

User's Guide

LMK5C33414A Programmer's Guide



Abstract

This programming guide lists the device registers of the LMK5C33414A.

Trademarks

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1 Device Registers

Table 1-1 lists the memory-mapped registers for the Device registers. All register offset addresses not listed in Table 1-1 should be considered as reserved locations and the register contents should not be modified.

Table 1-1. DEVICE Registers

Offset	Acronym	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	
0x0	R0	VNDRID_15:8								
0x1	R1	VNDRID								
0x2	R2	PRODID								
0x3	R3	REVID								
0x4	R4	PRTID_47:40								
0x5	R5	PRTID_39:32								
0x6	R6	PRTID_31:24								
0x7	R7	PRTID_23:16								
0x8	R8	PRTID_15:8								
0x9	R9	PRTID								
0x10	R16	NVMCNT								
0x12	R18	RESERVED				TARGET_ADR_MSB				
0x13	R19	EEREV								
0x14	R20	ROM_PLUS_EE	EE_ROM_PAGE_SEL				RESERVED			
0x15	R21	SPI_3WIRE_DIS	SYNC_SW	RESERVED						
0x16	R22	RESERVED		DPLL3_EN	APLL3_EN	DPLL2_EN	APLL2_EN	DPLL1_EN	APLL1_EN	
0x17	R23	RESERVED	SWRST	RESERVED						
0x18	R24	RESERVED		APLL3_STRT_PRTY		APLL2_STRT_PRTY		APLL1_STRT_PRTY		
0x19	R25	RESERVED								SYNC_EN
0x1A	R26	RESERVED		SYSREF_REQ_MODE		SYSREF_REQ_SEL			SYSREF_REQ_SW	
0x1B	R27	TEC_CNTR_39:32								
0x1C	R28	TEC_CNTR_31:24								
0x1D	R29	TEC_CNTR_23:16								
0x1E	R30	TEC_CNTR_15:8								
0x1F	R31	TEC_CNTR								
0x20	R32	RESERVED							TEC_CNTR_TRIG_SEL	TEC_CNTR_EN
0x21	R33	RESERVED				LOL_PLL1	LOL_PLL2	RESERVED	LOS_FDET_XO	
0x22	R34	LOPL_DPLL_1	LOFL_DPLL_1	RESERVED	HLDOVR1	RESERVED				
0x23	R35	LOPL_DPLL_2	LOFL_DPLL_2	RESERVED	HLDOVR2	RESERVED				
0x24	R36	LOPL_DPLL_3	LOFL_DPLL_3	RESERVED	HLDOVR3	RESERVED				
0x25	R37	RESERVED				LOL_PLL1_MASK	LOL_PLL2_MASK	RESERVED	LOS_FDET_XO_MASK	
0x26	R38	LOPL_DPLL_1_MASK	LOFL_DPLL_1_MASK	HIST1_MASK_K	HLDOVR1_MASK	REFSWITCH1_MASK	LOR_MISS_CLK1_MASK_K	LOR_FREQ_1_MASK	LOR_PH1_MASK	
0x27	R39	LOPL_DPLL_2_MASK	LOFL_DPLL_2_MASK	HIST2_MASK_K	HLDOVR2_MASK	REFSWITCH2_MASK	LOR_MISS_CLK2_MASK_K	LOR_FREQ_2_MASK	LOR_PH2_MASK	

Table 1-1. DEVICE Registers (continued)

Offset	Acronym	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0x28	R40	LOPL_DPLL_3_MASK	LOFL_DPLL_3_MASK	HIST3_MASK	HLDQVR3_MASK	REFSWITC_H3_MASK	LOR_MISS_CLK3_MASK	LOR_FREQ_3_MASK	LOR_PH3_MASK
0x29	R41	RESERVED				LOL_PLL1_POL	LOL_PLL2_POL	RESERVED	LOS_FDET_XO_POL
0x2A	R42	LOPL_DPLL_1_POL	LOFL_DPLL_1_POL	HIST1_POL	HLDQVR1_POL	REFSWITC_H1_POL	LOR_MISS_CLK1_POL	LOR_FREQ_1_POL	LOR_PH1_POL
0x2B	R43	LOPL_DPLL_2_POL	LOFL_DPLL_2_POL	HIST2_POL	HLDQVR2_POL	REFSWITC_H2_POL	LOR_MISS_CLK2_POL	LOR_FREQ_2_POL	LOR_PH2_POL
0x2C	R44	LOPL_DPLL_3_POL	LOFL_DPLL_3_POL	HIST3_POL	HLDQVR3_POL	REFSWITC_H3_POL	LOR_MISS_CLK3_POL	LOR_FREQ_3_POL	LOR_PH3_POL
0x2D	R45	RESERVED				LOL_PLL1_I_NTR	LOL_PLL2_I_NTR	RESERVED	LOS_FDET_XO_INTR
0x2E	R46	LOPL_DPLL_1_INTR	LOFL_DPLL_1_INTR	HIST1_INTR	HLDQVR1_I_NTR	REFSWITC_H1_INTR	LOR_MISS_CLK1_INTR	LOR_FREQ_1_INTR	LOR_PH1_I_NTR
0x2F	R47	LOPL_DPLL_2_INTR	LOFL_DPLL_2_INTR	HIST2_INTR	HLDQVR2_I_NTR	REFSWITC_H2_INTR	LOR_MISS_CLK2_INTR	LOR_FREQ_2_INTR	LOR_PH2_I_NTR
0x30	R48	LOPL_DPLL_3_INTR	LOFL_DPLL_3_INTR	HIST3_INTR	HLDQVR3_I_NTR	REFSWITC_H3_INTR	LOR_MISS_CLK3_INTR	LOR_FREQ_3_INTR	LOR_PH3_I_NTR
0x31	R49	RESERVED				INT_LATCH_OR_LIVE	INT_AND_OR	INT_EN	INT_CLR
0x32	R50	RESERVED				REF3_VALID_STATUS	REF2_VALID_STATUS	REF1_VALID_STATUS	REF0_VALID_STATUS
0x33	R51	RESERVED		REF3_PHASE_STATUS	RESERVED	REF3_FDET_STATUS	REF2_PHASE_STATUS	RESERVED	REF2_FDET_STATUS
0x34	R52	RESERVED		REF1_PHASE_STATUS	RESERVED	REF1_FDET_STATUS	REF0_PHASE_STATUS	RESERVED	REF0_FDET_STATUS
0x35	R53	RESERVED			TEC_CNTR_HELD	RESERVED			
0x36	R54	RESERVED	GPIO0_IN_FLT_EN	GPIO0_MODE					
0x37	R55	RESERVED	GPIO1_IN_FLT_EN	GPIO1_MODE					
0x38	R56	RESERVED	GPIO2_IN_FLT_EN	GPIO2_MODE					
0x39	R57	RESERVED	GPIO0_SEL						
0x3A	R58	RESERVED	GPIO1_SEL						
0x3B	R59	RESERVED	GPIO2_SEL						
0x3C	R60	RESERVED		GPIO0_OP_END	GPIO1_OP_END	GPIO2_OP_END	GPIO0_POL	GPIO1_POL	GPIO2_POL
0x3D	R61	RESERVED			GPIO_SYSREF_SEL			MUTE_DPLL3_PHLOCK	MUTE_DPLL3_FRLOCK
0x3E	R62	RESERVED		MUTE_DPLL2_PHLOCK	MUTE_DPLL2_FRLOCK	MUTE_APLL2_LOCK	MUTE_DPLL1_PHLOCK	MUTE_DPLL1_FRLOCK	MUTE_APLL1_LOCK
0x3F	R63	RESERVED			XO_FDET_BYP	XO_ITYPE			
0x40	R64	RESERVED			XO_OUT_BUF_EN				
0x41	R65	RESERVED			REF3_ITYPE				
0x42	R66	RESERVED			REF2_ITYPE				
0x43	R67	RESERVED			REF1_ITYPE				
0x44	R68	RESERVED			REF0_ITYPE				

Table 1-1. DEVICE Registers (continued)

Offset	Acronym	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0x46	R70	RESERVED							STATUS_MUX_DIV2_EN
0x4B	R75	RESERVED	TDC3_ZDM_BYPASS_FB_DIV	TDC3_ZDM_FB_PRE_BYP	TDC3_IN_SEL		TDC3_IN_DRV_SEL		
0x4C	R76	RESERVED	TDC2_ZDM_BYPASS_FB_DIV	TDC2_ZDM_FB_PRE_BYP	TDC2_IN_SEL		TDC2_IN_DRV_SEL		
0x4D	R77	RESERVED	TDC1_ZDM_BYPASS_FB_DIV	TDC1_ZDM_FB_PRE_BYP	TDC1_IN_SEL		TDC1_IN_DRV_SEL		
0x4E	R78	RESERVED		REF_OUT0_1_EN	REF_OUT01_SEL				
0x4F	R79	RESERVED		REF0_EARLY_DET_EN	REF0_PH_VALID_EN	REF0_VALT_MR_EN	REF0_PPM_EN	REF0_MISS_CLK_EN	RESERVED
0x50	R80	RESERVED		REF1_EARLY_DET_EN	REF1_PH_VALID_EN	REF1_VALT_MR_EN	REF1_PPM_EN	REF1_MISS_CLK_EN	RESERVED
0x51	R81	RESERVED		REF2_EARLY_DET_EN	REF2_PH_VALID_EN	REF2_VALT_MR_EN	REF2_PPM_EN	REF2_MISS_CLK_EN	RESERVED
0x52	R82	RESERVED		REF3_EARLY_DET_EN	REF3_PH_VALID_EN	REF3_VALT_MR_EN	REF3_PPM_EN	REF3_MISS_CLK_EN	RESERVED
0x53	R83	REF3_DET_CLK_DIV		REF2_DET_CLK_DIV		REF1_DET_CLK_DIV		REF0_DET_CLK_DIV	
0x54	R84	RESERVED		REF0_MISSCLK_DIV_21:16					
0x55	R85	REF0_MISSCLK_DIV_15:8							
0x56	R86	REF0_MISSCLK_DIV							
0x57	R87	RESERVED		REF1_MISSCLK_DIV_21:16					
0x58	R88	REF1_MISSCLK_DIV_15:8							
0x59	R89	REF1_MISSCLK_DIV							
0x5A	R90	RESERVED		REF2_MISSCLK_DIV_21:16					
0x5B	R91	REF2_MISSCLK_DIV_15:8							
0x5C	R92	REF2_MISSCLK_DIV							
0x5D	R93	RESERVED		REF3_MISSCLK_DIV_21:16					
0x5E	R94	REF3_MISSCLK_DIV_15:8							
0x5F	R95	REF3_MISSCLK_DIV							
0x60	R96	RESERVED							REF0_MISS_CLK_VCOS_EL
0x61	R97	RESERVED		REF0_EARLY_CLK_DIV_21:16					
0x62	R98	REF0_EARLY_CLK_DIV_15:8							
0x63	R99	REF0_EARLY_CLK_DIV							
0x64	R100	RESERVED		REF1_EARLY_CLK_DIV_21:16					
0x65	R101	REF1_EARLY_CLK_DIV_15:8							
0x66	R102	REF1_EARLY_CLK_DIV							
0x67	R103	RESERVED		REF2_EARLY_CLK_DIV_21:16					
0x68	R104	REF2_EARLY_CLK_DIV_15:8							
0x69	R105	REF2_EARLY_CLK_DIV							
0x6A	R106	RESERVED		REF3_EARLY_CLK_DIV_21:16					
0x6B	R107	REF3_EARLY_CLK_DIV_15:8							
0x6C	R108	REF3_EARLY_CLK_DIV							
0x6D	R109	RESERVED	REF0_PPM_MIN_14:8						

Table 1-1. DEVICE Registers (continued)

Offset	Acronym	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0x6E	R110	REF0_PPM_MIN							
0x6F	R111	RESERVED	REF0_PPM_MAX_14:8						
0x70	R112	REF0_PPM_MAX							
0x71	R113	RESERVED	REF1_PPM_MIN_14:8						
0x72	R114	REF1_PPM_MIN							
0x73	R115	RESERVED	REF1_PPM_MAX_14:8						
0x74	R116	REF1_PPM_MAX							
0x75	R117	RESERVED	REF2_PPM_MIN_14:8						
0x76	R118	REF2_PPM_MIN							
0x77	R119	RESERVED	REF2_PPM_MAX_14:8						
0x78	R120	REF2_PPM_MAX							
0x79	R121	RESERVED	REF3_PPM_MIN_14:8						
0x7A	R122	REF3_PPM_MIN							
0x7B	R123	RESERVED	REF3_PPM_MAX_14:8						
0x7C	R124	REF3_PPM_MAX							
0x8D	R141	RESERVED	REF2_PH_VALID_CNT_MSB			REF2_CNTSTRT_27:24			
0x8E	R142	REF2_CNTSTRT_23:16							
0x8F	R143	REF2_CNTSTRT_15:8							
0x90	R144	REF2_CNTSTRT							
0x91	R145	RESERVED				REF2_HOLD_CNTSTRT_27:24			
0x92	R146	REF2_HOLD_CNTSTRT_23:16							
0x93	R147	REF2_HOLD_CNTSTRT_15:8							
0x94	R148	REF2_HOLD_CNTSTRT							
0x95	R149	RESERVED	REF3_PH_VALID_CNT_MSB			REF3_CNTSTRT_27:24			
0x96	R150	REF3_CNTSTRT_23:16							
0x97	R151	REF3_CNTSTRT_15:8							
0x98	R152	REF3_CNTSTRT							
0x99	R153	RESERVED				REF3_HOLD_CNTSTRT_27:24			
0x9A	R154	REF3_HOLD_CNTSTRT_23:16							
0x9B	R155	REF3_HOLD_CNTSTRT_15:8							
0x9C	R156	REF3_HOLD_CNTSTRT							
0x9D	R157	RESERVED				REF0VLDTMR			
0x9E	R158	RESERVED				REF1VLDTMR			
0x9F	R159	RESERVED				REF2VLDTMR			
0xA0	R160	RESERVED				REF3VLDTMR			
0xA1	R161	RESERVED		REF0_PH_VALID_THR_13:8					
0xA2	R162	REF0_PH_VALID_THR							
0xA3	R163	RESERVED		REF1_PH_VALID_THR_13:8					
0xA4	R164	REF1_PH_VALID_THR							
0xA5	R165	RESERVED		REF2_PH_VALID_THR_13:8					
0xA6	R166	REF2_PH_VALID_THR							
0xA7	R167	RESERVED		REF3_PH_VALID_THR_13:8					
0xA8	R168	REF3_PH_VALID_THR							
0xAA	R170	NVMSCRC							
0xAB	R171	RESERVED	REGCOMMI T	NVMCRCE RR	RESERVED		NVMBUSY	NVMERASE	NVMPROG
0xAC	R172	NVMLCRC							

Table 1-1. DEVICE Registers (continued)

Offset	Acronym	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	
0xAD	R173	RESERVED			MEMADR_12:8					
0xAE	R174	MEMADR								
0xAF	R175	NVMDAT								
0xB0	R176	RAMDAT								
0xB4	R180	NVMUNLK								
0xDF	R223	RESERVED		DPLL1_REF0_AUTO_PRTY		DPLL1_REF1_AUTO_PRTY				
0xE0	R224	RESERVED		DPLL1_REF2_AUTO_PRTY		DPLL1_REF3_AUTO_PRTY				
0xE1	R225	RESERVED		DPLL1_REF4_AUTO_PRTY		DPLL1_REF5_AUTO_PRTY				
0xE2	R226	RESERVED		DPLL1_MAN_REFSEL		DPLL1_MA N_SWITCH _PIN_MOD _E		DPLL1_SWITCH_MODE		
0xE3	R227	RESERVED		DPLL1_REFSEL_STAT						
0xE4	R228	DPLL1_LOC KDET_PPM _EN	DPLL1_LOCKDET_PPM_MAX_14:8							
0xE5	R229	DPLL1_LOCKDET_PPM_MAX								
0xE6	R230	RESERVED	DPLL1_UNLOCKDET_PPM_MAX_14:8							
0xE7	R231	DPLL1_UNLOCKDET_PPM_MAX								
0xE8	R232	RESERVED		DPLL1_LOCKDET2_PPM_CNTSTRT_29:24						
0xE9	R233	DPLL1_LOCKDET2_PPM_CNTSTRT_23:16								
0xEA	R234	DPLL1_LOCKDET2_PPM_CNTSTRT_15:8								
0xEB	R235	DPLL1_LOCKDET2_PPM_CNTSTRT								
0xEC	R236	RESERVED		DPLL1_LOCKDET_PPM_CNTSTRT_29:24						
0xED	R237	DPLL1_LOCKDET_PPM_CNTSTRT_23:16								
0xEE	R238	DPLL1_LOCKDET_PPM_CNTSTRT_15:8								
0xEF	R239	DPLL1_LOCKDET_PPM_CNTSTRT								
0xF0	R240	RESERVED		DPLL1_LOCKDET_VCO_PPM_CNTSTRT_29:24						
0xF1	R241	DPLL1_LOCKDET_VCO_PPM_CNTSTRT_23:16								
0xF2	R242	DPLL1_LOCKDET_VCO_PPM_CNTSTRT_15:8								
0xF3	R243	DPLL1_LOCKDET_VCO_PPM_CNTSTRT								
0xF4	R244	RESERVED								DPLL1_STA TUS_PPM_ LOCK
0xF7	R247	DPLL1_LO OP_EN	DPLL1_PHA SE_CANCE L_EN	RESERVED	DPLL1_PHS 1_EN	DPLL1_ZD M_EN	DPLL1_HIS T_EN	DPLL1_PHA SE_CANCE L_ALWAYS	RESERVED	
0xF8	R248	DPLL1_HOL D_SLEW_LI M_EN	RESERVED				DPLL1_CLK _DIV_SRC_ SEL	RESERVED		
0xFA	R250	RESERVED			DPLL1_PH_OFFSET_44:40					
0xFB	R251	DPLL1_PH_OFFSET_39:32								
0xFC	R252	DPLL1_PH_OFFSET_31:24								
0xFD	R253	DPLL1_PH_OFFSET_23:16								
0xFE	R254	DPLL1_PH_OFFSET_15:8								
0xFF	R255	DPLL1_PH_OFFSET								
0x100	R256	DPLL1_FREE_RUN_39:32								
0x101	R257	DPLL1_FREE_RUN_31:24								
0x102	R258	DPLL1_FREE_RUN_23:16								
0x103	R259	DPLL1_FREE_RUN_15:8								

Table 1-1. DEVICE Registers (continued)

Offset	Acronym	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	
0x104	R260	DPLL1_FREE_RUN								
0x105	R261	RESERVED	DPLL1_1PP S_MODE	DPLL1_1PP S_EN	RESERVED					
0x122	R290	RESERVED							DPLL1_LCK_TIMER_9:8	
0x123	R291	DPLL1_LCK_TIMER								
0x124	R292	RESERVED							DPLL1_HIST_TIMER_9:8	
0x125	R293	DPLL1_HIST_TIMER								
0x126	R294	RESERVED							DPLL1_HOLD_TIMER_9: 8	
0x127	R295	DPLL1_HOLD_TIMER								
0x128	R296	RESERVED							DPLL1_PHS1_TIMER_9:8	
0x129	R297	DPLL1_PHS1_TIMER								
0x12E	R302	RESERVED			DPLL1_HIST_GAIN					
0x12F	R303	RESERVED		DPLL1_PL_THRESH						
0x130	R304	RESERVED		DPLL1_PL_UNLK_THRESH						
0x131	R305	RESERVED		DPLL1_PHS1_THRESH						
0x134	R308	RESERVED		DPLL1_HOLD_SLEW_STEP						
0x136	R310	RESERVED		DPLL1_STA TUS_PL	RESERVED					
0x137	R311	RESERVED			DPLL1_DC O_SLEW_A CTIVE	RESERVED				
0x13A	R314	RESERVED							DPLL1_FB DIV_32:32	
0x13B	R315	DPLL1_FB_DIV_31:24								
0x13C	R316	DPLL1_FB_DIV_23:16								
0x13D	R317	DPLL1_FB_DIV_15:8								
0x13E	R318	DPLL1_FB_DIV								
0x13F	R319	DPLL1_FB_NUM_39:32								
0x140	R320	DPLL1_FB_NUM_31:24								
0x141	R321	DPLL1_FB_NUM_23:16								
0x142	R322	DPLL1_FB_NUM_15:8								
0x143	R323	DPLL1_FB_NUM								
0x144	R324	DPLL1_FB_DEN_39:32								
0x145	R325	DPLL1_FB_DEN_31:24								
0x146	R326	DPLL1_FB_DEN_23:16								
0x147	R327	DPLL1_FB_DEN_15:8								
0x148	R328	DPLL1_FB_DEN								
0x149	R329	RESERVED							DPLL1_FB2 _DIV_32:32	
0x14A	R330	DPLL1_FB2_DIV_31:24								
0x14B	R331	DPLL1_FB2_DIV_23:16								
0x14C	R332	DPLL1_FB2_DIV_15:8								
0x14D	R333	DPLL1_FB2_DIV								
0x14E	R334	DPLL1_FB2_NUM_39:32								
0x14F	R335	DPLL1_FB2_NUM_31:24								
0x150	R336	DPLL1_FB2_NUM_23:16								
0x151	R337	DPLL1_FB2_NUM_15:8								
0x152	R338	DPLL1_FB2_NUM								

Table 1-1. DEVICE Registers (continued)

Offset	Acronym	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	
0x153	R339	DPLL1_FB2_DEN_39:32								
0x154	R340	DPLL1_FB2_DEN_31:24								
0x155	R341	DPLL1_FB2_DEN_23:16								
0x156	R342	DPLL1_FB2_DEN_15:8								
0x157	R343	DPLL1_FB2_DEN								
0x158	R344	RESERVED		DPLL1_REF_5_FB_SEL	DPLL1_REF_4_FB_SEL	DPLL1_REF_3_FB_SEL	DPLL1_REF_2_FB_SEL	DPLL1_REF_1_FB_SEL	DPLL1_REF_0_FB_SEL	
0x159	R345	RESERVED					DPLL1_FB_MASH_ORDER			
0x15A	R346	RESERVED	DPLL1_FB_FDEV_37:32							
0x15B	R347	DPLL1_FB_FDEV_31:24								
0x15C	R348	DPLL1_FB_FDEV_23:16								
0x15D	R349	DPLL1_FB_FDEV_15:8								
0x15E	R350	DPLL1_FB_FDEV								
0x15F	R351	RESERVED								DPLL1_FB_FDEV_UPD_ATE
0x160	R352	RESERVED								DPLL1_FB_FDEV_EN
0x161	R353	DPLL1_FB_NUM_STAT_39:32								
0x162	R354	DPLL1_FB_NUM_STAT_31:24								
0x163	R355	DPLL1_FB_NUM_STAT_23:16								
0x164	R356	DPLL1_FB_NUM_STAT_15:8								
0x165	R357	DPLL1_FB_NUM_STAT								
0x166	R358	RESERVED				DPLL1_REF_0_DBLR_EN	DPLL1_REF_1_DBLR_EN	DPLL1_REF_2_DBLR_EN	DPLL1_REF_3_DBLR_EN	
0x167	R359	DPLL1_REF0_RDIV_15:8								
0x168	R360	DPLL1_REF0_RDIV								
0x169	R361	DPLL1_REF1_RDIV_15:8								
0x16A	R362	DPLL1_REF1_RDIV								
0x16B	R363	DPLL1_REF2_RDIV_15:8								
0x16C	R364	DPLL1_REF2_RDIV								
0x16D	R365	DPLL1_REF3_RDIV_15:8								
0x16E	R366	DPLL1_REF3_RDIV								
0x16F	R367	DPLL1_REF4_RDIV_15:8								
0x170	R368	DPLL1_REF4_RDIV								
0x171	R369	DPLL1_REF5_RDIV_15:8								
0x172	R370	DPLL1_REF5_RDIV								
0x175	R373	RESERVED	DPLL2_REF0_AUTO_PRTY				DPLL2_REF1_AUTO_PRTY			
0x176	R374	RESERVED	DPLL2_REF2_AUTO_PRTY				DPLL2_REF3_AUTO_PRTY			
0x177	R375	RESERVED	DPLL2_REF4_AUTO_PRTY				DPLL2_REF5_AUTO_PRTY			
0x178	R376	RESERVED	DPLL2_MAN_REFSEL				DPLL2_MAN_SWITCH_PIN_MODE	DPLL2_SWITCH_MODE		
0x179	R377	RESERVED		DPLL2_REFSEL_STAT						
0x17A	R378	DPLL2_LOCKDET_PPM_EN	DPLL2_LOCKDET_PPM_MAX_14:8							
0x17B	R379	DPLL2_LOCKDET_PPM_MAX								

Table 1-1. DEVICE Registers (continued)

Offset	Acronym	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	
0x17C	R380	RESERVED	DPLL2_UNLOCKDET_PPM_MAX_14:8							
0x17D	R381	DPLL2_UNLOCKDET_PPM_MAX								
0x17E	R382	RESERVED		DPLL2_LOCKDET2_PPM_CNTSTRT_29:24						
0x17F	R383	DPLL2_LOCKDET2_PPM_CNTSTRT_23:16								
0x180	R384	DPLL2_LOCKDET2_PPM_CNTSTRT_15:8								
0x181	R385	DPLL2_LOCKDET2_PPM_CNTSTRT								
0x182	R386	RESERVED		DPLL2_LOCKDET_PPM_CNTSTRT_29:24						
0x183	R387	DPLL2_LOCKDET_PPM_CNTSTRT_23:16								
0x184	R388	DPLL2_LOCKDET_PPM_CNTSTRT_15:8								
0x185	R389	DPLL2_LOCKDET_PPM_CNTSTRT								
0x186	R390	RESERVED		DPLL2_LOCKDET_VCO_PPM_CNTSTRT_29:24						
0x187	R391	DPLL2_LOCKDET_VCO_PPM_CNTSTRT_23:16								
0x188	R392	DPLL2_LOCKDET_VCO_PPM_CNTSTRT_15:8								
0x189	R393	DPLL2_LOCKDET_VCO_PPM_CNTSTRT								
0x18A	R394	RESERVED								DPLL2_STA TUS_PPM_ LOCK
0x18D	R397	DPLL2_LO OP_EN	DPLL2_PHA SE_CANCE L_EN	RESERVED	DPLL2_PHS 1_EN	DPLL2_ZD M_EN	DPLL2_HIS T_EN	DPLL2_PHA SE_CANCE L_ALWAYS	RESERVED	
0x18E	R398	DPLL2_HOL D_SLEW_LI M_EN	RESERVED							
0x190	R400	RESERVED			DPLL2_PH_OFFSET_44:40					
0x191	R401	DPLL2_PH_OFFSET_39:32								
0x192	R402	DPLL2_PH_OFFSET_31:24								
0x193	R403	DPLL2_PH_OFFSET_23:16								
0x194	R404	DPLL2_PH_OFFSET_15:8								
0x195	R405	DPLL2_PH_OFFSET								
0x196	R406	DPLL2_FREE_RUN_39:32								
0x197	R407	DPLL2_FREE_RUN_31:24								
0x198	R408	DPLL2_FREE_RUN_23:16								
0x199	R409	DPLL2_FREE_RUN_15:8								
0x19A	R410	DPLL2_FREE_RUN								
0x19B	R411	RESERVED	DPLL2_1PP S_MODE	DPLL2_1PP S_EN	RESERVED					
0x1B8	R440	RESERVED							DPLL2_LCK_TIMER_9:8	
0x1B9	R441	DPLL2_LCK_TIMER								
0x1BA	R442	RESERVED							DPLL2_HIST_TIMER_9:8	
0x1BB	R443	DPLL2_HIST_TIMER								
0x1BC	R444	RESERVED							DPLL2_HOLD_TIMER_9: 8	
0x1BD	R445	DPLL2_HOLD_TIMER								
0x1BE	R446	RESERVED							DPLL2_PHS1_TIMER_9:8	
0x1BF	R447	DPLL2_PHS1_TIMER								
0x1C4	R452	RESERVED			DPLL2_HIST_GAIN					
0x1C5	R453	RESERVED		DPLL2_PL_THRESH						
0x1C6	R454	RESERVED		DPLL2_PL_UNLK_THRESH						
0x1C7	R455	RESERVED		DPLL2_PHS1_THRESH						

Table 1-1. DEVICE Registers (continued)

Offset	Acronym	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	
0x1CA	R458	RESERVED		DPLL2_HOLD_SLEW_STEP						
0x1CC	R460	RESERVED		DPLL2_STA TUS_PL	RESERVED					
0x1CD	R461	RESERVED			DPLL2_DC O_SLEW_A CTIVE	RESERVED				
0x1D0	R464	RESERVED							DPLL2_FB DIV_32:32	
0x1D1	R465	DPLL2_FB_DIV_31:24								
0x1D2	R466	DPLL2_FB_DIV_23:16								
0x1D3	R467	DPLL2_FB_DIV_15:8								
0x1D4	R468	DPLL2_FB_DIV								
0x1D5	R469	DPLL2_FB_NUM_39:32								
0x1D6	R470	DPLL2_FB_NUM_31:24								
0x1D7	R471	DPLL2_FB_NUM_23:16								
0x1D8	R472	DPLL2_FB_NUM_15:8								
0x1D9	R473	DPLL2_FB_NUM								
0x1DA	R474	DPLL2_FB_DEN_39:32								
0x1DB	R475	DPLL2_FB_DEN_31:24								
0x1DC	R476	DPLL2_FB_DEN_23:16								
0x1DD	R477	DPLL2_FB_DEN_15:8								
0x1DE	R478	DPLL2_FB_DEN								
0x1DF	R479	RESERVED							DPLL2_FB2 _DIV_32:32	
0x1E0	R480	DPLL2_FB2_DIV_31:24								
0x1E1	R481	DPLL2_FB2_DIV_23:16								
0x1E2	R482	DPLL2_FB2_DIV_15:8								
0x1E3	R483	DPLL2_FB2_DIV								
0x1E4	R484	DPLL2_FB2_NUM_39:32								
0x1E5	R485	DPLL2_FB2_NUM_31:24								
0x1E6	R486	DPLL2_FB2_NUM_23:16								
0x1E7	R487	DPLL2_FB2_NUM_15:8								
0x1E8	R488	DPLL2_FB2_NUM								
0x1E9	R489	DPLL2_FB2_DEN_39:32								
0x1EA	R490	DPLL2_FB2_DEN_31:24								
0x1EB	R491	DPLL2_FB2_DEN_23:16								
0x1EC	R492	DPLL2_FB2_DEN_15:8								
0x1ED	R493	DPLL2_FB2_DEN								
0x1EE	R494	RESERVED		DPLL2_REF 5_FB_SEL	DPLL2_REF 4_FB_SEL	DPLL2_REF 3_FB_SEL	DPLL2_REF 2_FB_SEL	DPLL2_REF 1_FB_SEL	DPLL2_REF 0_FB_SEL	
0x1EF	R495	RESERVED					DPLL2_FB_MASH_ORDER			
0x1F0	R496	RESERVED		DPLL2_FB_FDEV_37:32						
0x1F1	R497	DPLL2_FB_FDEV_31:24								
0x1F2	R498	DPLL2_FB_FDEV_23:16								
0x1F3	R499	DPLL2_FB_FDEV_15:8								
0x1F4	R500	DPLL2_FB_FDEV								
0x1F5	R501	RESERVED							DPLL2_FB FDEV_UPD ATE	

Table 1-1. DEVICE Registers (continued)

Offset	Acronym	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	
0x1F6	R502	RESERVED								DPLL2_FB_FDEV_EN
0x1F7	R503	DPLL2_FB_NUM_STAT_39:32								
0x1F8	R504	DPLL2_FB_NUM_STAT_31:24								
0x1F9	R505	DPLL2_FB_NUM_STAT_23:16								
0x1FA	R506	DPLL2_FB_NUM_STAT_15:8								
0x1FB	R507	DPLL2_FB_NUM_STAT								
0x1FC	R508	RESERVED				DPLL2_REF0_DBLR_EN	DPLL2_REF1_DBLR_EN	DPLL2_REF2_DBLR_EN	DPLL2_REF3_DBLR_EN	
0x1FD	R509	DPLL2_REF0_RDIV_15:8								
0x1FE	R510	DPLL2_REF0_RDIV								
0x1FF	R511	DPLL2_REF1_RDIV_15:8								
0x200	R512	DPLL2_REF1_RDIV								
0x201	R513	DPLL2_REF2_RDIV_15:8								
0x202	R514	DPLL2_REF2_RDIV								
0x203	R515	DPLL2_REF3_RDIV_15:8								
0x204	R516	DPLL2_REF3_RDIV								
0x205	R517	DPLL2_REF4_RDIV_15:8								
0x206	R518	DPLL2_REF4_RDIV								
0x207	R519	DPLL2_REF5_RDIV_15:8								
0x208	R520	DPLL2_REF5_RDIV								
0x20B	R523	RESERVED	DPLL3_REF0_AUTO_PRTY			DPLL3_REF1_AUTO_PRTY				
0x20C	R524	RESERVED	DPLL3_REF2_AUTO_PRTY			DPLL3_REF3_AUTO_PRTY				
0x20D	R525	RESERVED	DPLL3_REF4_AUTO_PRTY			DPLL3_REF5_AUTO_PRTY				
0x20E	R526	RESERVED	DPLL3_MAN_REFSEL			DPLL3_MAN_SWITCH_PIN_MODE	DPLL3_SWITCH_MODE			
0x20F	R527	RESERVED	DPLL3_REFSEL_STAT							
0x210	R528	DPLL3_LOCKDETECT_PPM_EN	DPLL3_LOCKDETECT_PPM_MAX_14:8							
0x211	R529	DPLL3_LOCKDETECT_PPM_MAX								
0x212	R530	RESERVED	DPLL3_UNLOCKDETECT_PPM_MAX_14:8							
0x213	R531	DPLL3_UNLOCKDETECT_PPM_MAX								
0x214	R532	RESERVED	DPLL3_LOCKDETECT2_PPM_CNTSTRT_29:24							
0x215	R533	DPLL3_LOCKDETECT2_PPM_CNTSTRT_23:16								
0x216	R534	DPLL3_LOCKDETECT2_PPM_CNTSTRT_15:8								
0x217	R535	DPLL3_LOCKDETECT2_PPM_CNTSTRT								
0x218	R536	RESERVED	DPLL3_LOCKDETECT_PPM_CNTSTRT_29:24							
0x219	R537	DPLL3_LOCKDETECT_PPM_CNTSTRT_23:16								
0x21A	R538	DPLL3_LOCKDETECT_PPM_CNTSTRT_15:8								
0x21B	R539	DPLL3_LOCKDETECT_PPM_CNTSTRT								
0x21C	R540	RESERVED	DPLL3_LOCKDETECT_VCO_PPM_CNTSTRT_29:24							
0x21D	R541	DPLL3_LOCKDETECT_VCO_PPM_CNTSTRT_23:16								
0x21E	R542	DPLL3_LOCKDETECT_VCO_PPM_CNTSTRT_15:8								
0x21F	R543	DPLL3_LOCKDETECT_VCO_PPM_CNTSTRT								

Table 1-1. DEVICE Registers (continued)

Offset	Acronym	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	
0x220	R544	RESERVED								DPPLL3_STA TUS_PPM_ LOCK
0x223	R547	DPPLL3_LO OP_EN	DPPLL3_PHA SE_CANCE L_EN	DPPLL3_FAS TLOCK_AL WAYS	DPPLL3_PHS 1_EN	DPPLL3_ZD M_EN	DPPLL3_HIS T_EN	DPPLL3_PHA SE_CANCE L_ALWAYS	RESERVED	
0x224	R548	DPPLL3_HOL D_SLEW_LI M_EN	RESERVED							
0x226	R550	RESERVED			DPPLL3_PH_OFFSET_44:40					
0x227	R551	DPPLL3_PH_OFFSET_39:32								
0x228	R552	DPPLL3_PH_OFFSET_31:24								
0x229	R553	DPPLL3_PH_OFFSET_23:16								
0x22A	R554	DPPLL3_PH_OFFSET_15:8								
0x22B	R555	DPPLL3_PH_OFFSET								
0x22C	R556	DPPLL3_FREE_RUN_39:32								
0x22D	R557	DPPLL3_FREE_RUN_31:24								
0x22E	R558	DPPLL3_FREE_RUN_23:16								
0x22F	R559	DPPLL3_FREE_RUN_15:8								
0x230	R560	DPPLL3_FREE_RUN								
0x231	R561	DPPLL3_PP M_REF_SE L	DPPLL3_1PP S_MODE	DPPLL3_1PP S_EN	RESERVED					
0x24E	R590	RESERVED							DPPLL3_LCK_TIMER_9:8	
0x24F	R591	DPPLL3_LCK_TIMER								
0x250	R592	RESERVED							DPPLL3_HIST_TIMER_9:8	
0x251	R593	DPPLL3_HIST_TIMER								
0x252	R594	RESERVED							DPPLL3_HOLD_TIMER_9: 8	
0x253	R595	DPPLL3_HOLD_TIMER								
0x254	R596	RESERVED							DPPLL3_PHS1_TIMER_9:8	
0x255	R597	DPPLL3_PHS1_TIMER								
0x25A	R602	RESERVED			DPPLL3_HIST_GAIN					
0x25B	R603	RESERVED		DPPLL3_PL_THRESH						
0x25C	R604	RESERVED		DPPLL3_PL_UNLK_THRESH						
0x25D	R605	RESERVED		DPPLL3_PHS1_THRESH						
0x262	R610	RESERVED		DPPLL3_STA TUS_PL	RESERVED					
0x263	R611	RESERVED			DPPLL3_DC O_SLEW_A CTIVE	RESERVED				
0x266	R614	RESERVED								DPPLL3_FB_ DIV_32:32
0x267	R615	DPPLL3_FB_DIV_31:24								
0x268	R616	DPPLL3_FB_DIV_23:16								
0x269	R617	DPPLL3_FB_DIV_15:8								
0x26A	R618	DPPLL3_FB_DIV								
0x26B	R619	DPPLL3_FB_NUM_39:32								
0x26C	R620	DPPLL3_FB_NUM_31:24								
0x26D	R621	DPPLL3_FB_NUM_23:16								
0x26E	R622	DPPLL3_FB_NUM_15:8								

Table 1-1. DEVICE Registers (continued)

Offset	Acronym	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	
0x26F	R623	DPLL3_FB_NUM								
0x270	R624	DPLL3_FB_DEN_39:32								
0x271	R625	DPLL3_FB_DEN_31:24								
0x272	R626	DPLL3_FB_DEN_23:16								
0x273	R627	DPLL3_FB_DEN_15:8								
0x274	R628	DPLL3_FB_DEN								
0x275	R629	RESERVED							DPLL3_FB2_DIV_32:32	
0x276	R630	DPLL3_FB2_DIV_31:24								
0x277	R631	DPLL3_FB2_DIV_23:16								
0x278	R632	DPLL3_FB2_DIV_15:8								
0x279	R633	DPLL3_FB2_DIV								
0x27A	R634	DPLL3_FB2_NUM_39:32								
0x27B	R635	DPLL3_FB2_NUM_31:24								
0x27C	R636	DPLL3_FB2_NUM_23:16								
0x27D	R637	DPLL3_FB2_NUM_15:8								
0x27E	R638	DPLL3_FB2_NUM								
0x27F	R639	DPLL3_FB2_DEN_39:32								
0x280	R640	DPLL3_FB2_DEN_31:24								
0x281	R641	DPLL3_FB2_DEN_23:16								
0x282	R642	DPLL3_FB2_DEN_15:8								
0x283	R643	DPLL3_FB2_DEN								
0x284	R644	RESERVED	DPLL3_REF_5_FB_SEL	DPLL3_REF_4_FB_SEL	DPLL3_REF_3_FB_SEL	DPLL3_REF_2_FB_SEL	DPLL3_REF_1_FB_SEL	DPLL3_REF_0_FB_SEL		
0x285	R645	RESERVED				DPLL3_FB_MASH_ORDER				
0x286	R646	RESERVED	DPLL3_FB_FDEV_37:32							
0x287	R647	DPLL3_FB_FDEV_31:24								
0x288	R648	DPLL3_FB_FDEV_23:16								
0x289	R649	DPLL3_FB_FDEV_15:8								
0x28A	R650	DPLL3_FB_FDEV								
0x28B	R651	RESERVED							DPLL3_FB_FDEV_UPD_ATE	
0x28C	R652	RESERVED							DPLL3_FB_FDEV_EN	
0x28D	R653	DPLL3_FB_NUM_STAT_39:32								
0x28E	R654	DPLL3_FB_NUM_STAT_31:24								
0x28F	R655	DPLL3_FB_NUM_STAT_23:16								
0x290	R656	DPLL3_FB_NUM_STAT_15:8								
0x291	R657	DPLL3_FB_NUM_STAT								
0x292	R658	RESERVED				DPLL3_REF_0_DBLR_EN	DPLL3_REF_1_DBLR_EN	DPLL3_REF_2_DBLR_EN	DPLL3_REF_3_DBLR_EN	
0x293	R659	DPLL3_REF0_RDIV_15:8								
0x294	R660	DPLL3_REF0_RDIV								
0x295	R661	DPLL3_REF1_RDIV_15:8								
0x296	R662	DPLL3_REF1_RDIV								
0x297	R663	DPLL3_REF2_RDIV_15:8								
0x298	R664	DPLL3_REF2_RDIV								

Table 1-1. DEVICE Registers (continued)

Offset	Acronym	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	
0x299	R665	DPLL3_REF3_RDIV_15:8								
0x29A	R666	DPLL3_REF3_RDIV								
0x29B	R667	DPLL3_REF4_RDIV_15:8								
0x29C	R668	DPLL3_REF4_RDIV								
0x29D	R669	DPLL3_REF5_RDIV_15:8								
0x29E	R670	DPLL3_REF5_RDIV								
0x2C3	R707	PLL1_CP_PU_R								
0x2C4	R708	RESERVED						PLL1_CPG		
0x2C5	R709	RESERVED			PLL1_LF_R2					
0x2C6	R710	RESERVED			PLL1_LF_R3					
0x2C7	R711	RESERVED			PLL1_LF_R4					
0x2C8	R712	PLL1_DISABLE_3RD4TH		PLL1_LF_C3			PLL1_LF_C4			
0x2C9	R713	RESERVED							PLL1_RDIV_8:8	
0x2CA	R714	PLL1_RDIV								
0x2CB	R715	RESERVED			PLL1_RDIV_XO_EN	PLL1_RDIV_XO_DBLR_EN	PLL1_RDIV_BYPASS_EN	PLL1_RDIV_MUX_SEL		
0x2CC	R716	RESERVED							PLL1_NDIV_8:8	
0x2CD	R717	PLL1_NDIV								
0x2CE	R718	PLL1_NUM_MSB								
0x2CF	R719	PLL1_NUM_39:32								
0x2D0	R720	PLL1_NUM_31:24								
0x2D1	R721	PLL1_NUM_23:16								
0x2D2	R722	PLL1_NUM_15:8								
0x2D3	R723	PLL1_NUM								
0x2D4	R724	RESERVED		PLL1_DTHRMODE		PLL1_ORDER			PLL1_MODE	
0x2D5	R725	APLL1_NUM_STAT_39:32								
0x2D6	R726	APLL1_NUM_STAT_31:24								
0x2D7	R727	APLL1_NUM_STAT_23:16								
0x2D8	R728	APLL1_NUM_STAT_15:8								
0x2D9	R729	APLL1_NUM_STAT								
0x2DB	R731	PLL1_PRI_DIV_SYNC_EN	PLL1_PRI_DIV_EN	PLL1_PRI_DIV			PLL1_P1_DIV_OUT0_1_EN	PLL1_P1_DIV_OUT2_3_EN	PLL1_P1_DIV_OUT14_15_EN	
0x2DC	R732	PLL1_SEC_DIV_SYNC_EN	PLL1_SEC_DIV_EN	PLL1_SEC_DIV			PLL1_P2_DIV_OUT0_1_EN	RESERVED		
0x2DD	R733	PLL1_VCO_BUF_EN	PLL1_VCO_BUF_2REF_EN		PLL1_VCO_BUF_2DPLL_EN	RESERVED	PLL1_VCO_BUF_PPM_CHECK_EN	PLL1_VCO_BUF_FB_TD_C_EN		
0x2E0	R736	PLL1_NCLK_TEST_EN	RESERVED			PLL1_RDIV_OUTPUT_EN	RESERVED			
0x2E5	R741	RESERVED		PLL1_VM_INSIDE	PLL1_VM_HI	RESERVED				
0x2E9	R745	RESERVED		PLL1_NDIV_OUTPUT_EN	RESERVED					

Table 1-1. DEVICE Registers (continued)

Offset	Acronym	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	
0x2EA	R746	RESERVED								PLL1_VCO_PREBUF_EN
0x305	R773	RESERVED								
0x309	R777	PLL2_CP_PU_R								
0x30A	R778	RESERVED			PLL2_CP_PU_DIS	PLL2_CPG				
0x30B	R779	PLL2_LF_R2								
0x30C	R780	RESERVED			PLL2_LF_R3					
0x30D	R781	RESERVED			PLL2_LF_R4					
0x30E	R782	PLL2_DISABLE_3RD4TH		PLL2_LF_C3			PLL2_LF_C4			
0x30F	R783	RESERVED								PLL2_RDIV_8:8
0x310	R784	PLL2_RDIV								
0x311	R785	RESERVED			PLL2_RDIV_XO_EN	PLL2_RDIV_XO_DBLR_EN	PLL2_RDIV_BYPASS_EN	PLL2_RDIV_MUX_SEL		
0x312	R786	RESERVED								PLL2_NDIV_8:8
0x313	R787	PLL2_NDIV								
0x314	R788	PLL2_NUM_MSB								
0x315	R789	PLL2_NUM_39:32								
0x316	R790	PLL2_NUM_31:24								
0x317	R791	PLL2_NUM_23:16								
0x318	R792	PLL2_NUM_15:8								
0x319	R793	PLL2_NUM								
0x31A	R794	RESERVED		PLL2_DTHRMODE		PLL2_ORDER		PLL2_MODE		
0x31B	R795	APLL2_NUM_STAT_39:32								
0x31C	R796	APLL2_NUM_STAT_31:24								
0x31D	R797	APLL2_NUM_STAT_23:16								
0x31E	R798	APLL2_NUM_STAT_15:8								
0x31F	R799	APLL2_NUM_STAT								
0x323	R803	RESERVED			PLL2_VCO_BUF_EN	PLL2_VCO_BUF_2REF_EN	PLL2_VCO_BUF_2DPLL_EN	PLL2_VCO_BUF_2WND_DET_EN		
0x324	R804	RESERVED		PLL2_VCO_DIV_SYNC_EN	PLL2_VCO_DIV_EN	PLL2_VCO_DIV				
0x325	R805	RESERVED	PLL2_VCO_BUF_FB_TDC_EN	PLL2_P1_OUT14_15_EN	PLL2_P1_OUT8_13_EN	PLL2_P1_OUT4_7_EN	PLL2_P1_OUT2_3_EN	PLL2_P1_OUT0_1_EN		
0x328	R808	RESERVED				PLL2_RDIV_OUTPUT_EN	RESERVED			
0x32D	R813	RESERVED		PLL2_VM_INSIDE	PLL2_VM_HI	RESERVED				
0x332	R818	RESERVED		PLL2_NDIV_OUTPUT_EN	RESERVED					
0x333	R819	RESERVED								PLL2_VCO_PREBUF_EN

Table 1-1. DEVICE Registers (continued)

Offset	Acronym	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	
0x348	R840	PLL3_CPBAW_BLEED								
0x349	R841	RESERVED			PLL3_CP_P U_DIS	PLL3_CPG				
0x34A	R842	RESERVED		PLL3_LF_R2						
0x34B	R843	RESERVED		PLL3_LF_R3						
0x34C	R844	RESERVED		PLL3_LF_R4						
0x34D	R845	RESERVED		PLL3_LF_C3			PLL3_LF_C4			
0x34E	R846	RESERVED							PLL3_RDIV _8:8	
0x34F	R847	PLL3_RDIV								
0x350	R848	RESERVED			PLL3_RDIV _XO_EN	PLL3_RDIV _XO_DBLR _EN	PLL3_RDIV _BYPASS_ _EN	PLL3_RDIV_MUX_SEL		
0x351	R849	RESERVED							PLL3_NDIV _8:8	
0x352	R850	PLL3_NDIV								
0x353	R851	PLL3_NUM_MSB								
0x354	R852	PLL3_NUM_39:32								
0x355	R853	PLL3_NUM_31:24								
0x356	R854	PLL3_NUM_23:16								
0x357	R855	PLL3_NUM_15:8								
0x358	R856	PLL3_NUM								
0x359	R857	RESERVED		PLL3_DTHRMODE		PLL3_ORDER			PLL3_MOD E	
0x35A	R858	APLL3_NUM_STAT_39:32								
0x35B	R859	APLL3_NUM_STAT_31:24								
0x35C	R860	APLL3_NUM_STAT_23:16								
0x35D	R861	APLL3_NUM_STAT_15:8								
0x35E	R862	APLL3_NUM_STAT								
0x360	R864	PLL3_VCO_BUF_OUT_EN				PLL3_VCO_ DIV_SYNC_ _EN	PLL3_PRI_DIV			
0x361	R865	PLL3_VCO_DIV_SEL	PLL3_VCO_ CHAN_DRV R_IN_EN	PLL3_P1_O UT14_15_E N	PLL3_P1_O UT8_13_EN	PLL3_P1_O UT4_7_EN	PLL3_P1_O UT2_3_EN	PLL3_P1_O UT0_1_EN		
0x362	R866	RESERVED			PLL3_VCO_BUF_2REF_ _EN		PLL3_WIN_ DET_DRVR_ _EN	PLL3_VCO_BUF_FB_TD C_EN		
0x368	R872	RESERVED				PLL3_RDIV _OUTPUT_ _EN	RESERVED			
0x372	R882	RESERVED		PLL3_NDIV _OUTPUT_ _EN	RESERVED					
0x3C1	R961	RESERVED	OUT_0_EN	OUT_0_FMT						
0x3C2	R962	OUT_0_CA P_EN	OUT_0_STA TIC_LOW	OUT_0_P_ CMOS_EN	OUT_0_N_ CMOS_EN	OUT_0_P_I NVERT_PO LARITY	OUT_0_N_I NVERT_PO LARITY	OUT_0_P_F ORCELOW	OUT_0_N_F ORCELOW	
0x3C3	R963	OUT_0_CONFIGURATION								
0x3C4	R964	RESERVED	OUT_1_EN	OUT_1_FMT						
0x3C5	R965	OUT_1_CA P_EN	OUT_1_STA TIC_LOW	OUT_1_P_ CMOS_EN	OUT_1_N_ CMOS_EN	OUT_1_P_I NVERT_PO LARITY	OUT_1_N_I NVERT_PO LARITY	OUT_1_P_F ORCELOW	OUT_1_N_F ORCELOW	

Table 1-1. DEVICE Registers (continued)

Offset	Acronym	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	
0x3C6	R966	OUT_1_CONFIGURATION								
0x3C7	R967	RESERVED						OUT_0_1_C MOS_OUT_ VOLTAGE_ SEL	OUT_0_1_C MOS_OUT_ LDO_EN	
0x3C8	R968	RESERVED				OUT_0_1_ZDM_TDC_SEL			OUT_0_1_Z DM_EN	
0x3C9	R969	RESERVED	OUT_0_1_D IV_MUTE_E N	OUT_0_1_D IV_SYNC_E N	OUT_0_1_S R_DIV_SYN C_EN	OUT_0_1_C H0_CHAN_ POL_SEL	OUT_0_1_C H1_CHAN_ POL_SEL	OUT_0_1_C H0_DIV_EN	OUT_0_1_C H1_DIV_EN	
0x3CC	R972	RESERVED						OUT_0_1_C H0_CH_DIV _SR_MUX_ CLK_SEL	RESERVED	
0x3CD	R973	OUT_0_1_CLK_IN_FANOUT						RESERVED		
0x3CE	R974	RESERVED				OUT_0_1_CH0_CH_STATIC_OFFSET_11:8				
0x3CF	R975	OUT_0_1_CH0_CH_STATIC_OFFSET								
0x3D0	R976	RESERVED				OUT_0_1_CH1_CH_STATIC_OFFSET_11:8				
0x3D1	R977	OUT_0_1_CH1_CH_STATIC_OFFSET								
0x3D2	R978	RESERVED				OUT_0_1_CH0_CH_DIV_11:8				
0x3D3	R979	OUT_0_1_CH0_CH_DIV								
0x3D4	R980	RESERVED				OUT_0_1_CH1_CH_DIV_11:8				
0x3D5	R981	OUT_0_1_CH1_CH_DIV								
0x3D6	R982	RESERVED				OUT_0_1_SR_ANA_DELAY				
0x3D7	R983	RESERVED		OUT_0_1_S R_ANA_DE LAY_DIV2_ SEL	OUT_0_1_S R_ANA_DE LAY_EN	OUT_0_1_S R_ANA_DE LAY_SMALL _STEP_EN	OUT_0_1_SR_ANA_DELAY_RANGE			
0x3D8	R984	RESERVED				OUT_0_1_SR_DDLY				
0x3D9	R985	RESERVED				OUT_0_1_SR_DIV_19:16				
0x3DA	R986	OUT_0_1_SR_DIV_15:8								
0x3DB	R987	OUT_0_1_SR_DIV								
0x3DC	R988	RESERVED	OUT_0_1_SR_DIV_STATIC_OFFSET_14:8							
0x3DD	R989	OUT_0_1_SR_DIV_STATIC_OFFSET								
0x3DE	R990	OUT_0_1_S R_REQ_MO DE	OUT_0_1_S R_GPIO_E N	RESERVED	OUT_0_1_PULSE_COUNT			OUT_0_1_SR_MODE		
0x3DF	R991	RESERVED		OUT_0_1_S R_CH0_DIV _BYPASS	RESERVED					
0x400	R1024	RESERVED	OUT_2_EN	OUT_2_FMT						
0x401	R1025	RESERVED				OUT_2_CA P_EN	OUT_2_CONFIGURATION			
0x402	R1026	OUT_2_CH AN_POL_S EL	OUT_2_CLK_MUX		RESERVED	OUT_2_DIV _EN	OUT_2_CH_MUX_SEL			
0x403	R1027	RESERVED			OUT_2_MU TE_EN	OUT_2_SY NC_EN	RESERVED			
0x404	R1028	RESERVED				OUT_2_CH_STATIC_OFFSET_11:8				
0x405	R1029	OUT_2_CH_STATIC_OFFSET								
0x406	R1030	RESERVED				OUT_2_CH_DIV_11:8				
0x407	R1031	OUT_2_CH_DIV								
0x420	R1056	RESERVED	OUT_3_EN	OUT_3_FMT						

Table 1-1. DEVICE Registers (continued)

Offset	Acronym	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	
0x421	R1057	RESERVED				OUT_3_CAP_EN	OUT_3_CONFIGURATION			
0x422	R1058	OUT_3_CHAN_POL_SEL	OUT_3_CLK_MUX	RESERVED	OUT_3_DIV_EN	OUT_3_CH_MUX_SEL				
0x423	R1059	RESERVED			OUT_3_MUTE_EN	OUT_3_SYNC_EN	RESERVED			
0x424	R1060	RESERVED				OUT_3_CH_STATIC_OFFSET_11:8				
0x425	R1061	OUT_3_CH_STATIC_OFFSET								
0x426	R1062	RESERVED				OUT_3_CH_DIV_11:8				
0x427	R1063	OUT_3_CH_DIV								
0x440	R1088	RESERVED					OUT_4_5_SR_ANA_DLY_BIASTRIM			
0x441	R1089	RESERVED	OUT_4_EN	OUT_4_FMT						
0x442	R1090	RESERVED	OUT_4_CAP_EN	RESERVED	OUT_4_CONFIGURATION					
0x443	R1091	RESERVED	OUT_5_EN	OUT_5_FMT						
0x444	R1092	RESERVED	OUT_5_CAP_EN	RESERVED	OUT_5_CONFIGURATION					
0x445	R1093	RESERVED		OUT_4_5_DIV_SYNC_EN	OUT_4_5_SR_DIV_SYNC_EN	RESERVED		OUT_4_5_CHAN_POL_SEL	OUT_4_5_DIV_EN	
0x446	R1094	OUT_4_5_MUTE_EN	OUT_4_5_ZDM_EN	OUT_4_5_CLK_IN_SEL	OUT_4_5_CH_DIV_SR_MUX_CLK_SEL	OUT_4_5_CH_MUX_SEL				
0x447	R1095	RESERVED				OUT_4_5_CH_STATIC_OFFSET_11:8				
0x448	R1096	OUT_4_5_CH_STATIC_OFFSET								
0x449	R1097	RESERVED				OUT_4_5_CH_DIV_11:8				
0x44A	R1098	OUT_4_5_CH_DIV								
0x44B	R1099	RESERVED			OUT_4_5_SR_ANA_DELAY					
0x44C	R1100	RESERVED		OUT_4_5_SR_ANA_DELAY_DIV2_SEL	OUT_4_5_SR_ANA_DELAY_EN	OUT_4_5_SR_ANA_DELAY_SMALL_STEP_EN	OUT_4_5_SR_ANA_DELAY_RANGE			
0x44D	R1101	RESERVED			OUT_4_5_SR_DDLY					
0x44E	R1102	RESERVED				OUT_4_5_SR_DIV_19:16				
0x44F	R1103	OUT_4_5_SR_DIV_15:8								
0x450	R1104	OUT_4_5_SR_DIV								
0x451	R1105	RESERVED	OUT_4_5_SR_DIV_STATIC_OFFSET_14:8							
0x452	R1106	OUT_4_5_SR_DIV_STATIC_OFFSET								
0x453	R1107	RESERVED	OUT_4_5_SR_REQ_MODE	OUT_4_5_PULSE_COUNT			OUT_4_5_SR_GPIO_EN	OUT_4_5_SR_MODE		
0x454	R1108	RESERVED			OUT_4_5_SR_CH_DIV_BYPASS	RESERVED				
0x461	R1121	RESERVED	OUT_6_EN	OUT_6_FMT						
0x462	R1122	RESERVED	OUT_6_CAP_EN	RESERVED	OUT_6_CONFIGURATION					
0x463	R1123	RESERVED	OUT_7_EN	OUT_7_FMT						
0x464	R1124	RESERVED	OUT_7_CAP_EN	RESERVED	OUT_7_CONFIGURATION					

Table 1-1. DEVICE Registers (continued)

Offset	Acronym	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	
0x465	R1125	RESERVED		OUT_6_7_D IV_SYNC_E N	OUT_6_7_S R_DIV_SYN C_EN	RESERVED		OUT_6_7_C HAN_POL_ SEL	OUT_6_7_D IV_EN	
0x466	R1126	OUT_6_7_ MUTE_EN	RESERVED	OUT_6_7_C LK_IN_SEL	OUT_6_7_C H_DIV_SR_ MUX_CLK_ SEL	OUT_6_7_CH_MUX_SEL				
0x467	R1127	RESERVED				OUT_6_7_CH_STATIC_OFFSET_11:8				
0x468	R1128	OUT_6_7_CH_STATIC_OFFSET								
0x469	R1129	RESERVED				OUT_6_7_CH_DIV_11:8				
0x46A	R1130	OUT_6_7_CH_DIV								
0x46B	R1131	RESERVED				OUT_6_7_SR_ANA_DELAY				
0x46C	R1132	RESERVED		OUT_6_7_S R_ANA_DE LAY_DIV2_ SEL	OUT_6_7_S R_ANA_DE LAY_EN	OUT_6_7_S R_ANA_DE LAY_SMALL _STEP_EN	OUT_6_7_SR_ANA_DELAY_RANGE			
0x46D	R1133	RESERVED				OUT_6_7_SR_DDLY				
0x46E	R1134	RESERVED				OUT_6_7_SR_DIV_19:16				
0x46F	R1135	OUT_6_7_SR_DIV_15:8								
0x470	R1136	OUT_6_7_SR_DIV								
0x471	R1137	RESERVED	OUT_6_7_SR_DIV_STATIC_OFFSET_14:8							
0x472	R1138	OUT_6_7_SR_DIV_STATIC_OFFSET								
0x473	R1139	RESERVED	OUT_6_7_S R_REQ_MO DE	OUT_6_7_PULSE_COUNT			OUT_6_7_S R_GPIO_E N	OUT_6_7_SR_MODE		
0x474	R1140	RESERVED				OUT_6_7_S R_CH_DIV_ BYPASS	RESERVED			
0x481	R1153	RESERVED	OUT_8_EN	RESERVED					OUT_8_FMT	
0x482	R1154	RESERVED	OUT_8_CA P_EN	RESERVED	RESERVED				OUT_8_CONFIGURATION	
0x483	R1155	RESERVED	OUT_9_EN	RESERVED					OUT_9_FMT	
0x484	R1156	RESERVED	OUT_9_CA P_EN	RESERVED	RESERVED				OUT_9_CONFIGURATION	
0x485	R1157	RESERVED		OUT_8_9_D IV_SYNC_E N	OUT_8_9_S R_DIV_SYN C_EN	RESERVED		OUT_8_9_C HAN_POL_ SEL	OUT_8_9_D IV_EN	
0x486	R1158	OUT_8_9_ MUTE_EN	RESERVED	OUT_8_9_C LK_IN_SEL	OUT_8_9_C H_DIV_SR_ MUX_CLK_ SEL	OUT_8_9_CH_MUX_SEL				
0x487	R1159	RESERVED				OUT_8_9_CH_STATIC_OFFSET_11:8				
0x488	R1160	OUT_8_9_CH_STATIC_OFFSET								
0x489	R1161	RESERVED				OUT_8_9_CH_DIV_11:8				
0x48A	R1162	OUT_8_9_CH_DIV								
0x48B	R1163	RESERVED				OUT_8_9_SR_ANA_DELAY				
0x48C	R1164	RESERVED		OUT_8_9_S R_ANA_DE LAY_DIV2_ SEL	OUT_8_9_S R_ANA_DE LAY_EN	OUT_8_9_S R_ANA_DE LAY_SMALL _STEP_EN	OUT_8_9_SR_ANA_DELAY_RANGE			
0x48D	R1165	RESERVED				OUT_8_9_SR_DDLY				
0x48E	R1166	RESERVED				OUT_8_9_SR_DIV_19:16				
0x48F	R1167	OUT_8_9_SR_DIV_15:8								

Table 1-1. DEVICE Registers (continued)

Offset	Acronym	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0x490	R1168	OUT_8_9_SR_DIV							
0x491	R1169	RESERVED	OUT_8_9_SR_DIV_STATIC_OFFSET_14:8						
0x492	R1170	OUT_8_9_SR_DIV_STATIC_OFFSET							
0x493	R1171	RESERVED	OUT_8_9_SR_REQ_MODE	OUT_8_9_PULSE_COUNT			OUT_8_9_SR_GPIO_EN	OUT_8_9_SR_MODE	
0x4A1	R1185	RESERVED	OUT_10_EN	OUT_10_FMT					
0x4A2	R1186	RESERVED	OUT_10_CAP_EN	RESERVED	OUT_10_CONFIGURATION				
0x4A3	R1187	RESERVED	OUT_11_EN	OUT_11_FMT					
0x4A4	R1188	RESERVED	OUT_11_CAP_EN	RESERVED	OUT_11_CONFIGURATION				
0x4A5	R1189	RESERVED		OUT_10_11_DIV_SYNC_EN	OUT_10_11_SR_DIV_SYNC_EN	RESERVED		OUT_10_11_CHAN_PO_L_SEL	OUT_10_11_DIV_EN
0x4A6	R1190	OUT_10_11_MUTE_EN	OUT_10_11_ZDM_EN	OUT_10_11_CLK_IN_SEL	OUT_10_11_CH_DIV_SR_MUX_CLK_SEL	OUT_10_11_CH_MUX_SEL			
0x4A7	R1191	RESERVED				OUT_10_11_CH_STATIC_OFFSET_11:8			
0x4A8	R1192	OUT_10_11_CH_STATIC_OFFSET							
0x4A9	R1193	RESERVED				OUT_10_11_CH_DIV_11:8			
0x4AA	R1194	OUT_10_11_CH_DIV							
0x4AB	R1195	RESERVED				OUT_10_11_SR_ANA_DELAY			
0x4AC	R1196	RESERVED		OUT_10_11_SR_ANA_DELAY_DIV_2_SEL	OUT_10_11_SR_ANA_DELAY_EN	OUT_10_11_SR_ANA_DELAY_SM_ALL_STEP_EN	OUT_10_11_SR_ANA_DELAY_RANGE		
0x4AD	R1197	RESERVED				OUT_10_11_SR_DDLY			
0x4AE	R1198	RESERVED				OUT_10_11_SR_DIV_19:16			
0x4AF	R1199	OUT_10_11_SR_DIV_15:8							
0x4B0	R1200	OUT_10_11_SR_DIV							
0x4B1	R1201	RESERVED	OUT_10_11_SR_DIV_STATIC_OFFSET_14:8						
0x4B2	R1202	OUT_10_11_SR_DIV_STATIC_OFFSET							
0x4B3	R1203	RESERVED	OUT_10_11_SR_REQ_MODE	OUT_10_11_PULSE_COUNT			OUT_10_11_SR_GPIO_EN	OUT_10_11_SR_MODE	
0x4B4	R1204	RESERVED				OUT_10_11_SR_CH_DIV_BYPASS	RESERVED		
0x4C1	R1217	RESERVED	OUT_12_EN	OUT_12_FMT					
0x4C2	R1218	RESERVED	OUT_12_CAP_EN	RESERVED	OUT_12_CONFIGURATION				
0x4C3	R1219	RESERVED	OUT_13_EN	OUT_13_FMT					
0x4C4	R1220	RESERVED	OUT_13_CAP_EN	RESERVED	OUT_13_CONFIGURATION				
0x4C5	R1221	RESERVED		OUT_12_13_DIV_SYNC_EN	OUT_12_13_SR_DIV_SYNC_EN	RESERVED		OUT_12_13_CHAN_PO_L_SEL	OUT_12_13_DIV_EN

Table 1-1. DEVICE Registers (continued)

Offset	Acronym	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0x4C6	R1222	OUT_12_13_MUTE_EN	RESERVED	OUT_12_13_CLK_IN_SEL	OUT_12_13_CH_DIV_S R_MUX_CLK_SEL	OUT_12_13_CH_MUX_SEL			
0x4C7	R1223	RESERVED				OUT_12_13_CH_STATIC_OFFSET_11:8			
0x4C8	R1224	OUT_12_13_CH_STATIC_OFFSET							
0x4C9	R1225	RESERVED				OUT_12_13_CH_DIV_11:8			
0x4CA	R1226	OUT_12_13_CH_DIV							
0x4CB	R1227	RESERVED			OUT_12_13_SR_ANA_DELAY				
0x4CC	R1228	RESERVED		OUT_12_13_SR_ANA_DELAY_DIV_2_SEL	OUT_12_13_SR_ANA_DELAY_EN	OUT_12_13_SR_ANA_DELAY_SM_ALL_STEP_EN	OUT_12_13_SR_ANA_DELAY_RANGE		
0x4CD	R1229	RESERVED			OUT_12_13_SR_DDLY				
0x4CE	R1230	RESERVED				OUT_12_13_SR_DIV_19:16			
0x4CF	R1231	OUT_12_13_SR_DIV_15:8							
0x4D0	R1232	OUT_12_13_SR_DIV							
0x4D1	R1233	RESERVED	OUT_12_13_SR_DIV_STATIC_OFFSET_14:8						
0x4D2	R1234	OUT_12_13_SR_DIV_STATIC_OFFSET							
0x4D3	R1235	RESERVED	OUT_12_13_SR_REQ_MODE	OUT_12_13_PULSE_COUNT			OUT_12_13_SR_GPIO_EN	OUT_12_13_SR_MODE	
0x4D4	R1236	RESERVED			OUT_12_13_SR_CH_DIV_BYPASS	RESERVED			
0x4E0	R1248	RESERVED			OUT_14_FMT				
0x500	R1280	RESERVED			OUT_15_FMT				

Complex bit access types are encoded to fit into small table cells. [Table 1-2](#) shows the codes that are used for access types in this section.

Table 1-2. Device Access Type Codes

Access Type	Code	Description
Read Type		
R	R	Read
R-0	R-0	Read Returns 0s
Write Type		
W	W	Write
W1S	W1S	Write 1 to set
WSC	W	Write
Reset or Default Value		
-n		Value after reset or the default value

1.1 R0 (Offset = 0x0)

Return to the [Summary Table](#).

Table 1-3. R0 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	VNDRID_15:8	R	0x10	See Register 1

1.2 R1 (Offset = 0x1)

Return to the [Summary Table](#).

Table 1-4. R1 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	VNDRID	R	0xB	Vendor Identification Number. The Vendor Identification Number is a unique 16-bit identification number assigned to I2C/SMBus vendors. ROM=N, EEPROM=N

1.3 R2 (Offset = 0x2)

Return to the [Summary Table](#).

Table 1-5. R2 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	PRODID	R	0x42	Product ID. ROM=N, EEPROM=N

1.4 R3 (Offset = 0x3)

Return to the [Summary Table](#).

Table 1-6. R3 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	REVID	R	0x2	Revision ID. ROM=N, EEPROM=N

1.5 R4 (Offset = 0x4)

Return to the [Summary Table](#).

Table 1-7. R4 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	PRTID_47:40	R	0xAB	Part ID. Used for manufacturing ROM=N, EEPROM=Y

1.6 R5 (Offset = 0x5)

Return to the [Summary Table](#).

Table 1-8. R5 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	PRTID_39:32	R	0x18	Part ID. Used for manufacturing ROM=N, EEPROM=Y

1.7 R6 (Offset = 0x6)

Return to the [Summary Table](#).

Table 1-9. R6 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	PRTID_31:24	R	0x1D	Part ID. Used for manufacturing ROM=N, EEPROM=Y

1.8 R7 (Offset = 0x7)Return to the [Summary Table](#).**Table 1-10. R7 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	PRTID_23:16	R	0x12	Part ID. Used for manufacturing ROM=N, EEPROM=Y

1.9 R8 (Offset = 0x8)Return to the [Summary Table](#).**Table 1-11. R8 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	PRTID_15:8	R	0x3A	Part ID. Used for manufacturing ROM=N, EEPROM=Y

1.10 R9 (Offset = 0x9)Return to the [Summary Table](#).**Table 1-12. R9 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	PRTID	R	0xEE	Part ID. Used for manufacturing ROM=N, EEPROM=Y

1.11 R16 (Offset = 0x10)Return to the [Summary Table](#).**Table 1-13. R16 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	NVMCNT	R	0x12	NVM Program Count. The NVMCNT increments automatically after every EEPROM Erase/Program Cycle. The NVMCNT value is retrieved automatically after reset, after a NVM Commit operation, or after a Erase/Program cycle. The NVMCNT register will increment until it reaches it's maximum value of 255 after which no further increments will take place. ROM=N, EEPROM=Y

1.12 R18 (Offset = 0x12)Return to the [Summary Table](#).**Table 1-14. R18 Field Descriptions**

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved

Table 1-14. R18 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
4:0	TARGET_ADR_MSB	R	0x19	I2C/SMBus Target Address. This field holds the 5 MSB bits of the Target Address used to identify this device during I2C/SMBus transactions. The two least significant bits of the Target Address are defined by CSC/ADD/TEC pin upon power-up. This is user-writable to EEPROM only through SRAM register at address 12. ROM=N, EEPROM=Y

1.13 R19 (Offset = 0x13)

Return to the [Summary Table](#).

Table 1-15. R19 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	EEREV	R/W	0x0	EEPROM Image Revision ID. EEPROM Image Revision is automatically retrieved from EEPROM and stored in the EEREV register after a reset or after a NVM commit operation. This is user-writable to EEPROM only through SRAM register address 13. ROM=N, EEPROM=Y

1.14 R20 (Offset = 0x14)

Return to the [Summary Table](#).

Table 1-16. R20 Field Descriptions

Bit	Field	Type	Reset	Description
7	ROM_PLUS_EE	R/W	0x0	When set, the thin EEPROM settings are loaded. This is user-writable to EEPROM only through SRAM register address 14. ROM=N, EEPROM=Y
6:3	EE_ROM_PAGE_SEL	R/W	0x0	EE_ROM_PAGE_SEL value is added to the GPIO pin value for selecting the start-up ROM. ROM=N, EEPROM=Y
2:0	RESERVED	R	0x0	Reserved

1.15 R21 (Offset = 0x15)

Return to the [Summary Table](#).

Table 1-17. R21 Field Descriptions

Bit	Field	Type	Reset	Description
7	SPI_3WIRE_DIS	R/W	0x1	Disable SPI 3 wire readback. The SDIO pin will remain input at all times. ROM=Y, EEPROM=N 0x0 = 3-wire SPI readback enabled 0x1 = 3-wire SPI readback disabled
6	SYNC_SW	R/W	0x0	Software SYNC Assertion. Writing a '1' to this bit is equivalent to asserting the SYNC pin. SYNC_EN must also be set to 1. ROM=Y, EEPROM=Y
5:0	RESERVED	R	0x0	Reserved

1.16 R22 (Offset = 0x16)

Return to the [Summary Table](#).

Table 1-18. R22 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved

Table 1-18. R22 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
5	DPPLL3_EN	R/W	0x1	Enable DPPLL3. ROM=Y, EEPROM=N
4	APLL3_EN	R/W	0x1	Enable APLL3. ROM=Y, EEPROM=Y
3	DPPLL2_EN	R/W	0x1	Enable DPPLL2. ROM=Y, EEPROM=N
2	APLL2_EN	R/W	0x1	Enable APLL2. ROM=Y, EEPROM=Y
1	DPPLL1_EN	R/W	0x0	Enable DPPLL1. ROM=Y, EEPROM=N
0	APLL1_EN	R/W	0x1	Enable APLL1. ROM=Y, EEPROM=Y

1.17 R23 (Offset = 0x17)Return to the [Summary Table](#).**Table 1-19. R23 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	SWRST	R/W	0x0	Software Reset ALL functions (active low). Writing a '0' will cause the device to return to its power-up state apart from the programmed registers and the configuration controller. The configuration controller is excluded to prevent a re-transfer of EEPROM data to on-chip registers. Not a self clearing field. ROM=N, EEPROM=N
5:0	RESERVED	R	0x0	Reserved

1.18 R24 (Offset = 0x18)Return to the [Summary Table](#).**Table 1-20. R24 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:4	APLL3_START_PRTY	R/W	0x0	APLL3 Start-up Priority. 0 is highest priority. APLLs with the same priority will start simultaneously. ROM=Y, EEPROM=Y
3:2	APLL2_START_PRTY	R/W	0x2	APLL2 Start-up Priority. 0 is highest priority. APLLs with the same priority will start simultaneously. ROM=Y, EEPROM=Y
1:0	APLL1_START_PRTY	R/W	0x1	APLL1 Start-up Priority. 0 is highest priority. APLLs with the same priority will start simultaneously. ROM=Y, EEPROM=Y

1.19 R25 (Offset = 0x19)Return to the [Summary Table](#).**Table 1-21. R25 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:1	RESERVED	R	0x0	Reserved

Table 1-21. R25 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
0	SYNC_EN	R/W	0x1	Allows SYNC from SYNC_SW and GPIO pin. For GPIO sync, must be set together with SYNC input for GPIOx_MODE. ROM=Y, EEPROM=Y

1.20 R26 (Offset = 0x1A)

Return to the [Summary Table](#).

Table 1-22. R26 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:4	SYSREF_REQ_MODE	R/W	0x3	SYSREF Request Mode. Determines how a GPIO input is synchronized to generate a SYSREF request. ROM=Y, EEPROM=N 0x0 = Direct SYSREF request 0x1 = Reserved 0x2 = Reserved 0x3 = Resampled SYSREF request
3:1	SYSREF_REQ_SEL	R/W	0x3	SYSREF Request Select. Choses which output drives the SYSREF feedback clock. ROM=Y, EEPROM=N 0x0 = SYSREF0_1_CLK 0x1 = SYSREF4_5_CLK 0x2 = SYSREF6_7_CLK 0x3 = SYSREF8_9_CLK 0x4 = SYSREF10_11_CLK 0x5 = SYSREF12_13_CLK 0x6 = Reserved
0	SYSREF_REQ_SW	R/WSC	0x0	Software SYSREF request trigger ROM=N, EEPROM=N

1.21 R27 (Offset = 0x1B)

Return to the [Summary Table](#).

Table 1-23. R27 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	TEC_CNTR_39:32	R	0x0	Time Elapsed Counter Readback ROM=N, EEPROM=N

1.22 R28 (Offset = 0x1C)

Return to the [Summary Table](#).

Table 1-24. R28 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	TEC_CNTR_31:24	R	0x0	Time Elapsed Counter Readback ROM=N, EEPROM=N

1.23 R29 (Offset = 0x1D)

Return to the [Summary Table](#).

Table 1-25. R29 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	TEC_CNTR_23:16	R	0x0	Time Elapsed Counter Readback ROM=N, EEPROM=N

1.24 R30 (Offset = 0x1E)Return to the [Summary Table](#).**Table 1-26. R30 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	TEC_CNTR_15:8	R	0x0	Time Elapsed Counter Readback ROM=N, EEPROM=N

1.25 R31 (Offset = 0x1F)Return to the [Summary Table](#).**Table 1-27. R31 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	TEC_CNTR	R	0x0	Time Elapsed Counter Readback ROM=N, EEPROM=N

1.26 R32 (Offset = 0x20)Return to the [Summary Table](#).**Table 1-28. R32 Field Descriptions**

Bit	Field	Type	Reset	Description
7:3	RESERVED	R	0x0	Reserved
2	RESERVED	R	0x0	Reserved
1	TEC_CNTR_TRIG_SEL	R/W	0x0	Time Elapsed Counter trigger select. If using GPIO, must also set GPIOx_MODE to provide TEC trigger. ROM=Y, EEPROM=N 0x0 = SPI 0x1 = GPIO
0	TEC_CNTR_EN	R/W	0x0	Time Elapsed Counter counter enable. When transitioning from 0 --> 1, the TEC counter will start from 0. ROM=Y, EEPROM=N

1.27 R33 (Offset = 0x21)Return to the [Summary Table](#).**Table 1-29. R33 Field Descriptions**

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3	LOL_PLL1	R	0x0	Loss of Lock - APLL1 ROM=N, EEPROM=N
2	LOL_PLL2	R	0x0	Loss of Lock - APLL2 ROM=N, EEPROM=N
1	RESERVED	R	0x0	Reserved
0	LOS_FDET_XO	R	0x0	Loss of Source Freq Detection - XO ROM=N, EEPROM=N

1.28 R34 (Offset = 0x22)

Return to the [Summary Table](#).

Table 1-30. R34 Field Descriptions

Bit	Field	Type	Reset	Description
7	LOPL_DPLL1	R	0x1	Loss of Phase Lock - DPLL1 ROM=N, EEPROM=N
6	LOFL_DPLL1	R	0x1	Loss of Frequency Lock - DPLL1 ROM=N, EEPROM=N
5	RESERVED	R	0x0	Reserved
4	HLDOVR1	R	0x1	Holdover event - DPLL1 ROM=N, EEPROM=N
3:0	RESERVED	R	0x0	Reserved

1.29 R35 (Offset = 0x23)

Return to the [Summary Table](#).

Table 1-31. R35 Field Descriptions

Bit	Field	Type	Reset	Description
7	LOPL_DPLL2	R	0x0	Loss of Phase Lock - DPLL2 ROM=N, EEPROM=N
6	LOFL_DPLL2	R	0x0	Loss of Frequency Lock - DPLL2 ROM=N, EEPROM=N
5	RESERVED	R	0x0	Reserved
4	HLDOVR2	R	0x0	Holdover event - DPLL2 ROM=N, EEPROM=N
3:0	RESERVED	R	0x0	Reserved

1.30 R36 (Offset = 0x24)

Return to the [Summary Table](#).

Table 1-32. R36 Field Descriptions

Bit	Field	Type	Reset	Description
7	LOPL_DPLL3	R	0x0	Loss of Phase Lock - DPLL3 ROM=N, EEPROM=N
6	LOFL_DPLL3	R	0x0	Loss of Frequency Lock - DPLL3 ROM=N, EEPROM=N
5	RESERVED	R	0x0	Reserved
4	HLDOVR3	R	0x0	Holdover event - DPLL3 ROM=N, EEPROM=N
3:0	RESERVED	R	0x0	Reserved

1.31 R37 (Offset = 0x25)

Return to the [Summary Table](#).

Table 1-33. R37 Field Descriptions

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3	LOL_PLL1_MASK	R/W	0x0	Masks Loss of Lock - APLL1. When LOL_PLL1_MASK is 1 then the LOL_PLL1 interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N

Table 1-33. R37 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
2	LOL_PLL2_MASK	R/W	0x0	Masks Loss of Lock - APLL2. When LOL_PLL2_MASK is 1 then the LOL_PLL2 interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N
1	RESERVED	R	0x0	Reserved
0	LOS_FDET_XO_MASK	R/W	0x0	Masks Loss of Source Freq Detection - XO. When LOS_FDET_XO_MASK is 1 then the LOS_FDET_XO interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N

1.32 R38 (Offset = 0x26)Return to the [Summary Table](#).**Table 1-34. R38 Field Descriptions**

Bit	Field	Type	Reset	Description
7	LOPL_DPLL1_MASK	R/W	0x1	Masks Loss of Phase Lock - DPLL1. When LOPL_DPLL1_MASK is 1 then the LOPL_DPLL1 interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N
6	LOFL_DPLL1_MASK	R/W	0x1	Masks Loss of Freq Lock - DPLL1. When LOFL_DPLL1_MASK is 1 then the LOFL_DPLL1 interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N
5	HIST1_MASK	R/W	0x1	Masks Tuning word history update - DPLL1. When HIST1_MASK is 1 then the HIST1 interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N
4	HLDOVR1_MASK	R/W	0x1	Masks Holdover event - DPLL1. When HLDOVR1_MASK is 1 then the HLDOVR1 interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N
3	REFSWITCH1_MASK	R/W	0x1	Masks Reference Switchover - DPLL1. When REFSWITCH1_MASK is 1 then the REFSWITCH1 interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N
2	LOR_MISSCLK1_MASK	R/W	0x1	Masks Loss of Active Reference - Missing Clock - DPLL1. When LOR_MISSCLK1_MASK is 1 then the LOR_MISSCLK1 interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N
1	LOR_FREQ1_MASK	R/W	0x1	Masks Loss of Active Reference - Frequency - DPLL1. When LOR_FREQ1_MASK is 1 then the LOR_FREQ1 interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N
0	LOR_PH1_MASK	R/W	0x1	Masks Loss of Active Reference - Phase - DPLL1. When LOR_PH1_MASK is 1 then the LOR_PH1 interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N

1.33 R39 (Offset = 0x27)Return to the [Summary Table](#).

Table 1-35. R39 Field Descriptions

Bit	Field	Type	Reset	Description
7	LOPL_DPLL2_MASK	R/W	0x0	Masks Loss of Phase Lock - DPLL2. When LOPL_DPLL2_MASK is 1 then the LOPL_DPLL2 interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N
6	LOFL_DPLL2_MASK	R/W	0x0	Masks Loss of Freq Lock - DPLL2. When LOFL_DPLL2_MASK is 1 then the LOFL_DPLL2 interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N
5	HIST2_MASK	R/W	0x1	Masks Tuning word history update - DPLL2. When HIST2_MASK is 1 then the HIST2 interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N
4	HLDOVR2_MASK	R/W	0x0	Masks Holdover event - DPLL2. When HLDOVR2_MASK is 1 then the HLDOVR2 interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N
3	REFSWITCH2_MASK	R/W	0x0	Masks Reference Switchover - DPLL2. When REFSWITCH2_MASK is 1 then the REFSWITCH2 interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N
2	LOR_MISSCLK2_MASK	R/W	0x0	Masks Loss of Active Reference - Missing Clock - DPLL2. When LOR_MISSCLK2_MASK is 1 then the LOR_MISSCLK2 interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N
1	LOR_FREQ2_MASK	R/W	0x0	Masks Loss of Active Reference - Frequency - DPLL2. When LOR_FREQ2_MASK is 1 then the LOR_FREQ2 interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N
0	LOR_PH2_MASK	R/W	0x0	Masks Loss of Active Reference - Phase - DPLL2. When LOR_PH2_MASK is 1 then the LOR_PH2 interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N

1.34 R40 (Offset = 0x28)

Return to the [Summary Table](#).

Table 1-36. R40 Field Descriptions

Bit	Field	Type	Reset	Description
7	LOPL_DPLL3_MASK	R/W	0x0	Masks Loss of Phase Lock - DPLL3. When LOPL_DPLL3_MASK is 1 then the LOPL_DPLL3 interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N
6	LOFL_DPLL3_MASK	R/W	0x0	Masks Loss of Freq Lock - DPLL3. When LOFL_DPLL3_MASK is 1 then the LOFL_DPLL3 interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N
5	HIST3_MASK	R/W	0x1	Masks Tuning word history update - DPLL3. When HIST3_MASK is 1 then the HIST3 interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N
4	HLDOVR3_MASK	R/W	0x0	Masks Holdover event - DPLL3. When HLDOVR3_MASK is 1 then the HLDOVR3 interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N
3	REFSWITCH3_MASK	R/W	0x0	Masks Reference Switchover - DPLL3. When REFSWITCH3_MASK is 1 then the REFSWITCH3 interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N

Table 1-36. R40 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
2	LOR_MISSCLK3_MASK	R/W	0x0	Masks Loss of Active Reference - Missing Clock - DPLL3. When LOR_MISSCLK3_MASK is 1 then the LOR_MISSCLK3 interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N
1	LOR_FREQ3_MASK	R/W	0x0	Masks Loss of Active Reference - Frequency - DPLL3. When LOR_FREQ3_MASK is 1 then the LOR_FREQ3 interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N
0	LOR_PH3_MASK	R/W	0x0	Masks Loss of Active Reference - Phase - DPLL3. When LOR_PH3_MASK is 1 then the LOR_PH3 interrupt source is masked and will not cause the interrupt signal to be activated. ROM=Y, EEPROM=N

1.35 R41 (Offset = 0x29)Return to the [Summary Table](#).**Table 1-37. R41 Field Descriptions**

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3	LOL_PLL1_POL	R/W	0x0	LOL_PLL1 Flag Polarity. When LOL_PLL1_POL = 1, LOL_PLL1 = 0 results in LOL_PLL1_INTR = 1. When LOL_PLL1_POL = 0, LOL_PLL1 = 1 results in LOL_PLL1_INTR = 1. ROM=Y, EEPROM=N
2	LOL_PLL2_POL	R/W	0x0	LOL_PLL2 Flag Polarity. When LOL_PLL2_POL = 1, LOL_PLL2 = 0 results in LOL_PLL2_INTR = 1. When LOL_PLL2_POL = 0, LOL_PLL2 = 1 results in LOL_PLL2_INTR = 1. ROM=Y, EEPROM=N
1	RESERVED	R	0x0	Reserved
0	LOS_FDET_XO_POL	R/W	0x0	LOS_FDET_XO Flag Polarity. When LOS_FDET_XO_POL = 1, LOS_FDET_XO = 0 results in LOS_FDET_XO_INTR = 1. When LOS_FDET_XO_POL = 0, LOS_FDET_XO = 1 results in LOS_FDET_XO_INTR = 1. ROM=Y, EEPROM=N

1.36 R42 (Offset = 0x2A)Return to the [Summary Table](#).**Table 1-38. R42 Field Descriptions**

Bit	Field	Type	Reset	Description
7	LOPL_DPLL1_POL	R/W	0x0	LOPL_DPLL1 Flag Polarity. When LOPL_DPLL1_POL = 1, LOPL_DPLL1 = 0 results in LOPL_DPLL1_INTR = 1. When LOPL_DPLL1_POL = 0, LOPL_DPLL1 = 1 results in LOPL_DPLL1_INTR = 1. ROM=Y, EEPROM=N
6	LOFL_DPLL1_POL	R/W	0x0	LOFL_DPLL1 Flag Polarity. When LOFL_DPLL1_POL = 1, LOFL_DPLL1 = 0 results in LOFL_DPLL1_INTR = 1. When LOFL_DPLL1_POL = 0, LOFL_DPLL1 = 1 results in LOFL_DPLL1_INTR = 1. ROM=Y, EEPROM=N
5	HIST1_POL	R/W	0x0	HIST1 Flag Polarity. When HIST1_POL = 1, HIST1 = 0 results in HIST1_INTR = 1. When HIST1_POL = 0, HIST1 = 1 results in HIST1_INTR = 1. ROM=Y, EEPROM=N

Table 1-38. R42 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
4	HLDOVR1_POL	R/W	0x0	HLDOVR1 Flag Polarity. When HLDOVR1_POL = 1, HLDOVR1 = 0 results in HLDOVR1_INTR = 1. When HLDOVR1_POL = 0, HLDOVR1 = 1 results in HLDOVR1_INTR = 1. ROM=Y, EEPROM=N
3	REFSWITCH1_POL	R/W	0x0	REFSWITCH1 Flag Polarity. When REFSWITCH1_POL = 1, REFSWITCH1 = 0 results in REFSWITCH1_INTR = 1. When REFSWITCH1_POL = 0, REFSWITCH1 = 1 results in REFSWITCH1_INTR = 1. ROM=Y, EEPROM=N
2	LOR_MISSCLK1_POL	R/W	0x0	LOR_MISSCLK1 Flag Polarity. When LOR_MISSCLK1_POL = 1, LOR_MISSCLK1 = 0 results in LOR_MISSCLK1_INTR = 1. When LOR_MISSCLK1_POL = 0, LOR_MISSCLK1 = 1 results in LOR_MISSCLK1_INTR = 1. ROM=Y, EEPROM=N
1	LOR_FREQ1_POL	R/W	0x0	LOR_FREQ1 Flag Polarity. When LOR_FREQ1_POL = 1, LOR_FREQ1 = 0 results in LOR_FREQ1_INTR = 1. When LOR_FREQ1_POL = 0, LOR_FREQ1 = 1 results in LOR_FREQ1_INTR = 1. ROM=Y, EEPROM=N
0	LOR_PH1_POL	R/W	0x0	LOR_PH1 Flag Polarity. When LOR_PH1_POL = 1, LOR_PH1 = 0 results in LOR_PH1_INTR = 1. When LOR_PH1_POL = 0, LOR_PH1 = 1 results in LOR_PH1_INTR = 1. ROM=Y, EEPROM=N

1.37 R43 (Offset = 0x2B)

Return to the [Summary Table](#).

Table 1-39. R43 Field Descriptions

Bit	Field	Type	Reset	Description
7	LOPL_DPLL2_POL	R/W	0x0	LOPL_DPLL2 Flag Polarity. When LOPL_DPLL2_POL = 1, LOPL_DPLL2 = 0 results in LOPL_DPLL2_INTR = 1. When LOPL_DPLL2_POL = 0, LOPL_DPLL2 = 1 results in LOPL_DPLL2_INTR = 1. ROM=Y, EEPROM=N
6	LOFL_DPLL2_POL	R/W	0x0	LOFL_DPLL2 Flag Polarity. When LOFL_DPLL2_POL = 1, LOFL_DPLL2 = 0 results in LOFL_DPLL2_INTR = 1. When LOFL_DPLL2_POL = 0, LOFL_DPLL2 = 1 results in LOFL_DPLL2_INTR = 1. ROM=Y, EEPROM=N
5	HIST2_POL	R/W	0x0	HIST2 Flag Polarity. When HIST2_POL = 1, HIST2 = 0 results in HIST2_INTR = 1. When HIST2_POL = 0, HIST2 = 1 results in HIST2_INTR = 1. ROM=Y, EEPROM=N
4	HLDOVR2_POL	R/W	0x0	HLDOVR2 Flag Polarity. When HLDOVR2_POL = 1, HLDOVR2 = 0 results in HLDOVR2_INTR = 1. When HLDOVR2_POL = 0, HLDOVR2 = 1 results in HLDOVR2_INTR = 1. ROM=Y, EEPROM=N
3	REFSWITCH2_POL	R/W	0x0	REFSWITCH2 Flag Polarity. When REFSWITCH2_POL = 1, REFSWITCH2 = 0 results in REFSWITCH2_INTR = 1. When REFSWITCH2_POL = 0, REFSWITCH2 = 1 results in REFSWITCH2_INTR = 1. ROM=Y, EEPROM=N
2	LOR_MISSCLK2_POL	R/W	0x0	LOR_MISSCLK2 Flag Polarity. When LOR_MISSCLK2_POL = 1, LOR_MISSCLK2 = 0 results in LOR_MISSCLK2_INTR = 1. When LOR_MISSCLK2_POL = 0, LOR_MISSCLK2 = 1 results in LOR_MISSCLK2_INTR = 1. ROM=Y, EEPROM=N

Table 1-39. R43 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
1	LOR_FREQ2_POL	R/W	0x0	LOR_FREQ2 Flag Polarity. When LOR_FREQ2_POL = 1, LOR_FREQ2 = 0 results in LOR_FREQ2_INTR = 1. When LOR_FREQ2_POL = 0, LOR_FREQ2 = 1 results in LOR_FREQ2_INTR = 1. ROM=Y, EEPROM=N
0	LOR_PH2_POL	R/W	0x0	LOR_PH2 Flag Polarity. When LOR_PH2_POL = 1, LOR_PH2 = 0 results in LOR_PH2_INTR = 1. When LOR_PH2_POL = 0, LOR_PH2 = 1 results in LOR_PH2_INTR = 1. ROM=Y, EEPROM=N

1.38 R44 (Offset = 0x2C)Return to the [Summary Table](#).**Table 1-40. R44 Field Descriptions**

Bit	Field	Type	Reset	Description
7	LOPL_DPLL3_POL	R/W	0x0	LOPL_DPLL3 Flag Polarity. When LOPL_DPLL3_POL = 1, LOPL_DPLL3 = 0 results in LOPL_DPLL3_INTR = 1. When LOPL_DPLL3_POL = 0, LOPL_DPLL3 = 1 results in LOPL_DPLL3_INTR = 1. ROM=Y, EEPROM=N
6	LOFL_DPLL3_POL	R/W	0x0	LOFL_DPLL3 Flag Polarity. When LOFL_DPLL3_POL = 1, LOFL_DPLL3 = 0 results in LOFL_DPLL3_INTR = 1. When LOFL_DPLL3_POL = 0, LOFL_DPLL3 = 1 results in LOFL_DPLL3_INTR = 1. ROM=Y, EEPROM=N
5	HIST3_POL	R/W	0x0	HIST3 Flag Polarity. When HIST3_POL = 1, HIST3 = 0 results in HIST3_INTR = 1. When HIST3_POL = 0, HIST3 = 1 results in HIST3_INTR = 1. ROM=Y, EEPROM=N
4	HLDOVR3_POL	R/W	0x0	HLDOVR3 Flag Polarity. When HLDOVR3_POL = 1, HLDOVR3 = 0 results in HLDOVR3_INTR = 1. When HLDOVR3_POL = 0, HLDOVR3 = 1 results in HLDOVR3_INTR = 1. ROM=Y, EEPROM=N
3	REFSWITCH3_POL	R/W	0x0	REFSWITCH3 Flag Polarity. When REFSWITCH3_POL = 1, REFSWITCH3 = 0 results in REFSWITCH3_INTR = 1. When REFSWITCH3_POL = 0, REFSWITCH3 = 1 results in REFSWITCH3_INTR = 1. ROM=Y, EEPROM=N
2	LOR_MISSCLK3_POL	R/W	0x0	LOR_MISSCLK3 Flag Polarity. When LOR_MISSCLK3_POL = 1, LOR_MISSCLK3 = 0 results in LOR_MISSCLK3_INTR = 1. When LOR_MISSCLK3_POL = 0, LOR_MISSCLK3 = 1 results in LOR_MISSCLK3_INTR = 1. ROM=Y, EEPROM=N
1	LOR_FREQ3_POL	R/W	0x0	LOR_FREQ3 Flag Polarity. When LOR_FREQ3_POL = 1, LOR_FREQ3 = 0 results in LOR_FREQ3_INTR = 1. When LOR_FREQ3_POL = 0, LOR_FREQ3 = 1 results in LOR_FREQ3_INTR = 1. ROM=Y, EEPROM=N
0	LOR_PH3_POL	R/W	0x0	LOR_PH3 Flag Polarity. When LOR_PH3_POL = 1, LOR_PH3 = 0 results in LOR_PH3_INTR = 1. When LOR_PH3_POL = 0, LOR_PH3 = 1 results in LOR_PH3_INTR = 1. ROM=Y, EEPROM=N

1.39 R45 (Offset = 0x2D)Return to the [Summary Table](#).

Table 1-41. R45 Field Descriptions

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3	LOL_PLL1_INTR	R	0x0	LOL_PLL1 Interrupt. The LOL_PLL1_INTR bit is set when a level of the correct polarity is detected on the LOL_PLL1 interrupt source. The LOL_PLL1_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N
2	LOL_PLL2_INTR	R	0x0	LOL_PLL2 Interrupt. The LOL_PLL2_INTR bit is set when a level of the correct polarity is detected on the LOL_PLL2 interrupt source. The LOL_PLL2_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N
1	RESERVED	R	0x0	Reserved
0	LOS_FDET_XO_INTR	R	0x0	LOL_FDET_XO Interrupt. The LOL_FDET_XO_INTR bit is set when a level of the correct polarity is detected on the LOL_FDET_XO interrupt source. The LOL_FDET_XO_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N

1.40 R46 (Offset = 0x2E)

Return to the [Summary Table](#).

Table 1-42. R46 Field Descriptions

Bit	Field	Type	Reset	Description
7	LOPL_DPLL1_INTR	R	0x1	LOPL_DPLL1 Interrupt. The LOPL_DPLL1_INTR bit is set when a level of the correct polarity is detected on the LOPL_DPLL1 interrupt source. The LOPL_DPLL1_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N
6	LOFL_DPLL1_INTR	R	0x1	LOFL_DPLL1 Interrupt. The LOFL_DPLL1_INTR bit is set when a level of the correct polarity is detected on the LOFL_DPLL1 interrupt source. The LOFL_DPLL1_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N
5	HIST1_INTR	R	0x0	HIST1 Interrupt. The HIST1_INTR bit is set when a level of the correct polarity is detected on the HIST1 interrupt source. The HIST1_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N
4	HLDOVR1_INTR	R	0x1	HLDOVR1 Interrupt. The HLDOVR1_INTR bit is set when a level of the correct polarity is detected on the HLDOVR1 interrupt source. The HLDOVR1_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N
3	REFSWITCH1_INTR	R	0x0	REFSWITCH1 Interrupt. The REFSWITCH1_INTR bit is set when a level of the correct polarity is detected on the REFSWITCH1 interrupt source. The REFSWITCH1_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N
2	LOR_MISSCLK1_INTR	R	0x0	LOR_MISSCLK1 Interrupt. The LOR_MISSCLK1_INTR bit is set when a level of the correct polarity is detected on the LOR_MISSCLK1 interrupt source. The LOR_MISSCLK1_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N
1	LOR_FREQ1_INTR	R	0x0	LOR_FREQ1 Interrupt. The LOR_FREQ1_INTR bit is set when a level of the correct polarity is detected on the LOR_FREQ1 interrupt source. The LOR_FREQ1_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N
0	LOR_PH1_INTR	R	0x0	LOR_PH1 Interrupt. The LOR_PH1_INTR bit is set when a level of the correct polarity is detected on the LOR_PH1 interrupt source. The LOR_PH1_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N

1.41 R47 (Offset = 0x2F)Return to the [Summary Table](#).**Table 1-43. R47 Field Descriptions**

Bit	Field	Type	Reset	Description
7	LOPL_DPLL2_INTR	R	0x0	LOPL_DPLL2 Interrupt. The LOPL_DPLL2_INTR bit is set when a level of the correct polarity is detected on the LOPL_DPLL2 interrupt source. The LOPL_DPLL2_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N
6	LOFL_DPLL2_INTR	R	0x0	LOFL_DPLL2 Interrupt. The LOFL_DPLL2_INTR bit is set when a level of the correct polarity is detected on the LOFL_DPLL2 interrupt source. The LOFL_DPLL2_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N
5	HIST2_INTR	R	0x1	HIST2 Interrupt. The HIST2_INTR bit is set when a level of the correct polarity is detected on the HIST2 interrupt source. The HIST2_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N
4	HLDOVR2_INTR	R	0x0	HLDOVR2 Interrupt. The HLDOVR2_INTR bit is set when a level of the correct polarity is detected on the HLDOVR2 interrupt source. The HLDOVR2_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N
3	REFSWITCH2_INTR	R	0x0	REFSWITCH2 Interrupt. The REFSWITCH2_INTR bit is set when a level of the correct polarity is detected on the REFSWITCH2 interrupt source. The REFSWITCH2_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N
2	LOR_MISSCLK2_INTR	R	0x0	LOR_MISSCLK2 Interrupt. The LOR_MISSCLK2_INTR bit is set when a level of the correct polarity is detected on the LOR_MISSCLK2 interrupt source. The LOR_MISSCLK2_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N
1	LOR_FREQ2_INTR	R	0x0	LOR_FREQ2 Interrupt. The LOR_FREQ2_INTR bit is set when a level of the correct polarity is detected on the LOR_FREQ2 interrupt source. The LOR_FREQ2_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N
0	LOR_PH2_INTR	R	0x0	LOR_PH2 Interrupt. The LOR_PH2_INTR bit is set when a level of the correct polarity is detected on the LOR_PH2 interrupt source. The LOR_PH2_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N

1.42 R48 (Offset = 0x30)Return to the [Summary Table](#).**Table 1-44. R48 Field Descriptions**

Bit	Field	Type	Reset	Description
7	LOPL_DPLL3_INTR	R	0x0	LOPL_DPLL3 Interrupt. The LOPL_DPLL3_INTR bit is set when a level of the correct polarity is detected on the LOPL_DPLL3 interrupt source. The LOPL_DPLL3_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N
6	LOFL_DPLL3_INTR	R	0x0	LOFL_DPLL3 Interrupt. The LOFL_DPLL3_INTR bit is set when a level of the correct polarity is detected on the LOFL_DPLL3 interrupt source. The LOFL_DPLL3_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N

Table 1-44. R48 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
5	HIST3_INTR	R	0x0	HIST3 Interrupt. The HIST3_INTR bit is set when a level of the correct polarity is detected on the HIST3 interrupt source. The HIST3_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N
4	HLDOVR3_INTR	R	0x0	HLDOVR3 Interrupt. The HLDOVR3_INTR bit is set when a level of the correct polarity is detected on the HLDOVR3 interrupt source. The HLDOVR3_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N
3	REFSWITCH3_INTR	R	0x0	REFSWITCH3 Interrupt. The REFSWITCH3_INTR bit is set when a level of the correct polarity is detected on the REFSWITCH3 interrupt source. The REFSWITCH3_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N
2	LOR_MISSCLK3_INTR	R	0x0	LOR_MISSCLK3 Interrupt. The LOR_MISSCLK3_INTR bit is set when a level of the correct polarity is detected on the LOR_MISSCLK3 interrupt source. The LOR_MISSCLK3_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N
1	LOR_FREQ3_INTR	R	0x0	LOR_FREQ3 Interrupt. The LOR_FREQ3_INTR bit is set when a level of the correct polarity is detected on the LOR_FREQ3 interrupt source. The LOR_FREQ3_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N
0	LOR_PH3_INTR	R	0x0	LOR_PH3 Interrupt. The LOR_PH3_INTR bit is set when a level of the correct polarity is detected on the LOR_PH3 interrupt source. The LOR_PH3_INTR bit is cleared by writing a 1 to INT_CLR. ROM=N, EEPROM=N

1.43 R49 (Offset = 0x31)

Return to the [Summary Table](#).

Table 1-45. R49 Field Descriptions

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3	INT_LATCH_OR_LIVE	R/W	0x0	ROM=Y, EEPROM=N 0x0 = Latch Mode 0x1 = Live Mode
2	INT_AND_OR	R/W	0x0	Interrupt AND/OR Combination. If INT_AND_OR is 1, then the interrupts are combined in an AND structure, in which case ALL un-masked interrupt flags must be active in order to generate the interrupt. If INT_AND_OR is 0, then the interrupts are combined in an OR structure, in which case ANY un-masked interrupt flags can generate the interrupt. ROM=Y, EEPROM=N 0x0 = OR 0x1 = AND
1	INT_EN	R/W	0x1	Interrupt Enable. If INT_EN is 1 then the interrupt circuit is enabled. If INT_EN is 0 the interrupt circuit is disabled. When INT_EN is 0, interrupts cannot be signaled on the GPIOx pins, and the flag registers (*_INTR) will not be updated; however, the live status registers will still reflect the current state of the internal interrupt source signals. To provide an interrupt on a pin, a GPIOx pin must also be configured as interrupt output. Interrupts may be enabled without providing a GPIOx output to allow sticky bits to be set. ROM=Y, EEPROM=N
0	INT_CLR	R/WSC	0x0	Clears all interrupt flag (*_INTR) registers ROM=N, EEPROM=N

1.44 R50 (Offset = 0x32)Return to the [Summary Table](#).**Table 1-46. R50 Field Descriptions**

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3	REF3_VALID_STATUS	R	0x0	Status of Reference Input Validation for IN3 ROM=N, EEPROM=N
2	REF2_VALID_STATUS	R	0x0	Status of Reference Input Validation for IN2 ROM=N, EEPROM=N
1	REF1_VALID_STATUS	R	0x0	Status of Reference Input Validation for IN1 ROM=N, EEPROM=N
0	REF0_VALID_STATUS	R	0x0	Status of Reference Input Validation for IN0 ROM=N, EEPROM=N

1.45 R51 (Offset = 0x33)Return to the [Summary Table](#).**Table 1-47. R51 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5	REF3_PH_STATUS	R	0x0	Status of Reference 3 Phase Validation ROM=N, EEPROM=N
4	RESERVED	R	0x0	Reserved
3	REF3_FDET_STATUS	R	0x0	Status of Reference 3 Frequency Validation ROM=N, EEPROM=N
2	REF2_PH_STATUS	R	0x0	Status of Reference 2 Phase Validation ROM=N, EEPROM=N
1	RESERVED	R	0x0	Reserved
0	REF2_FDET_STATUS	R	0x0	Status of Reference 2 Frequency Validation ROM=N, EEPROM=N

1.46 R52 (Offset = 0x34)Return to the [Summary Table](#).**Table 1-48. R52 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5	REF1_PH_STATUS	R	0x0	Status of Reference 1 Phase Validation ROM=N, EEPROM=N
4	RESERVED	R	0x0	Reserved
3	REF1_FDET_STATUS	R	0x0	Status of Reference 1 Frequency Validation ROM=N, EEPROM=N
2	REF0_PH_STATUS	R	0x0	Status of Reference 0 Phase Validation ROM=N, EEPROM=N
1	RESERVED	R	0x0	Reserved
0	REF0_FDET_STATUS	R	0x0	Status of Reference 0 Frequency Validation ROM=N, EEPROM=N

1.47 R53 (Offset = 0x35)Return to the [Summary Table](#).

Table 1-49. R53 Field Descriptions

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4	TEC_CNTR_HELD	R	0x0	TEC Held. Reading back a 1 indicates GPIO or SPI event has latched a holdover value. Will clear to 0 after TEC CNTR LSB is read. ROM=N, EEPROM=N
3:0	RESERVED	R	0x0	Reserved

1.48 R54 (Offset = 0x36)

Return to the [Summary Table](#).

Table 1-50. R54 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	GPIO0_IN_FLT_EN	R/W	0x0	Enable GPIO0 Input Pin Deglitch Filter ROM=Y, EEPROM=N

Table 1-50. R54 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
5:0	GPIO0_MODE	R/W	0x0	<p>Select GPIO0 Pin Operating Mode. ROM=Y, EEPROM=N</p> <p>0x0 = STATUS or INT, Acts as status or interrupt outputs (See section on STATUS/INTERRUPT)</p> <p>0x1 = INSEL01_DPLL1, Selects input 0 or input 1 for DPLL1</p> <p>0x2 = INSEL01_DPLL2, Selects input 0 or input 1 for DPLL2</p> <p>0x3 = INSEL01_DPLL3, Selects input 0 or input 1 for DPLL3</p> <p>0x4 = INSEL23_DPLL1, Selects input 2 or input 3 for DPLL1</p> <p>0x5 = INSEL23_DPLL2, Selects input 2 or input 3 for DPLL2</p> <p>0x6 = INSEL23_DPLL3, Selects input 2 or input 3 for DPLL3</p> <p>0x7 = Reserved</p> <p>0x8 = Reserved</p> <p>0x9 = Reserved</p> <p>0xA = Reserved</p> <p>0xB = Reserved</p> <p>0xC = Reserved</p> <p>0xD = INSEL12_DPLL1, Selects input 1 or input 2 for DPLL1</p> <p>0xE = INSEL12_DPLL2, Selects input 1 or input 2 for DPLL2</p> <p>0xF = INSEL12_DPLL3, Selects input 1 or input 2 for DPLL3</p> <p>0x10 = INSEL03_DPLL1, Selects input 0 or input 3 for DPLL1</p> <p>0x11 = INSEL03_DPLL2, Selects input 0 or input 3 for DPLL2</p> <p>0x12 = INSEL03_DPLL3, Selects input 0 or input 3 for DPLL3</p> <p>0x13 = INSEL02_DPLL1, Selects input 0 or input 2 for DPLL1</p> <p>0x14 = INSEL02_DPLL2, Selects input 0 or input 2 for DPLL2</p> <p>0x15 = INSEL02_DPLL3, Selects input 0 or input 2 for DPLL3</p> <p>0x16 = Reserved</p> <p>0x17 = Reserved</p> <p>0x18 = Reserved</p> <p>0x19 = INSEL13_DPLL1, Selects input 1 or input 3 for DPLL1</p> <p>0x1A = INSEL13_DPLL2, Selects input 1 or input 3 for DPLL2</p> <p>0x1B = INSEL13_DPLL3, Selects input 1 or input 3 for DPLL3</p> <p>0x1C = Reserved</p> <p>0x1D = Reserved</p> <p>0x1E = Reserved</p> <p>0x1F = SYNC, Synchronizes selected outputs on a low-to-high pulse. "1" is normal state for outputs. "0" sets outputs in SYNC.</p> <p>0x20 = SYSREF_REQ, Can request SYSREF pulses on appropriate output channels via low-to-high pulse.</p> <p>0x21 = FDEV_TRIG_DPLL1, A rising edge will trigger a frequency change based on the FDEV_DIR_DPLL1</p> <p>0x22 = FDEV_TRIG_DPLL2, A rising edge will trigger a frequency change based on the FDEV_DIR_DPLL2</p> <p>0x23 = FDEV_TRIG_DPLL3, A rising edge will trigger a frequency change based on the FDEV_DIR_DPLL3</p> <p>0x24 = FDEV_DIR_DPLL1, FDEV_DIR_DPLL1 will determine the direction of the FDEV trigger. 0 = Negative and 1 = Positive</p> <p>0x25 = FDEV_DIR_DPLL2, FDEV_DIR_DPLL2 will determine the direction of the FDEV trigger. 0 = Negative and 1 = Positive</p> <p>0x26 = FDEV_DIR_DPLL3, FDEV_DIR_DPLL3 will determine the direction of the FDEV trigger. 0 = Negative and 1 = Positive</p> <p>0x27 = TEC_TRIG_SEL</p>

1.49 R55 (Offset = 0x37)Return to the [Summary Table](#).**Table 1-51. R55 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	GPIO1_IN_FLT_EN	R/W	0x0	<p>Enable GPIO1 Input Pin Deglitch Filter ROM=Y, EEPROM=N</p>

Table 1-51. R55 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
5:0	GPIO1_MODE	R/W	0x0	Select GPIO1 Pin Operating Mode. ROM=Y, EEPROM=N 0x0 = STATUS or INT, Acts as status or interrupt outputs (See section on STATUS/INTERRUPT) 0x1 = INSEL01_DPLL1, Selects input 0 or input 1 for DPLL1 0x2 = INSEL01_DPLL2, Selects input 0 or input 1 for DPLL2 0x3 = INSEL01_DPLL3, Selects input 0 or input 1 for DPLL3 0x4 = INSEL23_DPLL1, Selects input 2 or input 3 for DPLL1 0x5 = INSEL23_DPLL2, Selects input 2 or input 3 for DPLL2 0x6 = INSEL23_DPLL3, Selects input 2 or input 3 for DPLL3 0x7 = Reserved 0x8 = Reserved 0x9 = Reserved 0xA = Reserved 0xB = Reserved 0xC = Reserved 0xD = INSEL12_DPLL1, Selects input 1 or input 2 for DPLL1 0xE = INSEL12_DPLL2, Selects input 1 or input 2 for DPLL2 0xF = INSEL12_DPLL3, Selects input 1 or input 2 for DPLL3 0x10 = INSEL03_DPLL1, Selects input 0 or input 3 for DPLL1 0x11 = INSEL03_DPLL2, Selects input 0 or input 3 for DPLL2 0x12 = INSEL03_DPLL3, Selects input 0 or input 3 for DPLL3 0x13 = INSEL02_DPLL1, Selects input 0 or input 2 for DPLL1 0x14 = INSEL02_DPLL2, Selects input 0 or input 2 for DPLL2 0x15 = INSEL02_DPLL3, Selects input 0 or input 2 for DPLL3 0x16 = Reserved 0x17 = Reserved 0x18 = Reserved 0x19 = INSEL13_DPLL1, Selects input 1 or input 3 for DPLL1 0x1A = INSEL13_DPLL2, Selects input 1 or input 3 for DPLL2 0x1B = INSEL13_DPLL3, Selects input 1 or input 3 for DPLL3 0x1C = Reserved 0x1D = Reserved 0x1E = Reserved 0x1F = SYNC, Synchronizes selected outputs on a low-to-high pulse. "1" is normal state for outputs. "0" sets outputs in SYNC. 0x20 = SYSREF_REQ, Can request SYSREF pulses on appropriate output channels via low-to-high pulse. 0x21 = FDEV_TRIG_DPLL1, A rising edge will trigger a frequency change based on the FDEV_DIR_DPLL1 0x22 = FDEV_TRIG_DPLL2, A rising edge will trigger a frequency change based on the FDEV_DIR_DPLL2 0x23 = FDEV_TRIG_DPLL3, A rising edge will trigger a frequency change based on the FDEV_DIR_DPLL3 0x24 = FDEV_DIR_DPLL1, FDEV_DIR_DPLL1 will determine the direction of the FDEV trigger. 0 = Negative and 1 = Positive 0x25 = FDEV_DIR_DPLL2, FDEV_DIR_DPLL2 will determine the direction of the FDEV trigger. 0 = Negative and 1 = Positive 0x26 = FDEV_DIR_DPLL3, FDEV_DIR_DPLL3 will determine the direction of the FDEV trigger. 0 = Negative and 1 = Positive 0x27 = TEC_TRIG_SEL

1.50 R56 (Offset = 0x38)

Return to the [Summary Table](#).

Table 1-52. R56 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	GPIO2_IN_FLT_EN	R/W	0x0	Enable GPIO2 Input Pin Deglitch Filter ROM=Y, EEPROM=N

Table 1-52. R56 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
5:0	GPIO2_MODE	R/W	0x0	<p>Select GPIO2 Pin Operating Mode. ROM=Y, EEPROM=N</p> <p>0x0 = STATUS or INT, Acts as status or interrupt outputs (See section on STATUS/INTERRUPT)</p> <p>0x1 = INSEL01_DPLL1, Selects input 0 or input 1 for DPLL1</p> <p>0x2 = INSEL01_DPLL2, Selects input 0 or input 1 for DPLL2</p> <p>0x3 = INSEL01_DPLL3, Selects input 0 or input 1 for DPLL3</p> <p>0x4 = INSEL23_DPLL1, Selects input 2 or input 3 for DPLL1</p> <p>0x5 = INSEL23_DPLL2, Selects input 2 or input 3 for DPLL2</p> <p>0x6 = INSEL23_DPLL3, Selects input 2 or input 3 for DPLL3</p> <p>0x7 = Reserved</p> <p>0x8 = Reserved</p> <p>0x9 = Reserved</p> <p>0xA = Reserved</p> <p>0xB = Reserved</p> <p>0xC = Reserved</p> <p>0xD = INSEL12_DPLL1, Selects input 1 or input 2 for DPLL1</p> <p>0xE = INSEL12_DPLL2, Selects input 1 or input 2 for DPLL2</p> <p>0xF = INSEL12_DPLL3, Selects input 1 or input 2 for DPLL3</p> <p>0x10 = INSEL03_DPLL1, Selects input 0 or input 3 for DPLL1</p> <p>0x11 = INSEL03_DPLL2, Selects input 0 or input 3 for DPLL2</p> <p>0x12 = INSEL03_DPLL3, Selects input 0 or input 3 for DPLL3</p> <p>0x13 = INSEL02_DPLL1, Selects input 0 or input 2 for DPLL1</p> <p>0x14 = INSEL02_DPLL2, Selects input 0 or input 2 for DPLL2</p> <p>0x15 = INSEL02_DPLL3, Selects input 0 or input 2 for DPLL3</p> <p>0x16 = Reserved</p> <p>0x17 = Reserved</p> <p>0x18 = Reserved</p> <p>0x19 = INSEL13_DPLL1, Selects input 1 or input 3 for DPLL1</p> <p>0x1A = INSEL13_DPLL2, Selects input 1 or input 3 for DPLL2</p> <p>0x1B = INSEL13_DPLL3, Selects input 1 or input 3 for DPLL3</p> <p>0x1C = Reserved</p> <p>0x1D = Reserved</p> <p>0x1E = Reserved</p> <p>0x1F = SYNC, Synchronizes selected outputs on a low-to-high pulse. "1" is normal state for outputs. "0" sets outputs in SYNC.</p> <p>0x20 = SYSREF_REQ, Can request SYSREF pulses on appropriate output channels via low-to-high pulse.</p> <p>0x21 = FDEV_TRIG_DPLL1, A rising edge will trigger a frequency change based on the FDEV_DIR_DPLL1</p> <p>0x22 = FDEV_TRIG_DPLL2, A rising edge will trigger a frequency change based on the FDEV_DIR_DPLL2</p> <p>0x23 = FDEV_TRIG_DPLL3, A rising edge will trigger a frequency change based on the FDEV_DIR_DPLL3</p> <p>0x24 = FDEV_DIR_DPLL1, FDEV_DIR_DPLL1 will determine the direction of the FDEV trigger. 0 = Negative and 1 = Positive</p> <p>0x25 = FDEV_DIR_DPLL2, FDEV_DIR_DPLL2 will determine the direction of the FDEV trigger. 0 = Negative and 1 = Positive</p> <p>0x26 = FDEV_DIR_DPLL3, FDEV_DIR_DPLL3 will determine the direction of the FDEV trigger. 0 = Negative and 1 = Positive</p> <p>0x27 = TEC_TRIG_SEL</p>

1.51 R57 (Offset = 0x39)Return to the [Summary Table](#).**Table 1-53. R57 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved

Table 1-53. R57 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
6:0	GPIO0_SEL	R/W	0x2	GPIO0 Status Signal Select. ROM=Y, EEPROM=N 0x0 = XO Loss of Signal (LOS) 0x1 = APLL1 Loss of Lock (LOL) 0x2 = APLL2 Loss of Lock (LOL) 0x3 = APLL3 Loss of Lock (LOL) 0x4 = DPLL1 Loss of Phase Lock (LOPL) 0x5 = DPLL1 Loss of Frequency Lock (LOFL) 0x6 = PLL1 LOL DPLL1 LOPL DPLL1 LOFL 0x7 = DPLL2 Loss of Phase Lock (LOPL) 0x8 = DPLL2 Loss of Frequency Lock (LOFL) 0x9 = PLL2 LOL DPLL2 LOPL DPLL2 LOFL 0xA = DPLL3 Loss of Phase Lock (LOPL) 0xB = DPLL3 Loss of Frequency Lock (LOFL) 0xC = PLL3 LOL DPLL3 LOPL DPLL3 LOFL 0xD = DPLL1 DPLL2 DPLL3 LOL 0xE = Interrupt (INTR). Derived from INT_FLAG register bits. 0xF = SPI Readback Data (SDO) 0x10 = Reserved 0x11 = Reserved 0x12 = Reserved 0x13 = Reserved 0x14 = Reserved 0x15 = DPLL1 REF0 Selected 0x16 = DPLL1 REF1 Selected 0x17 = DPLL1 REF2 Selected 0x18 = DPLL1 REF3 Selected 0x19 = Reserved 0x1A = DPLL1 Holdover Active 0x1B = DPLL2 REF0 Selected 0x1C = DPLL2 REF1 Selected 0x1D = DPLL2 REF2 Selected 0x1E = DPLL2 REF3 Selected 0x1F = Reserved 0x20 = DPLL2 Holdover Active 0x21 = DPLL3 REF0 Selected 0x22 = DPLL3 REF1 Selected 0x23 = DPLL3 REF2 Selected 0x24 = DPLL3 REF3 Selected 0x25 = Reserved 0x26 = DPLL3 Holdover Active 0x27 = REF0 Frequency Monitor 0x28 = REF1 Frequency Monitor 0x29 = REF2 Frequency Monitor 0x2A = REF3 Frequency Monitor 0x2B = Reserved 0x2C = REF0 Missing Clock Monitor 0x2D = REF1 Missing Clock Monitor 0x2E = REF2 Missing Clock Monitor 0x2F = REF3 Missing Clock Monitor 0x30 = Reserved 0x31 = Reserved 0x32 = Reserved 0x33 = Reserved 0x34 = Reserved 0x35 = Reserved 0x36 = Reserved 0x37 = Reserved 0x38 = Reserved 0x39 = Reserved 0x3A = Reserved 0x3B = REF0 Phase Validation Monitor 0x3C = REF1 Phase Validation Monitor 0x3D = REF2 Phase Validation Monitor 0x3E = REF3 Phase Validation Monitor 0x3F = Reserved 0x40 = Reserved

Table 1-53. R57 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
				0x41 = Reserved
				0x42 = Reserved
				0x43 = Reserved
				0x44 = Reserved
				0x45 = Reserved
				0x46 = Reserved
				0x47 = Reserved
				0x48 = Reserved
				0x49 = Reserved
				0x4A = Reserved
				0x4B = Reserved
				0x4C = Reserved
				0x4D = Reserved
				0x4E = Reserved
				0x4F = Reserved
				0x50 = PLL1 N-Divider Divided By 2
				0x51 = PLL2 N-Divider Divided By 2
				0x52 = PLL3 N-Divider Divided By 2
				0x53 = PLL1 R-Divider Divided By 2
				0x54 = PLL2 R-Divider Divided By 2
				0x55 = PLL3 R-Divider Divided By 2
				0x56 = Reserved
				0x57 = Reserved
				0x58 = Reserved
				0x59 = REF0 Monitor Divider Output Divided By 2 / REFx_DET_CLK_DIV
				0x5A = REF1 Monitor Divider Output Divided By 2 / REFx_DET_CLK_DIV
				0x5B = REF2 Monitor Divider Output Divided By 2 / REFx_DET_CLK_DIV
				0x5C = REF3 Monitor Divider Output Divided By 2 / REFx_DET_CLK_DIV
				0x5D = Reserved
				0x5E = TDC1 R-Divider Divided By 2
				0x5F = Reserved
				0x60 = TDC1 FB-Divider Divided By 2
				0x61 = TDC2 R-Divider Divided By 2
				0x62 = Reserved
				0x63 = TDC2 FB-Divider Divided By 2
				0x64 = TDC3 R-Divider Divided By 2
				0x65 = Reserved
				0x66 = TDC3 FB-Divider Divided By 2
				0x67 = Reserved
				0x68 = Reserved
				0x69 = Reserved
				0x6A = Reserved
				0x6B = Reserved
				0x6C = Reserved
				0x6D = Reserved
				0x6E = Reserved
				0x6F = Reserved
				0x70 = Reserved
				0x71 = Reserved
				0x72 = Reserved

1.52 R58 (Offset = 0x3A)Return to the [Summary Table](#).**Table 1-54. R58 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved

Table 1-54. R58 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
6:0	GPIO1_SEL	R/W	0x73	GPIO1 Status Signal Select. ROM=Y, EEPROM=N 0x0 = XO Loss of Signal (LOS) 0x1 = APLL1 Loss of Lock (LOL) 0x2 = APLL2 Loss of Lock (LOL) 0x3 = APLL3 Loss of Lock (LOL) 0x4 = DPLL1 Loss of Phase Lock (LOPL) 0x5 = DPLL1 Loss of Frequency Lock (LOFL) 0x6 = PLL1 LOL DPLL1 LOPL DPLL1 LOFL 0x7 = DPLL2 Loss of Phase Lock (LOPL) 0x8 = DPLL2 Loss of Frequency Lock (LOFL) 0x9 = PLL2 LOL DPLL2 LOPL DPLL2 LOFL 0xA = DPLL3 Loss of Phase Lock (LOPL) 0xB = DPLL3 Loss of Frequency Lock (LOFL) 0xC = PLL3 LOL DPLL3 LOPL DPLL3 LOFL 0xD = DPLL1 DPLL2 DPLL3 LOL 0xE = Interrupt (INTR). Derived from INT_FLAG register bits. 0xF = SPI Readback Data (SDO) 0x10 = Reserved 0x11 = Reserved 0x12 = Reserved 0x13 = Reserved 0x14 = Reserved 0x15 = DPLL1 REF0 Selected 0x16 = DPLL1 REF1 Selected 0x17 = DPLL1 REF2 Selected 0x18 = DPLL1 REF3 Selected 0x19 = Reserved 0x1A = DPLL1 Holdover Active 0x1B = DPLL2 REF0 Selected 0x1C = DPLL2 REF1 Selected 0x1D = DPLL2 REF2 Selected 0x1E = DPLL2 REF3 Selected 0x1F = Reserved 0x20 = DPLL2 Holdover Active 0x21 = DPLL3 REF0 Selected 0x22 = DPLL3 REF1 Selected 0x23 = DPLL3 REF2 Selected 0x24 = DPLL3 REF3 Selected 0x25 = Reserved 0x26 = DPLL3 Holdover Active 0x27 = REF0 Frequency Monitor 0x28 = REF1 Frequency Monitor 0x29 = REF2 Frequency Monitor 0x2A = REF3 Frequency Monitor 0x2B = Reserved 0x2C = REF0 Missing Clock Monitor 0x2D = REF1 Missing Clock Monitor 0x2E = REF2 Missing Clock Monitor 0x2F = REF3 Missing Clock Monitor 0x30 = Reserved 0x31 = Reserved 0x32 = Reserved 0x33 = Reserved 0x34 = Reserved 0x35 = Reserved 0x36 = Reserved 0x37 = Reserved 0x38 = Reserved 0x39 = Reserved 0x3A = Reserved 0x3B = REF0 Phase Validation Monitor 0x3C = REF1 Phase Validation Monitor 0x3D = REF2 Phase Validation Monitor 0x3E = REF3 Phase Validation Monitor 0x3F = Reserved 0x40 = Reserved

Table 1-54. R58 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
				0x41 = Reserved 0x42 = Reserved 0x43 = Reserved 0x44 = Reserved 0x45 = Reserved 0x46 = Reserved 0x47 = Reserved 0x48 = Reserved 0x49 = Reserved 0x4A = Reserved 0x4B = Reserved 0x4C = Reserved 0x4D = Reserved 0x4E = Reserved 0x4F = Reserved 0x50 = PLL1 N-Divider Divided By 2 0x51 = PLL2 N-Divider Divided By 2 0x52 = PLL3 N-Divider Divided By 2 0x53 = PLL1 R-Divider Divided By 2 0x54 = PLL2 R-Divider Divided By 2 0x55 = PLL3 R-Divider Divided By 2 0x56 = Reserved 0x57 = Reserved 0x58 = Reserved 0x59 = REF0 Monitor Divider Output Divided By 2 / REFx_DET_CLK_DIV 0x5A = REF1 Monitor Divider Output Divided By 2 / REFx_DET_CLK_DIV 0x5B = REF2 Monitor Divider Output Divided By 2 / REFx_DET_CLK_DIV 0x5C = REF3 Monitor Divider Output Divided By 2 / REFx_DET_CLK_DIV 0x5D = Reserved 0x5E = TDC1 R-Divider Divided By 2 0x5F = Reserved 0x60 = TDC1 FB-Divider Divided By 2 0x61 = TDC2 R-Divider Divided By 2 0x62 = Reserved 0x63 = TDC2 FB-Divider Divided By 2 0x64 = TDC3 R-Divider Divided By 2 0x65 = Reserved 0x66 = TDC3 FB-Divider Divided By 2 0x67 = Reserved 0x68 = Reserved 0x69 = Reserved 0x6A = Reserved 0x6B = Reserved 0x6C = Reserved 0x6D = Reserved 0x6E = Reserved 0x6F = Reserved 0x70 = Reserved 0x71 = Reserved 0x72 = Reserved 0x73 = Continuous SYSREF / 1-PPS from selected SYSREF DIV

1.53 R59 (Offset = 0x3B)Return to the [Summary Table](#).**Table 1-55. R59 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved

Table 1-55. R59 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
6:0	GPIO2_SEL	R/W	0xE	<p>GPIO2 Status Signal Select. ROM=Y, EEPROM=N</p> <p>0x0 = XO Loss of Signal (LOS) 0x1 = APLL1 Loss of Lock (LOL) 0x2 = APLL2 Loss of Lock (LOL) 0x3 = APLL3 Loss of Lock (LOL) 0x4 = DPLL1 Loss of Phase Lock (LOPL) 0x5 = DPLL1 Loss of Frequency Lock (LOFL) 0x6 = PLL1 LOL DPLL1 LOPL DPLL1 LOFL 0x7 = DPLL2 Loss of Phase Lock (LOPL) 0x8 = DPLL2 Loss of Frequency Lock (LOFL) 0x9 = PLL2 LOL DPLL2 LOPL DPLL2 LOFL 0xA = DPLL3 Loss of Phase Lock (LOPL) 0xB = DPLL3 Loss of Frequency Lock (LOFL) 0xC = PLL3 LOL DPLL3 LOPL DPLL3 LOFL 0xD = DPLL1 DPLL2 DPLL3 LOL 0xE = Interrupt (INTR). Derived from INT_FLAG register bits. 0xF = SPI Readback Data (SDO) 0x10 = Reserved 0x11 = Reserved 0x12 = Reserved 0x13 = Reserved 0x14 = Reserved 0x15 = DPLL1 REF0 Selected 0x16 = DPLL1 REF1 Selected 0x17 = DPLL1 REF2 Selected 0x18 = DPLL1 REF3 Selected 0x19 = Reserved 0x1A = DPLL1 Holdover Active 0x1B = DPLL2 REF0 Selected 0x1C = DPLL2 REF1 Selected 0x1D = DPLL2 REF2 Selected 0x1E = DPLL2 REF3 Selected 0x1F = Reserved 0x20 = DPLL2 Holdover Active 0x21 = DPLL3 REF0 Selected 0x22 = DPLL3 REF1 Selected 0x23 = DPLL3 REF2 Selected 0x24 = DPLL3 REF3 Selected 0x25 = Reserved 0x26 = DPLL3 Holdover Active 0x27 = REF0 Frequency Monitor 0x28 = REF1 Frequency Monitor 0x29 = REF2 Frequency Monitor 0x2A = REF3 Frequency Monitor 0x2B = Reserved 0x2C = REF0 Missing Clock Monitor 0x2D = REF1 Missing Clock Monitor 0x2E = REF2 Missing Clock Monitor 0x2F = REF3 Missing Clock Monitor 0x30 = Reserved 0x31 = Reserved 0x32 = Reserved 0x33 = Reserved 0x34 = Reserved 0x35 = Reserved 0x36 = Reserved 0x37 = Reserved 0x38 = Reserved 0x39 = Reserved 0x3A = Reserved 0x3B = REF0 Phase Validation Monitor 0x3C = REF1 Phase Validation Monitor 0x3D = REF2 Phase Validation Monitor 0x3E = REF3 Phase Validation Monitor 0x3F = Reserved 0x40 = Reserved</p>

Table 1-55. R59 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
				0x41 = Reserved
				0x42 = Reserved
				0x43 = Reserved
				0x44 = Reserved
				0x45 = Reserved
				0x46 = Reserved
				0x47 = Reserved
				0x48 = Reserved
				0x49 = Reserved
				0x4A = Reserved
				0x4B = Reserved
				0x4C = Reserved
				0x4D = Reserved
				0x4E = Reserved
				0x4F = Reserved
				0x50 = PLL1 N-Divider Divided By 2
				0x51 = PLL2 N-Divider Divided By 2
				0x52 = PLL3 N-Divider Divided By 2
				0x53 = PLL1 R-Divider Divided By 2
				0x54 = PLL2 R-Divider Divided By 2
				0x55 = PLL3 R-Divider Divided By 2
				0x56 = Reserved
				0x57 = Reserved
				0x58 = Reserved
				0x59 = REF0 Monitor Divider Output Divided By 2 / REFx_DET_CLK_DIV
				0x5A = REF1 Monitor Divider Output Divided By 2 / REFx_DET_CLK_DIV
				0x5B = REF2 Monitor Divider Output Divided By 2 / REFx_DET_CLK_DIV
				0x5C = REF3 Monitor Divider Output Divided By 2 / REFx_DET_CLK_DIV
				0x5D = Reserved
				0x5E = TDC1 R-Divider Divided By 2
				0x5F = Reserved
				0x60 = TDC1 FB-Divider Divided By 2
				0x61 = TDC2 R-Divider Divided By 2
				0x62 = Reserved
				0x63 = TDC2 FB-Divider Divided By 2
				0x64 = TDC3 R-Divider Divided By 2
				0x65 = Reserved
				0x66 = TDC3 FB-Divider Divided By 2
				0x67 = Reserved
				0x68 = Reserved
				0x69 = Reserved
				0x6A = Reserved
				0x6B = Reserved
				0x6C = Reserved
				0x6D = Reserved
				0x6E = Reserved
				0x6F = Reserved
				0x70 = Reserved
				0x71 = Reserved
				0x72 = Reserved
				0x73 = Continuous SYSREF / 1-PPS from selected SYSREF DIV

1.54 R60 (Offset = 0x3C)Return to the [Summary Table](#).**Table 1-56. R60 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved

Table 1-56. R60 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
5	GPIO0_OPEND	R/W	0x0	GPIO0 Open Drain Enable ROM=Y, EEPROM=N 0x0 = CMOS 0x1 = NMOS open drain. External pull-up from 1.8 V to 5.5 V supply rail required.
4	GPIO1_OPEND	R/W	0x1	GPIO1 Open Drain Enable ROM=Y, EEPROM=N 0x0 = CMOS 0x1 = NMOS open drain. External pull-up from 1.8 V to 5.5 V supply rail required.
3	GPIO2_OPEND	R/W	0x0	GPIO2 Open Drain Enable ROM=Y, EEPROM=N 0x0 = CMOS 0x1 = NMOS open drain. External pull-up from 1.8 V to 5.5 V supply rail required.
2	GPIO0_POL	R/W	0x1	GPIO0 Status Output Polarity. The GPIO0_STAT_POL bit defines the polarity of information presented on the GPIO0 output. If GPIO0_STAT_POL is set to 1, then GPIO0 is active high. If GPIO0_STAT_POL is 0, then GPIO0 is active low. ROM=Y, EEPROM=N 0x0 = Active High 0x1 = Active Low
1	GPIO1_POL	R/W	0x0	GPIO1 Status Output Polarity. The GPIO1_STAT_POL bit defines the polarity of information presented on the GPIO1 output. If GPIO1_STAT_POL is set to 1, then GPIO1 is active high. If GPIO1_STAT_POL is 0, then GPIO1 is active low. ROM=Y, EEPROM=N 0x0 = Active High 0x1 = Active Low
0	GPIO2_POL	R/W	0x0	GPIO2 Status Output Polarity. The GPIO2_STAT_POL bit defines the polarity of information presented on the GPIO2 output. If GPIO2_STAT_POL is set to 1, then GPIO2 is active high. If GPIO2_STAT_POL is 0, then GPIO2 is active low. ROM=Y, EEPROM=N 0x0 = Active High 0x1 = Active Low

1.55 R61 (Offset = 0x3D)

Return to the [Summary Table](#).

Table 1-57. R61 Field Descriptions

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4:2	GPIO_SYSREF_SEL	R/W	0x5	Select SYSREF divider output for GPIO output. When GPIOx_SEL chooses SYSREF divider, this is the SYSREF divider output on the GPIO. This signal is continuous. This could be used for low frequency outputs such as 1-PPS or 8 kHz as a 3.3-V LVCMOS signal. Select SYSREF divider output after static digital delay but before the analog and digital delay and pulser. ROM=Y, EEPROM=N 0x0 = OUT_0_1 0x1 = OUT_4_5 0x2 = OUT_6_7 0x3 = OUT_8_9 0x4 = OUT_10_11 0x5 = OUT_12_13 0x6 = NA 0x7 = NA

Table 1-57. R61 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
1	MUTE_DPLL3_PHLOCK	R/W	0x0	DPLL3 mute enabled during phase lock. Muted outputs will start clocking glitch free once achieving lock status. PLL3 outputs will be muted even if DPLL3_EN = 0. ROM=Y, EEPROM=Y
0	MUTE_DPLL3_FRLOCK	R/W	0x0	DPLL3 mute enabled during dpll lock. Muted outputs will start clocking glitch free once achieving lock status. PLL3 outputs will be muted even if DPLL3_EN = 0. ROM=Y, EEPROM=Y

1.56 R62 (Offset = 0x3E)Return to the [Summary Table](#).**Table 1-58. R62 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	RESERVED	R	0x0	Reserved
5	MUTE_DPLL2_PHLOCK	R/W	0x0	DPLL2 mute enabled during phase lock. Muted outputs will start clocking glitch free once achieving lock status. PLL2 outputs will be muted even if DPLL2_EN = 0. ROM=Y, EEPROM=Y
4	MUTE_DPLL2_FRLOCK	R/W	0x0	DPLL2 mute enabled during dpll lock. Muted outputs will start clocking glitch free once achieving lock status. PLL2 outputs will be muted even if DPLL2_EN = 0. ROM=Y, EEPROM=Y
3	MUTE_APLL2_LOCK	R/W	0x0	APLL2 mute enabled during PLL lock. Muted outputs will start clocking glitch free once achieving lock status. ROM=Y, EEPROM=Y
2	MUTE_DPLL1_PHLOCK	R/W	0x0	DPLL1 mute enabled during phase lock. Muted outputs will start clocking glitch free once achieving lock status. ROM=Y, EEPROM=Y
1	MUTE_DPLL1_FRLOCK	R/W	0x0	DPLL1 mute enabled during dpll lock. Muted outputs will start clocking glitch free once achieving lock status. ROM=Y, EEPROM=Y
0	MUTE_APLL1_LOCK	R/W	0x0	APLL1 mute enabled during PLL lock. Muted outputs will start clocking glitch free once achieving lock status. ROM=Y, EEPROM=Y

1.57 R63 (Offset = 0x3F)Return to the [Summary Table](#).**Table 1-59. R63 Field Descriptions**

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4	XO_FDET_BYP	R/W	0x0	Frequency Detector Bypass. When XO_FDET_BYP is set to 1, the output of the XO frequency detector is ignored. ROM=Y, EEPROM=N
3:0	XO_ITYPE	R/W	0x0	XO interface type control. ROM=Y, EEPROM=Y 0x0 = DC (ext term) 0x1 = AC (ext term) 0x3 = AC (int 100 Ω to GND) 0x4 = DC (int 50 Ω to GND) 0x5 = AC (int 50 Ω to GND) 0x8 = LVCMOS 0xC = LVCMOS (int 50 Ω)

1.58 R64 (Offset = 0x40)

Return to the [Summary Table](#).

Table 1-60. R64 Field Descriptions

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4:0	XO_OUT_BUF_EN	R/W	0xD	Bit position enables XO Output Buffer path to: [0] The XO Freq Detector [1] APLL1 REF [2] APLL2 REF [3] APLL3 REF, and [4] OUT0_1 ROM=Y, EEPROM=Y

1.59 R65 (Offset = 0x41)

Return to the [Summary Table](#).

Table 1-61. R65 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	REF3_ITYPE	R/W	0x0	To be updated. REF3 interface type control. ROM=Y, EEPROM=N 0x0 = DIFFin, ext DC, ext term 0x1 = DIFFin, ext AC, ext term 0x2 = DIFFin, ext DC, int 100 Ω diff 0x3 = DIFFin, ext AC, int 100 Ω diff 0x4 = DIFFin, ext DC, int 50 Ω to GND 0x5 = DIFFin, ext AC, int 50 Ω to GND 0x8 = CMOS, ext DC, int AC couple, 70 mV margin 0xC = S-E, ext DC, int AC couple, 70 mV margin, int 50 Ω to GND 0x18 = CMOS, ext DC, int DC couple, 150 mV hysteresis 0x23 = DIFFin, ext AC/DC, int 100 Ω diff, 210 mV margin 0x28 = CMOS, ext DC, int AC couple, 210 mV margin 0x38 = CMOS, ext DC, int DC couple, 0 mV hysteresis

1.60 R66 (Offset = 0x42)

Return to the [Summary Table](#).

Table 1-62. R66 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	REF2_ITYPE	R/W	0x0	To be updated. REF2 interface type control. ROM=Y, EEPROM=N 0x0 = DIFFin, ext DC, ext term 0x1 = DIFFin, ext AC, ext term 0x2 = DIFFin, ext DC, int 100 Ω diff 0x3 = DIFFin, ext AC, int 100 Ω diff 0x4 = DIFFin, ext DC, int 50 Ω to GND 0x5 = DIFFin, ext AC, int 50 Ω to GND 0x8 = CMOS, ext DC, int AC couple, 70 mV margin 0xC = S-E, ext DC, int AC couple, 70 mV margin, int 50 Ω to GND 0x18 = CMOS, ext DC, int DC couple, 150 mV hysteresis 0x23 = DIFFin, ext AC/DC, int 100 Ω diff, 210 mV margin 0x28 = CMOS, ext DC, int AC couple, 210 mV margin 0x38 = CMOS, ext DC, int DC couple, 0 mV hysteresis

1.61 R67 (Offset = 0x43)Return to the [Summary Table](#).**Table 1-63. R67 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	REF1_ITYPE	R/W	0x0	REF1 interface type control. ROM=Y, EEPROM=N 0x0 = DIFFin, ext DC, ext term 0x1 = DIFFin, ext AC, ext term 0x2 = DIFFin, ext DC, int 100 Ω diff 0x3 = DIFFin, ext AC, int 100 Ω diff 0x4 = DIFFin, ext DC, int 50 Ω to GND 0x5 = DIFFin, ext AC, int 50 Ω to GND 0x8 = CMOS, ext DC, int AC couple, 70 mV margin 0xC = S-E, ext DC, int AC couple, 70 mV margin, int 50 Ω to GND 0x18 = CMOS, ext DC, int DC couple, 150 mV hysteresis 0x23 = DIFFin, ext AC/DC, int 100 Ω diff, 210 mV margin 0x28 = CMOS, ext DC, int AC couple, 210 mV margin 0x38 = CMOS, ext DC, int DC couple, 0 mV hysteresis

1.62 R68 (Offset = 0x44)Return to the [Summary Table](#).**Table 1-64. R68 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	REF0_ITYPE	R/W	0x0	REF0 interface type control. ROM=Y, EEPROM=N 0x0 = DIFFin, ext DC, ext term 0x1 = DIFFin, ext AC, ext term 0x2 = DIFFin, ext DC, int 100 Ω diff 0x3 = DIFFin, ext AC, int 100 Ω diff 0x4 = DIFFin, ext DC, int 50 Ω to GND 0x5 = DIFFin, ext AC, int 50 Ω to GND 0x8 = CMOS, ext DC, int AC couple, 70 mV margin 0xC = S-E, ext DC, int AC couple, 70 mV margin, int 50 Ω to GND 0x18 = CMOS, ext DC, int DC couple, 150 mV hysteresis 0x23 = DIFFin, ext AC/DC, int 100 Ω diff, 210 mV margin 0x28 = CMOS, ext DC, int AC couple, 210 mV margin 0x38 = CMOS, ext DC, int DC couple, 0 mV hysteresis

1.63 R70 (Offset = 0x46)Return to the [Summary Table](#).**Table 1-65. R70 Field Descriptions**

Bit	Field	Type	Reset	Description
7:1	RESERVED	R	0x0	Reserved
0	STATUS_MUX_DIV2_EN	R/W	0x0	Enable all DivideBy2 clocks for Status MUX debug signals ROM=N, EEPROM=N

1.64 R75 (Offset = 0x4B)Return to the [Summary Table](#).**Table 1-66. R75 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved

Table 1-66. R75 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
6	TDC3_ZDM_BYPASS_FB_DIV	R/W	0x0	Selects TDC3 feedback input source ROM=Y, EEPROM=N 0x0 = Select FB Divider 0x1 = Bypass FB Divider
5	TDC3_ZDM_FB_PRE_BY P	R/W	0x0	Bypasses TDC3 feedback divider when using ZDM with DPLL3. ROM=Y, EEPROM=N 0x0 = ZDM disabled 0x1 = ZDM enable
4:3	TDC3_IN_SEL	R/W	0x3	Selects TDC3 zero delay input ROM=Y, EEPROM=N 0x0 = Reserved 0x1 = OUT_10_11_ZD_FB 0x2 = OUT_0_1_ZD_FB 0x3 = VCO3 direct (ZDM disabled)
2:0	TDC3_IN_DRV_SEL	R/W	0x2	Enables zero delay input mux output ROM=Y, EEPROM=N 0x0 = Reserved 0x1 = Reserved 0x2 = ZDM disabled 0x3 = Reserved 0x4 = Reserved 0x5 = ZDM enabled 0x6 = Reserved 0x7 = Reserved

1.65 R76 (Offset = 0x4C)

Return to the [Summary Table](#).

Table 1-67. R76 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	TDC2_ZDM_BYPASS_FB_DIV	R/W	0x0	Selects TDC feedback input. 0=FB_DIV, 1=ZD bypass FB DIV ROM=Y, EEPROM=N 0x0 = Select FB Divider 0x1 = Bypass FB Divider
5	TDC2_ZDM_FB_PRE_BY P	R/W	0x0	Bypasses TDC2 feedback divider when using ZDM with DPLL2. ROM=Y, EEPROM=N 0x0 = ZDM disabled 0x1 = ZDM enable
4:3	TDC2_IN_SEL	R/W	0x3	Selects zero delay input ROM=Y, EEPROM=N 0x0 = Reserved 0x1 = OUT_4_5_ZD_FB 0x2 = OUT_0_1_ZD_FB 0x3 = VCO2 direct (ZDM disabled)
2:0	TDC2_IN_DRV_SEL	R/W	0x2	Enables zero delay input mux output ROM=Y, EEPROM=N 0x0 = Reserved 0x1 = Reserved 0x2 = ZDM disabled 0x3 = Reserved 0x4 = Reserved 0x5 = ZDM enabled 0x6 = Reserved 0x7 = Reserved

1.66 R77 (Offset = 0x4D)

Return to the [Summary Table](#).

Table 1-68. R77 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	TDC1_ZDM_BYPASS_FB_DIV	R/W	0x0	Selects TDC feedback input. 0=FB_DIV, 1=ZD bypass FB DIV ROM=Y, EEPROM=N 0x0 = Select FB Divider 0x1 = Bypass FB Divider
5	TDC1_ZDM_FB_PRE_BY P	R/W	0x0	Bypasses TDC1 feedback divider when using ZDM with DPLL1. ROM=Y, EEPROM=N 0x0 = ZDM disabled 0x1 = ZDM enable
4:3	TDC1_IN_SEL	R/W	0x3	Selects which output group to feedback for zero delay mode. ROM=Y, EEPROM=N 0x0 = Reserved 0x1 = Reserved 0x2 = OUT_0_1_ZD_FB 0x3 = VCO1 direct (ZDM disabled)
2:0	TDC1_IN_DRV_SEL	R/W	0x2	Enables zero delay input mux output ROM=Y, EEPROM=N 0x0 = Reserved 0x1 = Reserved 0x2 = ZDM disabled 0x3 = Reserved 0x4 = Reserved 0x5 = ZDM enabled 0x6 = Reserved 0x7 = Reserved

1.67 R78 (Offset = 0x4E)Return to the [Summary Table](#).**Table 1-69. R78 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5	REF_OUT01_EN	R/W	0x0	Ref to OUT0_1 Enable. Enables the path for a reference clock (selected by REF_2OUT01_SEL) to be available for selection at OUT0_1. ROM=Y, EEPROM=N
4:0	REF_OUT01_SEL	R/W	0x0	Ref to OUT0_1 Select. Selects one reference clock which will be fed to the input of OUT0_1 (if path enabled by REF_2OUT01_EN). ROM=Y, EEPROM=N 0x0 = OFF 0x1 = REF0 0x2 = REF1 0x4 = REF2 0x8 = REF3

1.68 R79 (Offset = 0x4F)Return to the [Summary Table](#).**Table 1-70. R79 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5	REF0_EARLY_DET_EN	R/W	0x1	REF0 Early Clock Detect Enable ROM=Y, EEPROM=N
4	REF0_PH_VALID_EN	R/W	0x0	REF0 Phase Validation Enable ROM=Y, EEPROM=N
3	REF0_VALTMR_EN	R/W	0x1	REF0 Validation Timer Enable ROM=Y, EEPROM=N

Table 1-70. R79 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
2	REF0_PPM_EN	R/W	0x1	REF0 Freq ppm Enable ROM=Y, EEPROM=N
1	REF0_MISSCLK_EN	R/W	0x1	REF0 Missing Clock Detect Enable ROM=Y, EEPROM=N
0	RESERVED	R	0x0	Reserved

1.69 R80 (Offset = 0x50)

Return to the [Summary Table](#).

Table 1-71. R80 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5	REF1_EARLY_DET_EN	R/W	0x1	REF1 Early Clock Detect Enable ROM=Y, EEPROM=N
4	REF1_PH_VALID_EN	R/W	0x0	REF1 Phase Validation Enable ROM=Y, EEPROM=N
3	REF1_VALTMR_EN	R/W	0x1	REF1 Validation Timer Enable ROM=Y, EEPROM=N
2	REF1_PPM_EN	R/W	0x1	REF1 Freq ppm Enable ROM=Y, EEPROM=N
1	REF1_MISSCLK_EN	R/W	0x1	REF1 Missing Clock Detect Enable ROM=Y, EEPROM=N
0	RESERVED	R	0x0	Reserved

1.70 R81 (Offset = 0x51)

Return to the [Summary Table](#).

Table 1-72. R81 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5	REF2_EARLY_DET_EN	R/W	0x1	REF2 Early Clock Detect Enable ROM=Y, EEPROM=N
4	REF2_PH_VALID_EN	R/W	0x0	REF2 Phase Validation Enable ROM=Y, EEPROM=N
3	REF2_VALTMR_EN	R/W	0x1	REF2 Validation Timer Enable ROM=Y, EEPROM=N
2	REF2_PPM_EN	R/W	0x1	REF2 Freq ppm Enable ROM=Y, EEPROM=N
1	REF2_MISSCLK_EN	R/W	0x1	REF2 Missing Clock Detect Enable ROM=Y, EEPROM=N
0	RESERVED	R	0x0	Reserved

1.71 R82 (Offset = 0x52)

Return to the [Summary Table](#).

Table 1-73. R82 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5	REF3_EARLY_DET_EN	R/W	0x0	REF3 Early Clock Detect Enable ROM=Y, EEPROM=N

Table 1-73. R82 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
4	REF3_PH_VALID_EN	R/W	0x1	REF3 Phase Validation Enable ROM=Y, EEPROM=N
3	REF3_VALTMR_EN	R/W	0x1	REF3 Validation Timer Enable ROM=Y, EEPROM=N
2	REF3_PPM_EN	R/W	0x0	REF3 Freq ppm Enable ROM=Y, EEPROM=N
1	REF3_MISSCLK_EN	R/W	0x0	REF3 Missing Clock Detect Enable ROM=Y, EEPROM=N
0	RESERVED	R	0x0	Reserved

1.72 R83 (Offset = 0x53)Return to the [Summary Table](#).**Table 1-74. R83 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	REF3_DET_CLK_DIV	R/W	0x2	REF3 Clock Detector Divider. Bit 0 controls the divide value (0=Div4, 1=Div16). Bit 1, if set, causes the divider to be bypassed. ROM=Y, EEPROM=N 0x0 = Div By 4 0x1 = Div By 16 0x2 = Bypass 0x3 = Bypass (Reserved)
5:4	REF2_DET_CLK_DIV	R/W	0x2	REF2 Clock Detector Divider. Bit 0 controls the divide value (0=Div4, 1=Div16). Bit 1, if set, causes the divider to be bypassed. ROM=Y, EEPROM=N 0x0 = Div By 4 0x1 = Div By 16 0x2 = Bypass 0x3 = Bypass (Reserved)
3:2	REF1_DET_CLK_DIV	R/W	0x0	REF1 Clock Detector Divider. Bit 0 controls the divide value (0=Div4, 1=Div16). Bit 1, if set, causes the divider to be bypassed. ROM=Y, EEPROM=N 0x0 = Div By 4 0x1 = Div By 16 0x2 = Bypass 0x3 = Bypass (Reserved)
1:0	REF0_DET_CLK_DIV	R/W	0x0	REF0 Clock Detector Divider. Bit 0 controls the divide value (0=Div4, 1=Div16). Bit 1, if set, causes the divider to be bypassed. ROM=Y, EEPROM=N 0x0 = Div By 4 0x1 = Div By 16 0x2 = Bypass 0x3 = Bypass (Reserved)

1.73 R84 (Offset = 0x54)Return to the [Summary Table](#).**Table 1-75. R84 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	REF0_MISSCLK_DIV_21:16	R/W	0x0	See Register 86

1.74 R85 (Offset = 0x55)

Return to the [Summary Table](#).

Table 1-76. R85 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	REF0_MISSCLK_DIV_15:8	R/W	0x0	See Register 86

1.75 R86 (Offset = 0x56)

Return to the [Summary Table](#).

Table 1-77. R86 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	REF0_MISSCLK_DIV	R/W	0xB	REF0 Missing Clock Detector Divider. 21-bit divide value. Should be equal to the ratio of either VCO3/2 to REF0 or VCO2/5 to REF0 (determined by REF0_MISSCLK_VCOSEL selection) with some offset added for upper bound. ROM=Y, EEPROM=N

1.76 R87 (Offset = 0x57)

Return to the [Summary Table](#).

Table 1-78. R87 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	REF1_MISSCLK_DIV_21:16	R/W	0x0	See Register 89

1.77 R88 (Offset = 0x58)

Return to the [Summary Table](#).

Table 1-79. R88 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	REF1_MISSCLK_DIV_15:8	R/W	0x0	See Register 89

1.78 R89 (Offset = 0x59)

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Table 1-80. R89 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	REF1_MISSCLK_DIV	R/W	0xB	REF1 Missing Clock Detector Divider. 21-bit divide value. Should be equal to the ratio of either VCO3/2 to REF1 or VCO2/5 to REF0 (determined by REF1_MISSCLK_VCOSEL selection) with some offset added for upper bound. ROM=Y, EEPROM=N

1.79 R90 (Offset = 0x5A)

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Table 1-81. R90 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	REF2_MISSCLK_DIV_21: 16	R/W	0x0	See Register 92

1.80 R91 (Offset = 0x5B)Return to the [Summary Table](#).**Table 1-82. R91 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	REF2_MISSCLK_DIV_15: 8	R/W	0x0	See Register 92

1.81 R92 (Offset = 0x5C)Return to the [Summary Table](#).**Table 1-83. R92 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	REF2_MISSCLK_DIV	R/W	0x7E	REF2 Missing Clock Detector Divider. 21-bit divide value. Should be equal to the ratio of either VCO3/2 to REF2 or VCO2/5 to REF2 (determined by REF0_MISSCLK_VCOSEL selection) with some offset added for upper bound. ROM=Y, EEPROM=N

1.82 R93 (Offset = 0x5D)Return to the [Summary Table](#).**Table 1-84. R93 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	REF3_MISSCLK_DIV_21: 16	R/W	0x1F	See Register 95

1.83 R94 (Offset = 0x5E)Return to the [Summary Table](#).**Table 1-85. R94 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	REF3_MISSCLK_DIV_15: 8	R/W	0xFF	See Register 95

1.84 R95 (Offset = 0x5F)Return to the [Summary Table](#).

Table 1-86. R95 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	REF3_MISSCLK_DIV	R/W	0xFF	REF3 Missing Clock Detector Divider. 21-bit divide value. Should be equal to the ratio of either VCO3/2 to REF3 or VCO2/5 to REF3 (determined by REF0_MISSCLK_VCOSEL selection) with some offset added for upper bound. ROM=Y, EEPROM=N

1.85 R96 (Offset = 0x60)

Return to the [Summary Table](#).

Table 1-87. R96 Field Descriptions

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3:1	RESERVED	R	0x0	Reserved
0	REF0_MISSCLK_VCOSEL	R/W	0x0	Missing/Early Clock Detector VCO selection for all references. Also selects TEC clock source. ROM=Y, EEPROM=N 0x0 = VCO3 0x1 = VCO2

1.86 R97 (Offset = 0x61)

Return to the [Summary Table](#).

Table 1-88. R97 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	REF0_EARLY_CLK_DIV_21:16	R/W	0x0	See Register 99

1.87 R98 (Offset = 0x62)

Return to the [Summary Table](#).

Table 1-89. R98 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	REF0_EARLY_CLK_DIV_15:8	R/W	0x0	See Register 99

1.88 R99 (Offset = 0x63)

Return to the [Summary Table](#).

Table 1-90. R99 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	REF0_EARLY_CLK_DIV	R/W	0x3	REF0 Early Clock Detector Divider. 21-bit divide value. Should be equal to the ratio of either VCO3/2 to REF0 or VCO2/5 to REF0 (determined by REF0_MISSCLK_VCOSEL selection) with some offset subtracted for lower bound. ROM=Y, EEPROM=N

1.89 R100 (Offset = 0x64)

Return to the [Summary Table](#).

Table 1-91. R100 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	REF1_EARLY_CLK_DIV_ 21:16	R/W	0x0	See Register 102

1.90 R101 (Offset = 0x65)Return to the [Summary Table](#).**Table 1-92. R101 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	REF1_EARLY_CLK_DIV_ 15:8	R/W	0x0	See Register 102

1.91 R102 (Offset = 0x66)Return to the [Summary Table](#).**Table 1-93. R102 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	REF1_EARLY_CLK_DIV	R/W	0x3	REF1 Early Clock Detector Divider. 21-bit divide value. Should be equal to the ratio of either VCO3/2 to REF1 or VCO2/5 to REF1 (determined by REF0_MISSCLK_VCOSEL selection) with some offset subtracted for lower bound. ROM=Y, EEPROM=N

1.92 R103 (Offset = 0x67)Return to the [Summary Table](#).**Table 1-94. R103 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	REF2_EARLY_CLK_DIV_ 21:16	R/W	0x0	See Register 105

1.93 R104 (Offset = 0x68)Return to the [Summary Table](#).**Table 1-95. R104 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	REF2_EARLY_CLK_DIV_ 15:8	R/W	0x0	See Register 105

1.94 R105 (Offset = 0x69)Return to the [Summary Table](#).

Table 1-96. R105 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	REF2_EARLY_CLK_DIV	R/W	0x76	REF2 Early Clock Detector Divider. 21-bit divide value. Should be equal to the ratio of either VCO3/2 to REF2 or VCO2/5 to REF2 (determined by REF0_MISSCLK_VCOSEL selection) with some offset subtracted for lower bound. ROM=Y, EEPROM=N

1.95 R106 (Offset = 0x6A)

Return to the [Summary Table](#).

Table 1-97. R106 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	REF3_EARLY_CLK_DIV_21:16	R/W	0x1F	See Register 108

1.96 R107 (Offset = 0x6B)

Return to the [Summary Table](#).

Table 1-98. R107 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	REF3_EARLY_CLK_DIV_15:8	R/W	0xFF	See Register 108

1.97 R108 (Offset = 0x6C)

Return to the [Summary Table](#).

Table 1-99. R108 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	REF3_EARLY_CLK_DIV	R/W	0xFF	REF3 Early Clock Detector Divider. 21-bit divide value. Should be equal to the ratio of either VCO3/2 to REF3 or VCO2/5 to REF3 (determined by REF0_MISSCLK_VCOSEL selection) with some offset subtracted for lower bound. ROM=Y, EEPROM=N

1.98 R109 (Offset = 0x6D)

Return to the [Summary Table](#).

Table 1-100. R109 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:0	REF0_PPM_MIN_14:8	R/W	0x0	See Register 110

1.99 R110 (Offset = 0x6E)

Return to the [Summary Table](#).

Table 1-101. R110 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	REF0_PPM_MIN	R/W	0xE	REF0 Frequency PPM Lower Limit ROM=Y, EEPROM=N

1.100 R111 (Offset = 0x6F)Return to the [Summary Table](#).**Table 1-102. R111 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:0	REF0_PPM_MAX_14:8	R/W	0x0	See Register 112

1.101 R112 (Offset = 0x70)Return to the [Summary Table](#).**Table 1-103. R112 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	REF0_PPM_MAX	R/W	0x14	REF0 Frequency PPM Upper Limit ROM=Y, EEPROM=N

1.102 R113 (Offset = 0x71)Return to the [Summary Table](#).**Table 1-104. R113 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:0	REF1_PPM_MIN_14:8	R/W	0x0	See Register 114

1.103 R114 (Offset = 0x72)Return to the [Summary Table](#).**Table 1-105. R114 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	REF1_PPM_MIN	R/W	0xE	REF1 Frequency PPM Lower Limit ROM=Y, EEPROM=N

1.104 R115 (Offset = 0x73)Return to the [Summary Table](#).**Table 1-106. R115 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:0	REF1_PPM_MAX_14:8	R/W	0x0	See Register 116

1.105 R116 (Offset = 0x74)Return to the [Summary Table](#).

Table 1-107. R116 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	REF1_PPM_MAX	R/W	0x14	REF1 Frequency PPM Upper Limit ROM=Y, EEPROM=N

1.106 R117 (Offset = 0x75)

Return to the [Summary Table](#).

Table 1-108. R117 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:0	REF2_PPM_MIN_14:8	R/W	0x0	See Register 118

1.107 R118 (Offset = 0x76)

Return to the [Summary Table](#).

Table 1-109. R118 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	REF2_PPM_MIN	R/W	0xE	REF2 Frequency PPM Lower Limit ROM=Y, EEPROM=N

1.108 R119 (Offset = 0x77)

Return to the [Summary Table](#).

Table 1-110. R119 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:0	REF2_PPM_MAX_14:8	R/W	0x0	See Register 120

1.109 R120 (Offset = 0x78)

Return to the [Summary Table](#).

Table 1-111. R120 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	REF2_PPM_MAX	R/W	0x14	REF2 Frequency PPM Upper Limit ROM=Y, EEPROM=N

1.110 R121 (Offset = 0x79)

Return to the [Summary Table](#).

Table 1-112. R121 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:0	REF3_PPM_MIN_14:8	R/W	0x0	See Register 122

1.111 R122 (Offset = 0x7A)

Return to the [Summary Table](#).

Table 1-113. R122 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	REF3_PPM_MIN	R/W	0xE	REF3 Frequency PPM Lower Limit ROM=Y, EEPROM=N

1.112 R123 (Offset = 0x7B)Return to the [Summary Table](#).**Table 1-114. R123 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:0	REF3_PPM_MAX_14:8	R/W	0x0	See Register 124

1.113 R124 (Offset = 0x7C)Return to the [Summary Table](#).**Table 1-115. R124 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	REF3_PPM_MAX	R/W	0x14	REF3 Frequency PPM Upper Limit ROM=Y, EEPROM=N

1.114 R141 (Offset = 0x8D)Return to the [Summary Table](#).**Table 1-116. R141 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:4	REF2_PH_VALID_CNT_M SB	R/W	0x0	REF2 phase detector validation. Extra 3 bits for REF2 phase detector validation counter. Lower 28-bits are in REF2_CNTSTRT. REF2 frequency PPM detect validation and phase detect validation are mutually exclusive. Only one of REF2_PPM_EN or REF2_PH_VALID_EN may be enabled at same time. ROM=Y, EEPROM=N
3:0	REF2_CNTSTRT_27:24	R/W	0x0	See Register 144

1.115 R142 (Offset = 0x8E)Return to the [Summary Table](#).**Table 1-117. R142 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	REF2_CNTSTRT_23:16	R/W	0x0	See Register 144

1.116 R143 (Offset = 0x8F)Return to the [Summary Table](#).**Table 1-118. R143 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	REF2_CNTSTRT_15:8	R/W	0xA2	See Register 144

1.117 R144 (Offset = 0x90)

Return to the [Summary Table](#).

Table 1-119. R144 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	REF2_CNTSTRT	R/W	0xC3	28-bit REF2 PPM detect counter. REF2 decreases a counter reset by REF2_CNTSTRT value. When this becomes 0, then counter reset by REF2_HOLD_CNTSTRT is the error and used to know frequency accuracy. ROM=Y, EEPROM=N

1.118 R145 (Offset = 0x91)

Return to the [Summary Table](#).

Table 1-120. R145 Field Descriptions

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3:0	REF2_HOLD_CNTSTRT_27:24	R/W	0x0	See Register 148

1.119 R146 (Offset = 0x92)

Return to the [Summary Table](#).

Table 1-121. R146 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	REF2_HOLD_CNTSTRT_23:16	R/W	0x3	See Register 148

1.120 R147 (Offset = 0x93)

Return to the [Summary Table](#).

Table 1-122. R147 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	REF2_HOLD_CNTSTRT_15:8	R/W	0xD	See Register 148

1.121 R148 (Offset = 0x94)

Return to the [Summary Table](#).

Table 1-123. R148 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	REF2_HOLD_CNTSTRT	R/W	0x42	28-bit REF2 PPM detect counter. XO decreases a counter reset by REF2_HOLD_CNTSTRT. When counter reset by REF2_CNTSTRT becomes 0, this counter reset by REF2_HOLD_CNTSTRT contains the time error from which PPM error may be determined. ROM=Y, EEPROM=N

1.122 R149 (Offset = 0x95)

Return to the [Summary Table](#).

Table 1-124. R149 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:4	REF3_PH_VALID_CNT_MSB	R/W	0x0	REF3 phase detector validation. Extra 3 bits for REF3 phase detector validation counter. Lower 28-bits are in REF3_CNTSTRT. REF3 frequency PPM detect validation and phase detect validation are mutually exclusive. Only one of REF3_PPM_EN or REF3_PH_VALID_EN may be enabled at same time. ROM=Y, EEPROM=N
3:0	REF3_CNTSTRT_27:24	R/W	0x2	See Register 152

1.123 R150 (Offset = 0x96)Return to the [Summary Table](#).**Table 1-125. R150 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	REF3_CNTSTRT_23:16	R/W	0xDC	See Register 152

1.124 R151 (Offset = 0x97)Return to the [Summary Table](#).**Table 1-126. R151 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	REF3_CNTSTRT_15:8	R/W	0x6C	See Register 152

1.125 R152 (Offset = 0x98)Return to the [Summary Table](#).**Table 1-127. R152 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	REF3_CNTSTRT	R/W	0x0	28-bit REF3 PPM detect counter. REF3 decreases a counter reset by REF3_CNTSTRT value. When this becomes 0, then counter reset by REF3_HOLD_CNTSTRT is the error and used to know frequency accuracy. ROM=Y, EEPROM=N

1.126 R153 (Offset = 0x99)Return to the [Summary Table](#).**Table 1-128. R153 Field Descriptions**

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3:0	REF3_HOLD_CNTSTRT_27:24	R/W	0x0	See Register 156

1.127 R154 (Offset = 0x9A)Return to the [Summary Table](#).

Table 1-129. R154 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	REF3_HOLD_CNTSTRT_ 23:16	R/W	0x3	See Register 156

1.128 R155 (Offset = 0x9B)

Return to the [Summary Table](#).

Table 1-130. R155 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	REF3_HOLD_CNTSTRT_ 15:8	R/W	0xD	See Register 156

1.129 R156 (Offset = 0x9C)

Return to the [Summary Table](#).

Table 1-131. R156 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	REF3_HOLD_CNTSTRT	R/W	0x41	28-bit REF3 PPM detect counter. XO decreases a counter reset by REF3_HOLD_CNTSTRT. When counter reset by REF3_CNTSTRT becomes 0, this counter reset by REF3_HOLD_CNTSTRT contains the time error from which PPM error may be determined. ROM=Y, EEPROM=N

1.130 R157 (Offset = 0x9D)

Return to the [Summary Table](#).

Table 1-132. R157 Field Descriptions

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved

Table 1-132. R157 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
4:0	REF0VLDTMR	R/W	0xA	REF0 Validation Timer. All selected validations must be valid for selected amount of time before the IN0/REF0 is considered valid. ROM=Y, EEPROM=N 0x0 = 0.1 ms 0x1 = 0.2 ms 0x2 = 0.4 ms 0x3 = 0.8 ms 0x4 = 1.6 ms 0x5 = 3.2 ms 0x6 = 6.4 ms 0x7 = 12.8 ms 0x8 = 25.6 ms 0x9 = 51.2 ms 0xA = 102.4 ms 0xB = 204.8 ms 0xC = 409.6 ms 0xD = 819.2 ms 0xE = 1.6 s 0xF = 3.3 s 0x10 = 6.6 s 0x11 = 13.1 s 0x12 = 26.2 s 0x13 = 52.4 s 0x14 = 1.7 min 0x15 = 3.5 min 0x16 = 7.0 min 0x17 = 14.0 min 0x18 = 28.0 min 0x19 = 55.9 min 0x1A = 1.9 hr 0x1B = 3.7 hr 0x1C = 7.5 hr 0x1D = 14.9 hr 0x1E = 29.8 hr 0x1F = 59.7 hr

1.131 R158 (Offset = 0x9E)Return to the [Summary Table](#).**Table 1-133. R158 Field Descriptions**

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved

Table 1-133. R158 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
4:0	REF1VLDTMR	R/W	0xA	REF1 Validation Timer. All selected validations must be valid for selected amount of time before the IN1/REF1 is considered valid. ROM=Y, EEPROM=N 0x0 = 0.1 ms 0x1 = 0.2 ms 0x2 = 0.4 ms 0x3 = 0.8 ms 0x4 = 1.6 ms 0x5 = 3.2 ms 0x6 = 6.4 ms 0x7 = 12.8 ms 0x8 = 25.6 ms 0x9 = 51.2 ms 0xA = 102.4 ms 0xB = 204.8 ms 0xC = 409.6 ms 0xD = 819.2 ms 0xE = 1.6 s 0xF = 3.3 s 0x10 = 6.6 s 0x11 = 13.1 s 0x12 = 26.2 s 0x13 = 52.4 s 0x14 = 1.7 min 0x15 = 3.5 min 0x16 = 7.0 min 0x17 = 14.0 min 0x18 = 28.0 min 0x19 = 55.9 min 0x1A = 1.9 hr 0x1B = 3.7 hr 0x1C = 7.5 hr 0x1D = 14.9 hr 0x1E = 29.8 hr 0x1F = 59.7 hr

1.132 R159 (Offset = 0x9F)

Return to the [Summary Table](#).

Table 1-134. R159 Field Descriptions

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved

Table 1-134. R159 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
4:0	REF2VLDTMR	R/W	0xA	REF2 Validation Timer. All selected validations must be valid for selected amount of time before the IN2/REF2 is considered valid. ROM=Y, EEPROM=N 0x0 = 0.1 ms 0x1 = 0.2 ms 0x2 = 0.4 ms 0x3 = 0.8 ms 0x4 = 1.6 ms 0x5 = 3.2 ms 0x6 = 6.4 ms 0x7 = 12.8 ms 0x8 = 25.6 ms 0x9 = 51.2 ms 0xA = 102.4 ms 0xB = 204.8 ms 0xC = 409.6 ms 0xD = 819.2 ms 0xE = 1.6 s 0xF = 3.3 s 0x10 = 6.6 s 0x11 = 13.1 s 0x12 = 26.2 s 0x13 = 52.4 s 0x14 = 1.7 min 0x15 = 3.5 min 0x16 = 7.0 min 0x17 = 14.0 min 0x18 = 28.0 min 0x19 = 55.9 min 0x1A = 1.9 hr 0x1B = 3.7 hr 0x1C = 7.5 hr 0x1D = 14.9 hr 0x1E = 29.8 hr 0x1F = 59.7 hr

1.133 R160 (Offset = 0xA0)Return to the [Summary Table](#).**Table 1-135. R160 Field Descriptions**

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved

Table 1-135. R160 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
4:0	REF3VLDTMR	R/W	0xA	REF3 Validation Timer. All selected validations must be valid for selected amount of time before the IN3/REF3 is considered valid. ROM=Y, EEPROM=N 0x0 = 0.1 ms 0x1 = 0.2 ms 0x2 = 0.4 ms 0x3 = 0.8 ms 0x4 = 1.6 ms 0x5 = 3.2 ms 0x6 = 6.4 ms 0x7 = 12.8 ms 0x8 = 25.6 ms 0x9 = 51.2 ms 0xA = 102.4 ms 0xB = 204.8 ms 0xC = 409.6 ms 0xD = 819.2 ms 0xE = 1.6 s 0xF = 3.3 s 0x10 = 6.6 s 0x11 = 13.1 s 0x12 = 26.2 s 0x13 = 52.4 s 0x14 = 1.7 min 0x15 = 3.5 min 0x16 = 7.0 min 0x17 = 14.0 min 0x18 = 28.0 min 0x19 = 55.9 min 0x1A = 1.9 hr 0x1B = 3.7 hr 0x1C = 7.5 hr 0x1D = 14.9 hr 0x1E = 29.8 hr 0x1F = 59.7 hr

1.134 R161 (Offset = 0xA1)

Return to the [Summary Table](#).

Table 1-136. R161 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	REF0_PH_VALID_THR_1 3:8	R/W	0x0	REF0 Phase Validation Threshold ROM=Y, EEPROM=N

1.135 R162 (Offset = 0xA2)

Return to the [Summary Table](#).

Table 1-137. R162 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	REF0_PH_VALID_THR	R/W	0x0	REF0 Phase Validation Threshold ROM=Y, EEPROM=N

1.136 R163 (Offset = 0xA3)

Return to the [Summary Table](#).

Table 1-138. R163 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	REF1_PH_VALID_THR_1 3:8	R/W	0x0	REF1 Phase Validation Threshold ROM=Y, EEPROM=N

1.137 R164 (Offset = 0xA4)Return to the [Summary Table](#).**Table 1-139. R164 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	REF1_PH_VALID_THR	R/W	0x0	REF1 Phase Validation Threshold ROM=Y, EEPROM=N

1.138 R165 (Offset = 0xA5)Return to the [Summary Table](#).**Table 1-140. R165 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	REF2_PH_VALID_THR_1 3:8	R/W	0x0	REF2 Phase Validation Threshold ROM=Y, EEPROM=N

1.139 R166 (Offset = 0xA6)Return to the [Summary Table](#).**Table 1-141. R166 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	REF2_PH_VALID_THR	R/W	0x0	REF2 Phase Validation Threshold ROM=Y, EEPROM=N

1.140 R167 (Offset = 0xA7)Return to the [Summary Table](#).**Table 1-142. R167 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	REF3_PH_VALID_THR_1 3:8	R/W	0x3	REF3 Phase Validation Threshold ROM=Y, EEPROM=N

1.141 R168 (Offset = 0xA8)Return to the [Summary Table](#).**Table 1-143. R168 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	REF3_PH_VALID_THR	R/W	0xE8	REF3 Phase Validation Threshold ROM=Y, EEPROM=N

1.142 R170 (Offset = 0xAA)

Return to the [Summary Table](#).

Table 1-144. R170 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	NVMSCRC	R	0x0	NVM Stored CRC ROM=N, EEPROM=N

1.143 R171 (Offset = 0xAB)

Return to the [Summary Table](#).

Table 1-145. R171 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	REGCOMMIT	R/WSC	0x0	Copy fields which also exist in SRAM to SRAM memory. The REGCOMMIT bit is automatically cleared to 0 when the transfer is complete. Next an EEPROM programming operation may be performed to update NVM EEPROM. When programming to alter an NVM profile, it is suggested to toggle PD# to assure default conditions, change the desired fields, then assert the REGCOMMIT bit. ROM=N, EEPROM=N
5	NVMCRCERR	R	0x0	NVM CRC Error Indication. The NVMCRCERR bit is set to 1 if a CRC Error has been detected when reading back from on-chip EEPROM during device configuration. ROM=N, EEPROM=N
4	RESERVED	R	0x0	Reserved
3	RESERVED	R	0x0	Reserved
2	NVMBUSY	R	0x0	NVM Program Busy Indication. The NVMBUSY bit is 1 during an on-chip EEPROM Erase/Program cycle. While NVMBUSY is 1 the on-chip EEPROM cannot be accessed. Toggling PD# or removing power while NVMBUSY is asserted will corrupt the EEPROM. ROM=N, EEPROM=N
1	NVMERASE	R/WSC	0x0	NVM Erase Start. The NVMERASE bit is used to begin an on-chip EEPROM Erase cycle. The Erase cycle is only initiated if the immediately preceding I2C/SMBus transaction was a write to the NVMUNLK register with the appropriate code. The NVMERASE bit is automatically cleared to 0.
0	NVMPROG	R/WSC	0x0	NVM Program Start. The NVMPROG bit is used to begin an on-chip EEPROM Program cycle. The Program cycle is only initiated if the immediately preceding I2C/SMBus transaction was a write to the NVMUNLK register with the appropriate code. The NVMPROG bit is automatically cleared to 0.

1.144 R172 (Offset = 0xAC)

Return to the [Summary Table](#).

Table 1-146. R172 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	NVMLCRC	R	0x0	NVM Live CRC ROM=N, EEPROM=N

1.145 R173 (Offset = 0xAD)

Return to the [Summary Table](#).

Table 1-147. R173 Field Descriptions

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4:0	MEMADR_12:8	R/W	0x0	See Register 174

1.146 R174 (Offset = 0xAE)Return to the [Summary Table](#).**Table 1-148. R174 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	MEMADR	R/W	0x0	Memory Address. The MEMADR value determines the starting address for access to the on-chip memories. This same MEMADR value is used for EEPROM and SRAM access which share the same memory map and also ROM access. The NVMDAT field is used to read and write from EEPROM. The RAMDAT field is used to read and write from SRAM. The ROMDAT field is used to read and write from ROM.

1.147 R175 (Offset = 0xAF)Return to the [Summary Table](#).**Table 1-149. R175 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	NVMDAT	R/W	0x0	EEPROM Read Data. The first time an I2C/SMBus read transaction accesses the NVMDAT register address, either because it was explicitly targeted or because the address was auto-incremented, the read transaction will return the EEPROM data located at the address specified by the MEMADR register. Any additional read's which are part of the same transaction will cause the EEPROM address to be incremented and the next EEPROM data byte will be returned. The I2C/SMBus address will no longer be auto-incremented, i.e the I2C/SMBus address will be locked to the NVMDAT register after the first access. Access to the NVMDAT register will terminate at the end of the current I2C/SMBus transaction. ROM=N, EEPROM=N

1.148 R176 (Offset = 0xB0)Return to the [Summary Table](#).**Table 1-150. R176 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	RAMDAT	R/W	0x0	RAM Read/Write Data. The first time an I2C/SMBus read or write transaction accesses the RAMDAT register address, either because it was explicitly targeted or because the address was auto-incremented, a read transaction will return the RAM data located at the address specified by the MEMADR register and a write transaction will cause the current I2C/SMBus data to be written to the address specified by the MEMADR register. Any additional accesses which are part of the same transaction will cause the RAM address to be incremented and a read or write access will take place to the next SRAM address. The I2C/SMBus address will no longer be auto-incremented (that is, the I2C/SMBus address will be locked to the RAMDAT register after the first access). Access to the RAMDAT register will terminate at the end of the current I2C/SMBus transaction. ROM=N, EEPROM=N

1.149 R180 (Offset = 0xB4)

Return to the [Summary Table](#).

Table 1-151. R180 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	NVMUNLK	R/W	0x0	NVM Prog Unlock. The NVMUNLK register must be written immediately prior to setting the NVMERASE and NVMPROG bit, otherwise the Erase/Program cycle will not be triggered. NVMUNLK must be written with a value of 0xEA. ROM=N, EEPROM=N

1.150 R223 (Offset = 0xDF)

Return to the [Summary Table](#).

Table 1-152. R223 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:3	DPLL1_REF0_AUTO_PRIORITY	R/W	0x0	REF0 Priority for Automatic Switchover. Sets the priority for REF0 used in Automatic Non-Revertive, Automatic Revertive, and Manual Selection with Automatic Fallback switchover modes. ROM=Y, EEPROM=N 0x0 = Not available for selection 0x1 = 1st 0x2 = 2nd 0x3 = 3rd 0x4 = 4th 0x5 = 5th 0x6 = 6th 0x7 = 7th
2:0	DPLL1_REF1_AUTO_PRIORITY	R/W	0x0	REF1 Priority for Automatic Switchover. Sets the priority for REF1 used in Automatic Non-Revertive, Automatic Revertive, and Manual Selection with Automatic Fallback switchover modes. ROM=Y, EEPROM=N 0x0 = Not available for selection 0x1 = 1st 0x2 = 2nd 0x3 = 3rd 0x4 = 4th 0x5 = 5th 0x6 = 6th 0x7 = 7th

1.151 R224 (Offset = 0xE0)

Return to the [Summary Table](#).

Table 1-153. R224 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:3	DPLL1_REF2_AUTO_PRIORITY	R/W	0x0	REF2 Priority for Automatic Switchover. Sets the priority for REF2 used in Automatic Non-Revertive, Automatic Revertive, and Manual Selection with Automatic Fallback switchover modes. ROM=Y, EEPROM=N 0x0 = Not available for selection 0x1 = 1st 0x2 = 2nd 0x3 = 3rd 0x4 = 4th 0x5 = 5th 0x6 = 6th 0x7 = 7th

Table 1-153. R224 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
2:0	DPLL1_REF3_AUTO_PRIORITY	R/W	0x1	REF3 Priority for Automatic Switchover. Sets the priority for REF3 used in Automatic Non-Revertive, Automatic Revertive, and Manual Selection with Automatic Fallback switchover modes. ROM=Y, EEPROM=N 0x0 = Not available for selection 0x1 = 1st 0x2 = 2nd 0x3 = 3rd 0x4 = 4th 0x5 = 5th 0x6 = 6th 0x7 = 7th

1.152 R225 (Offset = 0xE1)Return to the [Summary Table](#).**Table 1-154. R225 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:3	DPLL1_REF4_AUTO_PRIORITY	R/W	0x0	REF4 Priority for Automatic Switchover. Sets the priority for REF4 feedback from APLL2 used in Automatic Non-Revertive, Automatic Revertive, and Manual Selection with Automatic Fallback switchover modes. ROM=Y, EEPROM=N 0x0 = Not available for selection 0x1 = 1st 0x2 = 2nd 0x3 = 3rd 0x4 = 4th 0x5 = 5th 0x6 = 6th 0x7 = 7th
2:0	DPLL1_REF5_AUTO_PRIORITY	R/W	0x0	REF5 Priority for Automatic Switchover. Sets the priority for REF5 feedback from APLL3 used in Automatic Non-Revertive, Automatic Revertive, and Manual Selection with Automatic Fallback switchover modes. ROM=Y, EEPROM=N 0x0 = Not available for selection 0x1 = 1st 0x2 = 2nd 0x3 = 3rd 0x4 = 4th 0x5 = 5th 0x6 = 6th 0x7 = 7th

1.153 R226 (Offset = 0xE2)Return to the [Summary Table](#).**Table 1-155. R226 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	RESERVED	R	0x0	Reserved

Table 1-155. R226 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
5:3	DPLL1_MAN_REFSEL	R/W	0x0	DPLL1 Manual Reference Selection Mode. Determines how the manually selected reference is chosen. If this is set to a '1', the manually selected reference is taken from a GPIO input pin. If it is set to a '0', the manually selected reference is taken from ROM=Y, EEPROM=N 0x0 = REF0 0x1 = REF1 0x2 = REF2 0x3 = REF3 0x4 = PLL2 0x5 = PLL3
2	DPLL1_MAN_SWITCH_PIN_MODE	R/W	0x0	DPLL1 Manual Reference Selection Mode. Determines how the manually selected reference is chosen. If this is set to a '1', the manually selected reference is taken from a GPIO input pin. If it is set to a '0', the manually selected reference is taken from a register. ROM=Y, EEPROM=N 0x0 = Register 0x1 = Pin
1:0	DPLL1_SWITCH_MODE	R/W	0x1	DPLL1 Reference Switchover Mode. Selects between Automatic Non-revertive, Automatic Revertive, Manual Selection with Automatic Fallback, and Manual Selection with Automatic Holdover. ROM=Y, EEPROM=N 0x0 = Auto non-revertive 0x1 = Auto revertive 0x2 = Manual with fallback 0x3 = Manual with holdover

1.154 R227 (Offset = 0xE3)

Return to the [Summary Table](#).

Table 1-156. R227 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	DPLL1_REFSEL_STAT	R	0x0	Reports the DPLL1 selected reference ROM=N, EEPROM=N 0x0 = Holdover 0x1 = REF0 0x2 = REF1 0x4 = REF2 0x8 = REF3 0x10 = APLL2 0x20 = APLL3

1.155 R228 (Offset = 0xE4)

Return to the [Summary Table](#).

Table 1-157. R228 Field Descriptions

Bit	Field	Type	Reset	Description
7	DPLL1_LOCKDET_PPM_EN	R/W	0x0	DPLL frequency lock detect enable ROM=Y, EEPROM=N
6:0	DPLL1_LOCKDET_PPM_MAX_14:8	R/W	0x0	See Register 229

1.156 R229 (Offset = 0xE5)

Return to the [Summary Table](#).

Table 1-158. R229 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_LOCKDET_PPM_MAX	R/W	0xA	DPLL frequency lock detect in-lock threshold ROM=Y, EEPROM=N

1.157 R230 (Offset = 0xE6)Return to the [Summary Table](#).**Table 1-159. R230 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:0	DPLL1_UNLOCKDET_PPM_MAX_14:8	R/W	0x0	See Register 231

1.158 R231 (Offset = 0xE7)Return to the [Summary Table](#).**Table 1-160. R231 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_UNLOCKDET_PPM_MAX	R/W	0x64	DPLL frequency lock detect out-of-lock threshold ROM=Y, EEPROM=N

1.159 R232 (Offset = 0xE8)Return to the [Summary Table](#).**Table 1-161. R232 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	DPLL1_LOCKDET2_PPM_CNTSTRT_29:24	R/W	0x0	See Register 235

1.160 R233 (Offset = 0xE9)Return to the [Summary Table](#).**Table 1-162. R233 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_LOCKDET2_PPM_CNTSTRT_23:16	R/W	0x9	See Register 235

1.161 R234 (Offset = 0xEA)Return to the [Summary Table](#).**Table 1-163. R234 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_LOCKDET2_PPM_CNTSTRT_15:8	R/W	0x27	See Register 235

1.162 R235 (Offset = 0xEB)

Return to the [Summary Table](#).

Table 1-164. R235 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_LOCKDET2_PPM_CNTSTRT	R/W	0xC0	DPLL frequency lock detect reference count value used with DPLL1 feedback configuration 2 ROM=Y, EEPROM=N

1.163 R236 (Offset = 0xEC)

Return to the [Summary Table](#).

Table 1-165. R236 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	DPLL1_LOCKDET_PPM_CNTSTRT_29:24	R/W	0x0	See Register 239

1.164 R237 (Offset = 0xED)

Return to the [Summary Table](#).

Table 1-166. R237 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_LOCKDET_PPM_CNTSTRT_23:16	R/W	0x0	See Register 239

1.165 R238 (Offset = 0xEE)

Return to the [Summary Table](#).

Table 1-167. R238 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_LOCKDET_PPM_CNTSTRT_15:8	R/W	0x0	DPLL frequency lock detect reference count value used with DPLL1 feedback configuration 1 ROM=Y, EEPROM=N

1.166 R239 (Offset = 0xEF)

Return to the [Summary Table](#).

Table 1-168. R239 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_LOCKDET_PPM_CNTSTRT	R/W	0x1	DPLL frequency lock detect reference count value used with DPLL1 feedback configuration 1 ROM=Y, EEPROM=N

1.167 R240 (Offset = 0xF0)

Return to the [Summary Table](#).

Table 1-169. R240 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved

Table 1-169. R240 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
5:0	DPLL1_LOCKDET_VCO_PPM_CNTSTRT_29:24	R/W	0x6	See Register 243

1.168 R241 (Offset = 0xF1)Return to the [Summary Table](#).**Table 1-170. R241 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_LOCKDET_VCO_PPM_CNTSTRT_23:16	R/W	0x35	See Register 243

1.169 R242 (Offset = 0xF2)Return to the [Summary Table](#).**Table 1-171. R242 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_LOCKDET_VCO_PPM_CNTSTRT_15:8	R/W	0x75	See Register 243

1.170 R243 (Offset = 0xF3)Return to the [Summary Table](#).**Table 1-172. R243 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_LOCKDET_VCO_PPM_CNTSTRT	R/W	0xB	DPLL frequency lock detect VCO count value ROM=Y, EEPROM=N

1.171 R244 (Offset = 0xF4)Return to the [Summary Table](#).**Table 1-173. R244 Field Descriptions**

Bit	Field	Type	Reset	Description
7:3	RESERVED	R	0x0	Reserved
2:1	RESERVED	R	0x0	Reserved
0	DPLL1_STATUS_PPM_LOCK	R	0x0	Readback lock indicator from DPLL PPM Checker ROM=N, EEPROM=N

1.172 R247 (Offset = 0xF7)Return to the [Summary Table](#).**Table 1-174. R247 Field Descriptions**

Bit	Field	Type	Reset	Description
7	DPLL1_LOOP_EN	R/W	0x0	Enable DPLL1 loop filter and R-Div mash engine ROM=Y, EEPROM=N
6	DPLL1_PHASE_CANCEL_EN	R/W	0x1	Enable Phase Cancellation ROM=Y, EEPROM=N
5	RESERVED	R	0x0	Reserved

Table 1-174. R247 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
4	DPLL1_PHS1_EN	R/W	0x1	Enable holdover exit phase slew control . ROM=Y, EEPROM=N
3	DPLL1_ZDM_EN	R/W	0x0	Enable Zero Delay ROM=Y, EEPROM=N
2	DPLL1_HIST_EN	R/W	0x1	Enable History word to be used during holdover ROM=Y, EEPROM=N
1	DPLL1_PHASE_CANCEL_ALWAYS	R/W	0x0	Force phase cancellation to always occur when DPLL is acquiring lock ROM=Y, EEPROM=N
0	RESERVED	R	0x0	Reserved

1.173 R248 (Offset = 0xF8)

Return to the [Summary Table](#).

Table 1-175. R248 Field Descriptions

Bit	Field	Type	Reset	Description
7	DPLL1_HOLD_SLEW_LIM_EN	R/W	0x0	Enable slew limiter when entering holdover. Allows slew rate control between current DPLL value before entering holdover and history value. Requires DPLL1_LOOP_EN=1. ROM=Y, EEPROM=N
6	RESERVED	R	0x0	Reserved
5:3	RESERVED	R	0x0	Reserved
2	DPLL1_CLK_DIV_SRC_SELECT	R/W	0x0	DPLL1 cannot be used without DPLL2 or DPLL3 operating. DPLL1 clock select 0x0 = DPLL3 0x1 = DPLL2
1:0	RESERVED	R	0x0	Reserved

1.174 R250 (Offset = 0xFA)

Return to the [Summary Table](#).

Table 1-176. R250 Field Descriptions

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4:0	DPLL1_PH_OFFSET_44:40	R/W	0x0	See Register 255

1.175 R251 (Offset = 0xFB)

Return to the [Summary Table](#).

Table 1-177. R251 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_PH_OFFSET_39:32	R/W	0x0	See Register 255

1.176 R252 (Offset = 0xFC)

Return to the [Summary Table](#).

Table 1-178. R252 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_PH_OFFSET_31:24	R/W	0x0	See Register 255

1.177 R253 (Offset = 0xFD)Return to the [Summary Table](#).**Table 1-179. R253 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_PH_OFFSET_23:16	R/W	0x0	See Register 255

1.178 R254 (Offset = 0xFE)Return to the [Summary Table](#).**Table 1-180. R254 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_PH_OFFSET_15:8	R/W	0x0	See Register 255

1.179 R255 (Offset = 0xFF)Return to the [Summary Table](#).**Table 1-181. R255 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_PH_OFFSET	R/W	0x0	Phase offset to adjust and calibrate input to output phase in ZDM. This is a 2s complement number. ROM=Y, EEPROM=N

1.180 R256 (Offset = 0x100)Return to the [Summary Table](#).**Table 1-182. R256 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_FREE_RUN_39:32	R/W	0x0	See Register 260

1.181 R257 (Offset = 0x101)Return to the [Summary Table](#).**Table 1-183. R257 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_FREE_RUN_31:24	R/W	0x0	See Register 260

1.182 R258 (Offset = 0x102)Return to the [Summary Table](#).

Table 1-184. R258 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FREE_RUN_23:16	R/W	0x0	See Register 260

1.183 R259 (Offset = 0x103)

Return to the [Summary Table](#).

Table 1-185. R259 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FREE_RUN_15:8	R/W	0x0	See Register 260

1.184 R260 (Offset = 0x104)

Return to the [Summary Table](#).

Table 1-186. R260 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FREE_RUN	R/W	0x0	DPLL1 starting word. Also non-history holdover word. Used for APLL DCO. ROM=Y, EEPROM=N

1.185 R261 (Offset = 0x105)

Return to the [Summary Table](#).

Table 1-187. R261 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	DPLL1_1PPS_MODE	R/W	0x1	Set when using 1-PPS input ROM=Y, EEPROM=N
5	DPLL1_1PPS_EN	R/W	0x1	Set when using 1-PPS input ROM=Y, EEPROM=N
4:0	RESERVED	R	0x0	Reserved

1.186 R290 (Offset = 0x122)

Return to the [Summary Table](#).

Table 1-188. R290 Field Descriptions

Bit	Field	Type	Reset	Description
7:2	RESERVED	R	0x0	Reserved
1:0	DPLL1_LCK_TIMER_9:8	R/W	0x2	See Register 291

1.187 R291 (Offset = 0x123)

Return to the [Summary Table](#).

Table 1-189. R291 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_LCK_TIMER	R/W	0x35	Minimum amount of time until DPLL1_LOPL will be deasserted after starting to lock. Timer begins once device is within valid phase lock window. ROM=Y, EEPROM=N

1.188 R292 (Offset = 0x124)Return to the [Summary Table](#).**Table 1-190. R292 Field Descriptions**

Bit	Field	Type	Reset	Description
7:2	RESERVED	R	0x0	Reserved
1:0	DPLL1_HIST_TIMER_9:8	R/W	0x1	See Register 293

1.189 R293 (Offset = 0x125)Return to the [Summary Table](#).**Table 1-191. R293 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_HIST_TIMER	R/W	0x92	Time interval between history update events. ROM=Y, EEPROM=N

1.190 R294 (Offset = 0x126)Return to the [Summary Table](#).**Table 1-192. R294 Field Descriptions**

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4:2	RESERVED	R	0x0	Reserved
1:0	DPLL1_HOLD_TIMER_9:8	R/W	0x1	See Register 295

1.191 R295 (Offset = 0x127)Return to the [Summary Table](#).**Table 1-193. R295 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_HOLD_TIMER	R/W	0x42	Rate of change to DPLL or APLL numerator during phase slew control. See DPLLx_HOLD_SLEW_STEP. ROM=Y, EEPROM=N

1.192 R296 (Offset = 0x128)Return to the [Summary Table](#).**Table 1-194. R296 Field Descriptions**

Bit	Field	Type	Reset	Description
7:2	RESERVED	R	0x0	Reserved
1:0	DPLL1_PHS1_TIMER_9:8	R/W	0x1	See Register 297

1.193 R297 (Offset = 0x129)Return to the [Summary Table](#).

Table 1-195. R297 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_PHS1_TIMER	R/W	0x40	Holdover exit phase slew control. Timer controlling update period. ROM=Y, EEPROM=N

1.194 R302 (Offset = 0x12E)

Return to the [Summary Table](#).

Table 1-196. R302 Field Descriptions

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4:0	DPLL1_HIST_GAIN	R/W	0x8	History filter gain ROM=Y, EEPROM=N

1.195 R303 (Offset = 0x12F)

Return to the [Summary Table](#).

Table 1-197. R303 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	DPLL1_PL_THRESH	R/W	0x16	Phase lock in-lock threshold ROM=Y, EEPROM=N

1.196 R304 (Offset = 0x130)

Return to the [Summary Table](#).

Table 1-198. R304 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	DPLL1_PL_UNLK_THRE SH	R/W	0x18	Phase lock out-of-lock threshold ROM=Y, EEPROM=N

1.197 R305 (Offset = 0x131)

Return to the [Summary Table](#).

Table 1-199. R305 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	DPLL1_PHS1_THRESH	R/W	0x7	Holdover exit phase slew control. Change per timer event. ROM=Y, EEPROM=N

1.198 R308 (Offset = 0x134)

Return to the [Summary Table](#).

Table 1-200. R308 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved

Table 1-200. R308 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
5:0	DPLL1_HOLD_SLEW_STEP	R/W	0x3F	When DPLL exits holdover, rate of phase change relates to the ratio of DPLLx_HOLD_SLEW_STEP divided by DPLLx_HOLD_TIMER. DPLLx_HOLD_SLEW_STEP is applied to DPLL numerator when exiting holdover or APLL numerator when using APLL relative DCO. ROM=Y, EEPROM=N

1.199 R310 (Offset = 0x136)Return to the [Summary Table](#).**Table 1-201. R310 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	RESERVED	R	0x0	Reserved
5	DPLL1_STATUS_PL	R	0x0	Readback the phase lock status ROM=N, EEPROM=N
4:0	RESERVED	R	0x0	Reserved

1.200 R311 (Offset = 0x137)Return to the [Summary Table](#).**Table 1-202. R311 Field Descriptions**

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4	DPLL1_DCO_SLEW_ACTIVE	R	0x0	Readback DCO slew status ROM=N, EEPROM=N
3:0	RESERVED	R	0x0	Reserved

1.201 R314 (Offset = 0x13A)Return to the [Summary Table](#).**Table 1-203. R314 Field Descriptions**

Bit	Field	Type	Reset	Description
7:1	RESERVED	R	0x0	Reserved
0	DPLL1_FB_DIV_32:32	R/W	0x1	See Register 318

1.202 R315 (Offset = 0x13B)Return to the [Summary Table](#).**Table 1-204. R315 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB_DIV_31:24	R/W	0x2A	See Register 318

1.203 R316 (Offset = 0x13C)Return to the [Summary Table](#).

Table 1-205. R316 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB_DIV_23:16	R/W	0x5	See Register 318

1.204 R317 (Offset = 0x13D)

Return to the [Summary Table](#).

Table 1-206. R317 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB_DIV_15:8	R/W	0xF2	See Register 318

1.205 R318 (Offset = 0x13E)

Return to the [Summary Table](#).

Table 1-207. R318 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB_DIV	R/W	0x0	DPLL Feedback Divider N Value used with DPLL1 feedback configuration 1. Divide value is programmed value except when using ZDM mode with FB div, actual divide value is +1. ROM=Y, EEPROM=N

1.206 R319 (Offset = 0x13F)

Return to the [Summary Table](#).

Table 1-208. R319 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB_NUM_39:32	R/W	0x0	See Register 323

1.207 R320 (Offset = 0x140)

Return to the [Summary Table](#).

Table 1-209. R320 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB_NUM_31:24	R/W	0x0	See Register 323

1.208 R321 (Offset = 0x141)

Return to the [Summary Table](#).

Table 1-210. R321 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB_NUM_23:16	R/W	0x0	See Register 323

1.209 R322 (Offset = 0x142)

Return to the [Summary Table](#).

Table 1-211. R322 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB_NUM_15:8	R/W	0x0	See Register 323

1.210 R323 (Offset = 0x143)

 Return to the [Summary Table](#).

Table 1-212. R323 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB_NUM	R/W	0x0	DPLL Feedback Divider Numerator Value used with DPLL1 feedback configuration 1 ROM=Y, EEPROM=N

1.211 R324 (Offset = 0x144)

 Return to the [Summary Table](#).

Table 1-213. R324 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB_DEN_39:32	R/W	0x0	See Register 328

1.212 R325 (Offset = 0x145)

 Return to the [Summary Table](#).

Table 1-214. R325 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB_DEN_31:24	R/W	0x0	See Register 328

1.213 R326 (Offset = 0x146)

 Return to the [Summary Table](#).

Table 1-215. R326 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB_DEN_23:16	R/W	0x0	See Register 328

1.214 R327 (Offset = 0x147)

 Return to the [Summary Table](#).

Table 1-216. R327 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB_DEN_15:8	R/W	0x0	See Register 328

1.215 R328 (Offset = 0x148)

 Return to the [Summary Table](#).

Table 1-217. R328 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB_DEN	R/W	0x0	DPLL Feedback Divider Denominator Value used with DPLL1 feedback configuration 1 ROM=Y, EEPROM=N

1.216 R329 (Offset = 0x149)

 Return to the [Summary Table](#).

Table 1-218. R329 Field Descriptions

Bit	Field	Type	Reset	Description
7:1	RESERVED	R	0x0	Reserved
0	DPLL1_FB2_DIV_32:32	R/W	0x0	See Register 333

1.217 R330 (Offset = 0x14A)

Return to the [Summary Table](#).

Table 1-219. R330 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB2_DIV_31:24	R/W	0x0	See Register 333

1.218 R331 (Offset = 0x14B)

Return to the [Summary Table](#).

Table 1-220. R331 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB2_DIV_23:16	R/W	0x0	See Register 333

1.219 R332 (Offset = 0x14C)

Return to the [Summary Table](#).

Table 1-221. R332 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB2_DIV_15:8	R/W	0x1	See Register 333

1.220 R333 (Offset = 0x14D)

Return to the [Summary Table](#).

Table 1-222. R333 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB2_DIV	R/W	0xE0	DPLL Feedback Divider N Value used with DPLL1 feedback configuration 2. Divide value is programmed value except when using ZDM mode with FB div, actual divide value is +1. ROM=Y, EEPROM=N

1.221 R334 (Offset = 0x14E)

Return to the [Summary Table](#).

Table 1-223. R334 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB2_NUM_39:32	R/W	0x0	See Register 338

1.222 R335 (Offset = 0x14F)

Return to the [Summary Table](#).

Table 1-224. R335 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB2_NUM_31:24	R/W	0x0	See Register 338

1.223 R336 (Offset = 0x150)Return to the [Summary Table](#).**Table 1-225. R336 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB2_NUM_23:16	R/W	0x0	See Register 338

1.224 R337 (Offset = 0x151)Return to the [Summary Table](#).**Table 1-226. R337 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB2_NUM_15:8	R/W	0x0	See Register 338

1.225 R338 (Offset = 0x152)Return to the [Summary Table](#).**Table 1-227. R338 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB2_NUM	R/W	0x0	DPLL Feedback Divider Numerator Value used with DPLL1 feedback configuration 2 ROM=Y, EEPROM=N

1.226 R339 (Offset = 0x153)Return to the [Summary Table](#).**Table 1-228. R339 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB2_DEN_39:32	R/W	0x0	See Register 343

1.227 R340 (Offset = 0x154)Return to the [Summary Table](#).**Table 1-229. R340 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB2_DEN_31:24	R/W	0x0	See Register 343

1.228 R341 (Offset = 0x155)Return to the [Summary Table](#).**Table 1-230. R341 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB2_DEN_23:16	R/W	0x0	See Register 343

1.229 R342 (Offset = 0x156)

Return to the [Summary Table](#).

Table 1-231. R342 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB2_DEN_15:8	R/W	0x0	See Register 343

1.230 R343 (Offset = 0x157)

Return to the [Summary Table](#).

Table 1-232. R343 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB2_DEN	R/W	0x0	DPLL Feedback Divider Denominator Value used with DPLL1 feedback configuration 2 ROM=Y, EEPROM=N

1.231 R344 (Offset = 0x158)

Return to the [Summary Table](#).

Table 1-233. R344 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5	DPLL1_REF5_FB_SEL	R/W	0x0	DPLL Feedback N, NUM, DEN select for REF3. When this bit is a 0, Value 1 is chosen for each of the three parameters. When it is set to a 1, Value 2 is used. ROM=Y, EEPROM=N 0x0 = FB Config 1 0x1 = FB Config 2
4	DPLL1_REF4_FB_SEL	R/W	0x0	DPLL Feedback N, NUM, DEN select for REF4. When this bit is a 0, Value 1 is chosen for each of the three parameters. When it is set to a 1, Value 2 is used. ROM=Y, EEPROM=N 0x0 = FB Config 1 0x1 = FB Config 2
3	DPLL1_REF3_FB_SEL	R/W	0x0	DPLL Feedback N, NUM, DEN select for REF3. When this bit is a 0, Value 1 is chosen for each of the three parameters. When it is set to a 1, Value 2 is used. ROM=Y, EEPROM=N 0x0 = FB Config 1 0x1 = FB Config 2
2	DPLL1_REF2_FB_SEL	R/W	0x0	DPLL Feedback N, NUM, DEN select for REF2. When this bit is a 0, Value 1 is chosen for each of the three parameters. When it is set to a 1, Value 2 is used. ROM=Y, EEPROM=N 0x0 = FB Config 1 0x1 = FB Config 2
1	DPLL1_REF1_FB_SEL	R/W	0x1	DPLL Feedback N, NUM, DEN select for REF1. When this bit is a 0, Value 1 is chosen for each of the three parameters. When it is set to a 1, Value 2 is used. ROM=Y, EEPROM=N 0x0 = FB Config 1 0x1 = FB Config 2
0	DPLL1_REF0_FB_SEL	R/W	0x1	DPLL Feedback N, NUM, DEN select for REF0. When this bit is a 0, Value 1 is chosen for each of the three parameters. When it is set to a 1, Value 2 is used. ROM=Y, EEPROM=N 0x0 = FB Config 1 0x1 = FB Config 2

1.232 R345 (Offset = 0x159)Return to the [Summary Table](#).**Table 1-234. R345 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:3	RESERVED	R	0x0	Reserved
2:0	DPLL1_FB_MASH_ORDER	R/W	0x2	DPLL Feedback Divider MASH Order. ROM=Y, EEPROM=N 0x0 = Integer 0x1 = 1st order 0x2 = 2nd order 0x3 = 3rd order 0x4 = 4th order

1.233 R346 (Offset = 0x15A)Return to the [Summary Table](#).**Table 1-235. R346 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	DPLL1_FB_FDEV_37:32	R/W	0x0	See Register 350

1.234 R347 (Offset = 0x15B)Return to the [Summary Table](#).**Table 1-236. R347 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB_FDEV_31:24	R/W	0x0	See Register 350

1.235 R348 (Offset = 0x15C)Return to the [Summary Table](#).**Table 1-237. R348 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB_FDEV_23:16	R/W	0x0	See Register 350

1.236 R349 (Offset = 0x15D)Return to the [Summary Table](#).**Table 1-238. R349 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB_FDEV_15:8	R/W	0x0	See Register 350

1.237 R350 (Offset = 0x15E)Return to the [Summary Table](#).

Table 1-239. R350 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB_FDEV	R/W	0x0	DPLL Feedback Divider DCO Frequency Deviation Value ROM=Y, EEPROM=N

1.238 R351 (Offset = 0x15F)

Return to the [Summary Table](#).

Table 1-240. R351 Field Descriptions

Bit	Field	Type	Reset	Description
7:1	RESERVED	R	0x0	Reserved
0	DPLL1_FB_FDEV_UPDATE	R/W	0x0	Increment/Decrement DPLL Feedback Numerator value with DPLL_FB_FDEV value ROM=Y, EEPROM=N

1.239 R352 (Offset = 0x160)

Return to the [Summary Table](#).

Table 1-241. R352 Field Descriptions

Bit	Field	Type	Reset	Description
7:1	RESERVED	R	0x0	Reserved
0	DPLL1_FB_FDEV_EN	R/W	0x0	Enable DPLL DCO mode ROM=Y, EEPROM=N

1.240 R353 (Offset = 0x161)

Return to the [Summary Table](#).

Table 1-242. R353 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB_NUM_STAT_3 9:32	R	0x0	See Register 357

1.241 R354 (Offset = 0x162)

Return to the [Summary Table](#).

Table 1-243. R354 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB_NUM_STAT_3 1:24	R	0x0	See Register 357

1.242 R355 (Offset = 0x163)

Return to the [Summary Table](#).

Table 1-244. R355 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB_NUM_STAT_2 3:16	R	0x0	See Register 357

1.243 R356 (Offset = 0x164)Return to the [Summary Table](#).**Table 1-245. R356 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB_NUM_STAT_1 5:8	R	0x0	See Register 357

1.244 R357 (Offset = 0x165)Return to the [Summary Table](#).**Table 1-246. R357 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_FB_NUM_STAT	R	0x0	Readback DPLL Feedback Divider Numerator value as a result of DCO mode ROM=N, EEPROM=N

1.245 R358 (Offset = 0x166)Return to the [Summary Table](#).**Table 1-247. R358 Field Descriptions**

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3	DPLL1_REF0_DBLR_EN	R/W	0x0	DPLL Reference 0 Doubler Enable ROM=Y, EEPROM=N
2	DPLL1_REF1_DBLR_EN	R/W	0x0	DPLL Reference 1 Doubler Enable ROM=Y, EEPROM=N
1	DPLL1_REF2_DBLR_EN	R/W	0x0	DPLL Reference 2 Doubler Enable ROM=Y, EEPROM=N
0	DPLL1_REF3_DBLR_EN	R/W	0x0	DPLL Reference 3 Doubler Enable ROM=Y, EEPROM=N

1.246 R359 (Offset = 0x167)Return to the [Summary Table](#).**Table 1-248. R359 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_REF0_RDIV_15:8	R/W	0x0	See Register 360

1.247 R360 (Offset = 0x168)Return to the [Summary Table](#).**Table 1-249. R360 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_REF0_RDIV	R/W	0x1	DPLL REF0 R-divider value ROM=Y, EEPROM=N

1.248 R361 (Offset = 0x169)Return to the [Summary Table](#).

Table 1-250. R361 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_REF1_RDIV_15:8	R/W	0x0	See Register 362

1.249 R362 (Offset = 0x16A)

Return to the [Summary Table](#).

Table 1-251. R362 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_REF1_RDIV	R/W	0x1	DPLL REF1 R-divider value ROM=Y, EEPROM=N

1.250 R363 (Offset = 0x16B)

Return to the [Summary Table](#).

Table 1-252. R363 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_REF2_RDIV_15:8	R/W	0x0	See Register 364

1.251 R364 (Offset = 0x16C)

Return to the [Summary Table](#).

Table 1-253. R364 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_REF2_RDIV	R/W	0x1	DPLL REF2 R-divider value ROM=Y, EEPROM=N

1.252 R365 (Offset = 0x16D)

Return to the [Summary Table](#).

Table 1-254. R365 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_REF3_RDIV_15:8	R/W	0x0	See Register 366

1.253 R366 (Offset = 0x16E)

Return to the [Summary Table](#).

Table 1-255. R366 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_REF3_RDIV	R/W	0x1	DPLL REF3 R-divider value ROM=Y, EEPROM=N

1.254 R367 (Offset = 0x16F)

Return to the [Summary Table](#).

Table 1-256. R367 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL1_REF4_RDIV_15:8	R/W	0x0	See Register 368

1.255 R368 (Offset = 0x170)Return to the [Summary Table](#).**Table 1-257. R368 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_REF4_RDIV	R/W	0x0	DPLL REF4 R-divider value ROM=Y, EEPROM=N

1.256 R369 (Offset = 0x171)Return to the [Summary Table](#).**Table 1-258. R369 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_REF5_RDIV_15:8	R/W	0x0	DPLL REF5 R-divider value. For use when DPLL1 uses output of VCO3 as a reference. ROM=Y, EEPROM=N

1.257 R370 (Offset = 0x172)Return to the [Summary Table](#).**Table 1-259. R370 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL1_REF5_RDIV	R/W	0x0	DPLL REF5 R-divider value. For use when DPLL1 uses output of VCO3 as a reference. ROM=Y, EEPROM=N

1.258 R373 (Offset = 0x175)Return to the [Summary Table](#).**Table 1-260. R373 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:3	DPLL2_REF0_AUTO_PRIORITY	R/W	0x2	REF0 Priority for Automatic Switchover. Sets the priority for REF0 used in Automatic Non-Revertive, Automatic Revertive, and Manual Selection with Automatic Fallback switchover modes. ROM=Y, EEPROM=N 0x0 = Not available for selection 0x1 = 1st 0x2 = 2nd 0x3 = 3rd 0x4 = 4th 0x5 = 5th 0x6 = 6th 0x7 = 7th
2:0	DPLL2_REF1_AUTO_PRIORITY	R/W	0x1	REF1 Priority for Automatic Switchover. Sets the priority for REF1 used in Automatic Non-Revertive, Automatic Revertive, and Manual Selection with Automatic Fallback switchover modes. ROM=Y, EEPROM=N 0x0 = Not available for selection 0x1 = 1st 0x2 = 2nd 0x3 = 3rd 0x4 = 4th 0x5 = 5th 0x6 = 6th 0x7 = 7th

1.259 R374 (Offset = 0x176)

Return to the [Summary Table](#).

Table 1-261. R374 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:3	DPLL2_REF2_AUTO_PRIORITY	R/W	0x3	REF2 Priority for Automatic Switchover. Sets the priority for REF2 used in Automatic Non-Revertive, Automatic Revertive, and Manual Selection with Automatic Fallback switchover modes. ROM=Y, EEPROM=N 0x0 = Not available for selection 0x1 = 1st 0x2 = 2nd 0x3 = 3rd 0x4 = 4th 0x5 = 5th 0x6 = 6th 0x7 = 7th
2:0	DPLL2_REF3_AUTO_PRIORITY	R/W	0x0	REF3 Priority for Automatic Switchover. Sets the priority for REF3 used in Automatic Non-Revertive, Automatic Revertive, and Manual Selection with Automatic Fallback switchover modes. ROM=Y, EEPROM=N 0x0 = Not available for selection 0x1 = 1st 0x2 = 2nd 0x3 = 3rd 0x4 = 4th 0x5 = 5th 0x6 = 6th 0x7 = 7th

1.260 R375 (Offset = 0x177)

Return to the [Summary Table](#).

Table 1-262. R375 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:3	DPLL2_REF4_AUTO_PRIORITY	R/W	0x0	REF4 Priority for Automatic Switchover. Sets the priority for REF4 feedback from APLL1 used in Automatic Non-Revertive, Automatic Revertive, and Manual Selection with Automatic Fallback switchover modes. ROM=Y, EEPROM=N 0x0 = Not available for selection 0x1 = 1st 0x2 = 2nd 0x3 = 3rd 0x4 = 4th 0x5 = 5th 0x6 = 6th 0x7 = 7th
2:0	DPLL2_REF5_AUTO_PRIORITY	R/W	0x0	REF5 Priority for Automatic Switchover. Sets the priority for REF5 feedback from APLL3 used in Automatic Non-Revertive, Automatic Revertive, and Manual Selection with Automatic Fallback switchover modes. ROM=Y, EEPROM=N 0x0 = Not available for selection 0x1 = 1st 0x2 = 2nd 0x3 = 3rd 0x4 = 4th 0x5 = 5th 0x6 = 6th 0x7 = 7th

1.261 R376 (Offset = 0x178)

Return to the [Summary Table](#).

Table 1-263. R376 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	RESERVED	R	0x0	Reserved
5:3	DPLL2_MAN_REFSEL	R/W	0x0	DPLL2 Manual Reference Selection ROM=Y, EEPROM=N 0x0 = REF0 0x1 = REF1 0x2 = REF2 0x3 = REF3 0x4 = PLL1 0x5 = PLL3
2	DPLL2_MAN_SWITCH_PIN_MODE	R/W	0x0	DPLL2 Manual Reference Selection Mode. Determines how the manually selected reference is chosen. If this is set to a '1', the manually selected reference is taken from a GPIO input pin. If it is set to a '0', the manually selected reference is taken from a register. ROM=Y, EEPROM=N 0x0 = Register 0x1 = Pin
1:0	DPLL2_SWITCH_MODE	R/W	0x1	DPLL2 Reference Switchover Mode. Selects between Automatic Non-revertive, Automatic Revertive, Manual Selection with Automatic Fallback, and Manual Selection with Automatic Holdover. ROM=Y, EEPROM=N 0x0 = Auto non-revertive 0x1 = Auto revertive 0x2 = Manual with fallback 0x3 = Manual with holdover

1.262 R377 (Offset = 0x179)

Return to the [Summary Table](#).

Table 1-264. R377 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	DPLL2_REFSEL_STAT	R	0x4	Reads the DPLL2 selected reference ROM=N, EEPROM=N 0x0 = Holdover 0x1 = REF0 0x2 = REF1 0x4 = REF2 0x8 = REF3 0x10 = APLL1 0x20 = APLL3

1.263 R378 (Offset = 0x17A)

Return to the [Summary Table](#).

Table 1-265. R378 Field Descriptions

Bit	Field	Type	Reset	Description
7	DPLL2_LOCKDET_PPM_EN	R/W	0x1	DPLL frequency lock detect enable ROM=Y, EEPROM=N
6:0	DPLL2_LOCKDET_PPM_MAX_14:8	R/W	0x0	See Register 379

1.264 R379 (Offset = 0x17B)

Return to the [Summary Table](#).

Table 1-266. R379 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_LOCKDET_PPM_MAX	R/W	0xA	DPLL frequency lock detect in-lock threshold ROM=Y, EEPROM=N

1.265 R380 (Offset = 0x17C)

Return to the [Summary Table](#).

Table 1-267. R380 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:0	DPLL2_UNLOCKDET_PPM_MAX_14:8	R/W	0x0	See Register 381

1.266 R381 (Offset = 0x17D)

Return to the [Summary Table](#).

Table 1-268. R381 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_UNLOCKDET_PPM_MAX	R/W	0x64	DPLL frequency lock detect out-of-lock threshold ROM=Y, EEPROM=N

1.267 R382 (Offset = 0x17E)

Return to the [Summary Table](#).

Table 1-269. R382 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	DPLL2_LOCKDET2_PPM_CNTSTRT_29:24	R/W	0x0	See Register 385

1.268 R383 (Offset = 0x17F)

Return to the [Summary Table](#).

Table 1-270. R383 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_LOCKDET2_PPM_CNTSTRT_23:16	R/W	0x0	See Register 385

1.269 R384 (Offset = 0x180)

Return to the [Summary Table](#).

Table 1-271. R384 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_LOCKDET2_PPM_CNTSTRT_15:8	R/W	0x9	See Register 385

1.270 R385 (Offset = 0x181)

 Return to the [Summary Table](#).

Table 1-272. R385 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_LOCKDET2_PPM_CNTSTRT	R/W	0xC5	DPLL frequency lock detect reference count value used with DPLL2 feedback configuration 2 ROM=Y, EEPROM=N

1.271 R386 (Offset = 0x182)

 Return to the [Summary Table](#).

Table 1-273. R386 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	DPLL2_LOCKDET_PPM_CNTSTRT_29:24	R/W	0x0	See Register 389

1.272 R387 (Offset = 0x183)

 Return to the [Summary Table](#).

Table 1-274. R387 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_LOCKDET_PPM_CNTSTRT_23:16	R/W	0x10	See Register 389

1.273 R388 (Offset = 0x184)

 Return to the [Summary Table](#).

Table 1-275. R388 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_LOCKDET_PPM_CNTSTRT_15:8	R/W	0xF4	See Register 389

1.274 R389 (Offset = 0x185)

 Return to the [Summary Table](#).

Table 1-276. R389 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_LOCKDET_PPM_CNTSTRT	R/W	0x48	DPLL frequency lock detect reference count value used with DPLL2 feedback configuration 1 ROM=Y, EEPROM=N

1.275 R390 (Offset = 0x186)

 Return to the [Summary Table](#).

Table 1-277. R390 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved

Table 1-277. R390 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
5:0	DPLL2_LOCKDET_VCO_PPM_CNTSTRT_29:24	R/W	0x0	See Register 393

1.276 R391 (Offset = 0x187)

Return to the [Summary Table](#).

Table 1-278. R391 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_LOCKDET_VCO_PPM_CNTSTRT_23:16	R/W	0x98	See Register 393

1.277 R392 (Offset = 0x188)

Return to the [Summary Table](#).

Table 1-279. R392 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_LOCKDET_VCO_PPM_CNTSTRT_15:8	R/W	0x96	See Register 393

1.278 R393 (Offset = 0x189)

Return to the [Summary Table](#).

Table 1-280. R393 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_LOCKDET_VCO_PPM_CNTSTRT	R/W	0x88	DPLL frequency lock detect VCO count value ROM=Y, EEPROM=N

1.279 R394 (Offset = 0x18A)

Return to the [Summary Table](#).

Table 1-281. R394 Field Descriptions

Bit	Field	Type	Reset	Description
7:3	RESERVED	R	0x0	Reserved
2:1	RESERVED	R	0x0	Reserved
0	DPLL2_STATUS_PPM_LOCK	R	0x1	Readback lock indicator from DPLL PPM Checker ROM=N, EEPROM=N

1.280 R397 (Offset = 0x18D)

Return to the [Summary Table](#).

Table 1-282. R397 Field Descriptions

Bit	Field	Type	Reset	Description
7	DPLL2_LOOP_EN	R/W	0x1	Enable DPLL2 loop filter and R-Div mash engine ROM=Y, EEPROM=N
6	DPLL2_PHASE_CANCEL_EN	R/W	0x1	Enable Phase Cancellation ROM=Y, EEPROM=N
5	RESERVED	R	0x0	Reserved

Table 1-282. R397 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
4	DPLL2_PHS1_EN	R/W	0x1	Enable holdover exit phase slew control . ROM=Y, EEPROM=N
3	DPLL2_ZDM_EN	R/W	0x0	Enable Zero Delay ROM=Y, EEPROM=N
2	DPLL2_HIST_EN	R/W	0x1	Enable History word to be used during holdover ROM=Y, EEPROM=N
1	DPLL2_PHASE_CANCEL_ALWAYS	R/W	0x0	Force phase cancellation to always occur when DPLL is acquiring lock ROM=Y, EEPROM=N
0	RESERVED	R	0x0	Reserved

1.281 R398 (Offset = 0x18E)Return to the [Summary Table](#).**Table 1-283. R398 Field Descriptions**

Bit	Field	Type	Reset	Description
7	DPLL2_HOLD_SLEW_LIM_EN	R/W	0x0	Enable slew limiter when entering holdover ROM=Y, EEPROM=N
6:0	RESERVED	R	0x0	Reserved

1.282 R400 (Offset = 0x190)Return to the [Summary Table](#).**Table 1-284. R400 Field Descriptions**

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4:0	DPLL2_PH_OFFSET_44:40	R/W	0x0	See Register 405

1.283 R401 (Offset = 0x191)Return to the [Summary Table](#).**Table 1-285. R401 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL2_PH_OFFSET_39:32	R/W	0x0	See Register 405

1.284 R402 (Offset = 0x192)Return to the [Summary Table](#).**Table 1-286. R402 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL2_PH_OFFSET_31:24	R/W	0x0	See Register 405

1.285 R403 (Offset = 0x193)Return to the [Summary Table](#).

Table 1-287. R403 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_PH_OFFSET_23:16	R/W	0x0	See Register 405

1.286 R404 (Offset = 0x194)

Return to the [Summary Table](#).

Table 1-288. R404 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_PH_OFFSET_15:8	R/W	0x0	See Register 405

1.287 R405 (Offset = 0x195)

Return to the [Summary Table](#).

Table 1-289. R405 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_PH_OFFSET	R/W	0x0	Phase offset to adjust and calibrate input to output phase in ZDM. This is a 2s complement number. ROM=Y, EEPROM=N

1.288 R406 (Offset = 0x196)

Return to the [Summary Table](#).

Table 1-290. R406 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_FREE_RUN_39:32	R/W	0x0	See Register 410

1.289 R407 (Offset = 0x197)

Return to the [Summary Table](#).

Table 1-291. R407 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_FREE_RUN_31:24	R/W	0x0	See Register 410

1.290 R408 (Offset = 0x198)

Return to the [Summary Table](#).

Table 1-292. R408 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_FREE_RUN_23:16	R/W	0x0	See Register 410

1.291 R409 (Offset = 0x199)

Return to the [Summary Table](#).

Table 1-293. R409 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_FREE_RUN_15:8	R/W	0x0	See Register 410

1.292 R410 (Offset = 0x19A)Return to the [Summary Table](#).**Table 1-294. R410 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL2_FREE_RUN	R/W	0x0	DPLL2 starting word. Also non-history holdover word. ROM=Y, EEPROM=N

1.293 R411 (Offset = 0x19B)Return to the [Summary Table](#).**Table 1-295. R411 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	DPLL2_1PPS_MODE	R/W	0x0	Set when using 1-PPS input ROM=Y, EEPROM=N
5	DPLL2_1PPS_EN	R/W	0x0	Set when using 1-PPS input ROM=Y, EEPROM=N
4:0	RESERVED	R	0x0	Reserved

1.294 R440 (Offset = 0x1B8)Return to the [Summary Table](#).**Table 1-296. R440 Field Descriptions**

Bit	Field	Type	Reset	Description
7:2	RESERVED	R	0x0	Reserved
1:0	DPLL2_LCK_TIMER_9:8	R/W	0x1	See Register 441

1.295 R441 (Offset = 0x1B9)Return to the [Summary Table](#).**Table 1-297. R441 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL2_LCK_TIMER	R/W	0xD2	Minimum amount of time until DPLL2_LOPL will be deasserted after starting to lock. Timer begins once device is within valid phase lock window. ROM=Y, EEPROM=N

1.296 R442 (Offset = 0x1BA)Return to the [Summary Table](#).**Table 1-298. R442 Field Descriptions**

Bit	Field	Type	Reset	Description
7:2	RESERVED	R	0x0	Reserved
1:0	DPLL2_HIST_TIMER_9:8	R/W	0x1	See Register 443

1.297 R443 (Offset = 0x1BB)

Return to the [Summary Table](#).

Table 1-299. R443 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_HIST_TIMER	R/W	0x92	Time interval between history update events. ROM=Y, EEPROM=N

1.298 R444 (Offset = 0x1BC)

Return to the [Summary Table](#).

Table 1-300. R444 Field Descriptions

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4:2	RESERVED	R	0x0	Reserved
1:0	DPLL2_HOLD_TIMER_9:8	R/W	0x1	See Register 445

1.299 R445 (Offset = 0x1BD)

Return to the [Summary Table](#).

Table 1-301. R445 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_HOLD_TIMER	R/W	0x42	Rate of change to DPLL or APLL numerator during phase slew control. See DPLLx_HOLD_SLEW_STEP. ROM=Y, EEPROM=N

1.300 R446 (Offset = 0x1BE)

Return to the [Summary Table](#).

Table 1-302. R446 Field Descriptions

Bit	Field	Type	Reset	Description
7:2	RESERVED	R	0x0	Reserved
1:0	DPLL2_PHS1_TIMER_9:8	R/W	0x1	See Register 447

1.301 R447 (Offset = 0x1BF)

Return to the [Summary Table](#).

Table 1-303. R447 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_PHS1_TIMER	R/W	0x40	Holdover exit phase slew control. Timer controlling update period. ROM=Y, EEPROM=N

1.302 R452 (Offset = 0x1C4)

Return to the [Summary Table](#).

Table 1-304. R452 Field Descriptions

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved

Table 1-304. R452 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
4:0	DPLL2_HIST_GAIN	R/W	0x8	History filter gain ROM=Y, EEPROM=N

1.303 R453 (Offset = 0x1C5)Return to the [Summary Table](#).**Table 1-305. R453 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	DPLL2_PL_THRESH	R/W	0x25	Phase lock in-lock threshold ROM=Y, EEPROM=N

1.304 R454 (Offset = 0x1C6)Return to the [Summary Table](#).**Table 1-306. R454 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	DPLL2_PL_UNLK_THRE SH	R/W	0x27	Phase lock out-of-lock threshold ROM=Y, EEPROM=N

1.305 R455 (Offset = 0x1C7)Return to the [Summary Table](#).**Table 1-307. R455 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	DPLL2_PHS1_THRESH	R/W	0x7	Holdover exit phase slew control. Change per timer event. ROM=Y, EEPROM=N

1.306 R458 (Offset = 0x1CA)Return to the [Summary Table](#).**Table 1-308. R458 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	DPLL2_HOLD_SLEW_ST EP	R/W	0x3F	When DPLL exits holdover, rate of phase change relates to DPLLx_HOLD_SLEW_STEP over DPLLx_HOLD_TIMER. DPLLx_HOLD_SLEW_STEP is applied to DPLL numerator when exiting holdover or APLL numerator when using APLL relative DCO. ROM=Y, EEPROM=N

1.307 R460 (Offset = 0x1CC)Return to the [Summary Table](#).**Table 1-309. R460 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved

Table 1-309. R460 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
6	RESERVED	R	0x0	Reserved
5	DPLL2_STATUS_PL	R	0x1	Readback the phase lock status ROM=N, EEPROM=N
4:0	RESERVED	R	0x0	Reserved

1.308 R461 (Offset = 0x1CD)

Return to the [Summary Table](#).

Table 1-310. R461 Field Descriptions

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4	DPLL2_DCO_SLEW_ACT IVE	R	0x0	Readback DCO slew status ROM=N, EEPROM=N
3:0	RESERVED	R	0x0	Reserved

1.309 R464 (Offset = 0x1D0)

Return to the [Summary Table](#).

Table 1-311. R464 Field Descriptions

Bit	Field	Type	Reset	Description
7:1	RESERVED	R	0x0	Reserved
0	DPLL2_FB_DIV_32:32	R/W	0x0	See Register 468

1.310 R465 (Offset = 0x1D1)

Return to the [Summary Table](#).

Table 1-312. R465 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB_DIV_31:24	R/W	0x0	See Register 468

1.311 R466 (Offset = 0x1D2)

Return to the [Summary Table](#).

Table 1-313. R466 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB_DIV_23:16	R/W	0x0	See Register 468

1.312 R467 (Offset = 0x1D3)

Return to the [Summary Table](#).

Table 1-314. R467 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB_DIV_15:8	R/W	0x2	See Register 468

1.313 R468 (Offset = 0x1D4)Return to the [Summary Table](#).**Table 1-315. R468 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB_DIV	R/W	0x1C	DPLL Feedback Divider N Value used with DPLL2 feedback configuration 1. Divide value is programmed value except when using ZDM mode with FB div, actual divide value is +1. ROM=Y, EEPROM=N

1.314 R469 (Offset = 0x1D5)Return to the [Summary Table](#).**Table 1-316. R469 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB_NUM_39:32	R/W	0x0	See Register 473

1.315 R470 (Offset = 0x1D6)Return to the [Summary Table](#).**Table 1-317. R470 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB_NUM_31:24	R/W	0x0	See Register 473

1.316 R471 (Offset = 0x1D7)Return to the [Summary Table](#).**Table 1-318. R471 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB_NUM_23:16	R/W	0x0	See Register 473

1.317 R472 (Offset = 0x1D8)Return to the [Summary Table](#).**Table 1-319. R472 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB_NUM_15:8	R/W	0x0	See Register 473

1.318 R473 (Offset = 0x1D9)Return to the [Summary Table](#).**Table 1-320. R473 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB_NUM	R/W	0x0	DPLL Feedback Divider Numerator Value used with DPLL2 feedback configuration 1 ROM=Y, EEPROM=N

1.319 R474 (Offset = 0x1DA)

Return to the [Summary Table](#).

Table 1-321. R474 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB_DEN_39:32	R/W	0x0	See Register 478

1.320 R475 (Offset = 0x1DB)

Return to the [Summary Table](#).

Table 1-322. R475 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB_DEN_31:24	R/W	0x0	See Register 478

1.321 R476 (Offset = 0x1DC)

Return to the [Summary Table](#).

Table 1-323. R476 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB_DEN_23:16	R/W	0x0	See Register 478

1.322 R477 (Offset = 0x1DD)

Return to the [Summary Table](#).

Table 1-324. R477 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB_DEN_15:8	R/W	0x0	See Register 478

1.323 R478 (Offset = 0x1DE)

Return to the [Summary Table](#).

Table 1-325. R478 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB_DEN	R/W	0x0	DPLL Feedback Divider Denominator Value used with DPLL2 feedback configuration 1 ROM=Y, EEPROM=N

1.324 R479 (Offset = 0x1DF)

Return to the [Summary Table](#).

Table 1-326. R479 Field Descriptions

Bit	Field	Type	Reset	Description
7:1	RESERVED	R	0x0	Reserved
0	DPLL2_FB2_DIV_32:32	R/W	0x0	See Register 483

1.325 R480 (Offset = 0x1E0)

Return to the [Summary Table](#).

Table 1-327. R480 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB2_DIV_31:24	R/W	0x0	See Register 483

1.326 R481 (Offset = 0x1E1)Return to the [Summary Table](#).**Table 1-328. R481 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB2_DIV_23:16	R/W	0x0	See Register 483

1.327 R482 (Offset = 0x1E2)Return to the [Summary Table](#).**Table 1-329. R482 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB2_DIV_15:8	R/W	0x2	See Register 483

1.328 R483 (Offset = 0x1E3)Return to the [Summary Table](#).**Table 1-330. R483 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB2_DIV	R/W	0x32	DPLL Feedback Divider N Value used with DPLL2 feedback configuration 2. Divide value is programmed value except when using ZDM mode with FB div, actual divide value is +1. ROM=Y, EEPROM=N

1.329 R484 (Offset = 0x1E4)Return to the [Summary Table](#).**Table 1-331. R484 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB2_NUM_39:32	R/W	0x80	See Register 488

1.330 R485 (Offset = 0x1E5)Return to the [Summary Table](#).**Table 1-332. R485 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB2_NUM_31:24	R/W	0x0	See Register 488

1.331 R486 (Offset = 0x1E6)Return to the [Summary Table](#).**Table 1-333. R486 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB2_NUM_23:16	R/W	0x0	See Register 488

1.332 R487 (Offset = 0x1E7)

Return to the [Summary Table](#).

Table 1-334. R487 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB2_NUM_15:8	R/W	0x0	See Register 488

1.333 R488 (Offset = 0x1E8)

Return to the [Summary Table](#).

Table 1-335. R488 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB2_NUM	R/W	0x0	DPLL Feedback Divider Numerator Value used with DPLL2 feedback configuration 2 ROM=Y, EEPROM=N

1.334 R489 (Offset = 0x1E9)

Return to the [Summary Table](#).

Table 1-336. R489 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB2_DEN_39:32	R/W	0x0	See Register 493

1.335 R490 (Offset = 0x1EA)

Return to the [Summary Table](#).

Table 1-337. R490 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB2_DEN_31:24	R/W	0x0	See Register 493

1.336 R491 (Offset = 0x1EB)

Return to the [Summary Table](#).

Table 1-338. R491 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB2_DEN_23:16	R/W	0x0	See Register 493

1.337 R492 (Offset = 0x1EC)

Return to the [Summary Table](#).

Table 1-339. R492 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB2_DEN_15:8	R/W	0x0	See Register 493

1.338 R493 (Offset = 0x1ED)

Return to the [Summary Table](#).

Table 1-340. R493 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB2_DEN	R/W	0x0	DPLL Feedback Divider Denominator Value used with DPLL2 feedback configuration 2 ROM=Y, EEPROM=N

1.339 R494 (Offset = 0x1EE)Return to the [Summary Table](#).**Table 1-341. R494 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5	DPLL2_REF5_FB_SEL	R/W	0x0	DPLL Feedback N, NUM, DEN select for REF3. When this bit is a 0, Value 1 is chosen for each of the three parameters. When it is set to a 1, Value 2 is used. ROM=Y, EEPROM=N 0x0 = FB Config 1 0x1 = FB Config 2
4	DPLL2_REF4_FB_SEL	R/W	0x0	DPLL Feedback N, NUM, DEN select for REF4. When this bit is a 0, Value 1 is chosen for each of the three parameters. When it is set to a 1, Value 2 is used. ROM=Y, EEPROM=N 0x0 = FB Config 1 0x1 = FB Config 2
3	DPLL2_REF3_FB_SEL	R/W	0x0	DPLL Feedback N, NUM, DEN select for REF3. When this bit is a 0, Value 1 is chosen for each of the three parameters. When it is set to a 1, Value 2 is used. ROM=Y, EEPROM=N 0x0 = FB Config 1 0x1 = FB Config 2
2	DPLL2_REF2_FB_SEL	R/W	0x1	DPLL Feedback N, NUM, DEN select for REF2. When this bit is a 0, Value 1 is chosen for each of the three parameters. When it is set to a 1, Value 2 is used. ROM=Y, EEPROM=N 0x0 = FB Config 1 0x1 = FB Config 2
1	DPLL2_REF1_FB_SEL	R/W	0x0	DPLL Feedback N, NUM, DEN select for REF1. When this bit is a 0, Value 1 is chosen for each of the three parameters. When it is set to a 1, Value 2 is used. ROM=Y, EEPROM=N 0x0 = FB Config 1 0x1 = FB Config 2
0	DPLL2_REF0_FB_SEL	R/W	0x0	DPLL Feedback N, NUM, DEN select for REF0. When this bit is a 0, Value 1 is chosen for each of the three parameters. When it is set to a 1, Value 2 is used. ROM=Y, EEPROM=N 0x0 = FB Config 1 0x1 = FB Config 2

1.340 R495 (Offset = 0x1EF)Return to the [Summary Table](#).**Table 1-342. R495 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:3	RESERVED	R	0x0	Reserved

Table 1-342. R495 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
2:0	DPLL2_FB_MASH_ORDER	R/W	0x2	DPLL Feedback Divider MASH Order. ROM=Y, EEPROM=N 0x0 = Integer 0x1 = 1st order 0x2 = 2nd order 0x3 = 3rd order 0x4 = 4th order

1.341 R496 (Offset = 0x1F0)

Return to the [Summary Table](#).

Table 1-343. R496 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	DPLL2_FB_FDEV_37:32	R/W	0x0	See Register 500

1.342 R497 (Offset = 0x1F1)

Return to the [Summary Table](#).

Table 1-344. R497 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB_FDEV_31:24	R/W	0x0	See Register 500

1.343 R498 (Offset = 0x1F2)

Return to the [Summary Table](#).

Table 1-345. R498 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB_FDEV_23:16	R/W	0x0	See Register 500

1.344 R499 (Offset = 0x1F3)

Return to the [Summary Table](#).

Table 1-346. R499 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB_FDEV_15:8	R/W	0x0	See Register 500

1.345 R500 (Offset = 0x1F4)

Return to the [Summary Table](#).

Table 1-347. R500 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB_FDEV	R/W	0x0	DPLL Feedback Divider DCO Frequency Deviation Value ROM=Y, EEPROM=N

1.346 R501 (Offset = 0x1F5)

Return to the [Summary Table](#).

Table 1-348. R501 Field Descriptions

Bit	Field	Type	Reset	Description
7:1	RESERVED	R	0x0	Reserved
0	DPLL2_FB_FDEV_UPDATE	R/W	0x0	Increment/Decrement DPLL Feedback Numerator value with DPLL_FB_FDEV value ROM=Y, EEPROM=N

1.347 R502 (Offset = 0x1F6)Return to the [Summary Table](#).**Table 1-349. R502 Field Descriptions**

Bit	Field	Type	Reset	Description
7:1	RESERVED	R	0x0	Reserved
0	DPLL2_FB_FDEV_EN	R/W	0x0	Enable DPLL DCO mode ROM=Y, EEPROM=N

1.348 R503 (Offset = 0x1F7)Return to the [Summary Table](#).**Table 1-350. R503 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB_NUM_STAT_3 9:32	R	0x0	See Register 507

1.349 R504 (Offset = 0x1F8)Return to the [Summary Table](#).**Table 1-351. R504 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB_NUM_STAT_3 1:24	R	0x0	See Register 507

1.350 R505 (Offset = 0x1F9)Return to the [Summary Table](#).**Table 1-352. R505 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB_NUM_STAT_2 3:16	R	0x0	See Register 507

1.351 R506 (Offset = 0x1FA)Return to the [Summary Table](#).**Table 1-353. R506 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB_NUM_STAT_1 5:8	R	0x0	See Register 507

1.352 R507 (Offset = 0x1FB)

Return to the [Summary Table](#).

Table 1-354. R507 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_FB_NUM_STAT	R	0x0	Readback DPLL Feedback Divider Numerator value as a result of DCO mode ROM=N, EEPROM=N

1.353 R508 (Offset = 0x1FC)

Return to the [Summary Table](#).

Table 1-355. R508 Field Descriptions

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3	DPLL2_REF0_DBLR_EN	R/W	0x0	DPLL Reference 0 Doubler Enable ROM=Y, EEPROM=N
2	DPLL2_REF1_DBLR_EN	R/W	0x0	DPLL Reference 1 Doubler Enable ROM=Y, EEPROM=N
1	DPLL2_REF2_DBLR_EN	R/W	0x0	DPLL Reference 2 Doubler Enable ROM=Y, EEPROM=N
0	DPLL2_REF3_DBLR_EN	R/W	0x0	DPLL Reference 3 Doubler Enable ROM=Y, EEPROM=N

1.354 R509 (Offset = 0x1FD)

Return to the [Summary Table](#).

Table 1-356. R509 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_REF0_RDIV_15:8	R/W	0x0	See Register 510

1.355 R510 (Offset = 0x1FE)

Return to the [Summary Table](#).

Table 1-357. R510 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_REF0_RDIV	R/W	0xF	DPLL Reference 0 R divider value ROM=Y, EEPROM=N

1.356 R511 (Offset = 0x1FF)

Return to the [Summary Table](#).

Table 1-358. R511 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_REF1_RDIV_15:8	R/W	0x0	See Register 512

1.357 R512 (Offset = 0x200)

Return to the [Summary Table](#).

Table 1-359. R512 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_REF1_RDIV	R/W	0xF	DPLL Reference 1 R divider value ROM=Y, EEPROM=N

1.358 R513 (Offset = 0x201)Return to the [Summary Table](#).**Table 1-360. R513 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL2_REF2_RDIV_15:8	R/W	0x0	See Register 514

1.359 R514 (Offset = 0x202)Return to the [Summary Table](#).**Table 1-361. R514 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL2_REF2_RDIV	R/W	0x1	DPLL Reference 2 R divider value ROM=Y, EEPROM=N

1.360 R515 (Offset = 0x203)Return to the [Summary Table](#).**Table 1-362. R515 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL2_REF3_RDIV_15:8	R/W	0x0	See Register 516

1.361 R516 (Offset = 0x204)Return to the [Summary Table](#).**Table 1-363. R516 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL2_REF3_RDIV	R/W	0x0	DPLL Reference 3 R divider value ROM=Y, EEPROM=N

1.362 R517 (Offset = 0x205)Return to the [Summary Table](#).**Table 1-364. R517 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL2_REF4_RDIV_15:8	R/W	0x0	See Register 518

1.363 R518 (Offset = 0x206)Return to the [Summary Table](#).

Table 1-365. R518 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_REF4_RDIV	R/W	0x0	DPLL REF4 R-divider value ROM=Y, EEPROM=N

1.364 R519 (Offset = 0x207)

Return to the [Summary Table](#).

Table 1-366. R519 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_REF5_RDIV_15:8	R/W	0x0	See Register 520

1.365 R520 (Offset = 0x208)

Return to the [Summary Table](#).

Table 1-367. R520 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL2_REF5_RDIV	R/W	0x0	DPLL Reference 3 R divider value ROM=Y, EEPROM=N

1.366 R523 (Offset = 0x20B)

Return to the [Summary Table](#).

Table 1-368. R523 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:3	DPLL3_REF0_AUTO_PRIORITY	R/W	0x2	REF0 Priority for Automatic Switchover. Sets the priority for REF0 used in Automatic Non-Revertive, Automatic Revertive, and Manual Selection with Automatic Fallback switchover modes. ROM=Y, EEPROM=N 0x0 = Not available for selection 0x1 = 1st 0x2 = 2nd 0x3 = 3rd 0x4 = 4th 0x5 = 5th 0x6 = 6th 0x7 = 7th
2:0	DPLL3_REF1_AUTO_PRIORITY	R/W	0x3	REF1 Priority for Automatic Switchover. Sets the priority for REF1 used in Automatic Non-Revertive, Automatic Revertive, and Manual Selection with Automatic Fallback switchover modes. ROM=Y, EEPROM=N 0x0 = Not available for selection 0x1 = 1st 0x2 = 2nd 0x3 = 3rd 0x4 = 4th 0x5 = 5th 0x6 = 6th 0x7 = 7th

1.367 R524 (Offset = 0x20C)

Return to the [Summary Table](#).

Table 1-369. R524 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:3	DPLL3_REF2_AUTO_PRIORITY	R/W	0x0	REF2 Priority for Automatic Switchover. Sets the priority for REF2 used in Automatic Non-Revertive, Automatic Revertive, and Manual Selection with Automatic Fallback switchover modes. ROM=Y, EEPROM=N 0x0 = Not available for selection 0x1 = 1st 0x2 = 2nd 0x3 = 3rd 0x4 = 4th 0x5 = 5th 0x6 = 6th 0x7 = 7th
2:0	DPLL3_REF3_AUTO_PRIORITY	R/W	0x0	REF3 Priority for Automatic Switchover. Sets the priority for REF3 used in Automatic Non-Revertive, Automatic Revertive, and Manual Selection with Automatic Fallback switchover modes. ROM=Y, EEPROM=N 0x0 = Not available for selection 0x1 = 1st 0x2 = 2nd 0x3 = 3rd 0x4 = 4th 0x5 = 5th 0x6 = 6th 0x7 = 7th

1.368 R525 (Offset = 0x20D)Return to the [Summary Table](#).**Table 1-370. R525 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:3	DPLL3_REF4_AUTO_PRIORITY	R/W	0x0	REF4 Priority for Automatic Switchover. Sets the priority for REF4 feedback from APLL1 used in Automatic Non-Revertive, Automatic Revertive, and Manual Selection with Automatic Fallback switchover modes. ROM=Y, EEPROM=N 0x0 = Not available for selection 0x1 = 1st 0x2 = 2nd 0x3 = 3rd 0x4 = 4th 0x5 = 5th 0x6 = 6th 0x7 = 7th
2:0	DPLL3_REF5_AUTO_PRIORITY	R/W	0x1	REF5 Priority for Automatic Switchover. Sets the priority for REF5 feedback from APLL2 used in Automatic Non-Revertive, Automatic Revertive, and Manual Selection with Automatic Fallback switchover modes. ROM=Y, EEPROM=N 0x0 = Not available for selection 0x1 = 1st 0x2 = 2nd 0x3 = 3rd 0x4 = 4th 0x5 = 5th 0x6 = 6th 0x7 = 7th

1.369 R526 (Offset = 0x20E)

Return to the [Summary Table](#).

Table 1-371. R526 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	RESERVED	R	0x0	Reserved
5:3	DPLL3_MAN_REFSEL	R/W	0x0	DPLL3 Manual Reference Selection Mode. Determines how the manually selected reference is chosen. If this is set to a '1', the manually selected reference is taken from a GPIO input pin. If it is set to a '0', the manually selected reference is taken from a register. ROM=Y, EEPROM=N 0x0 = REF0 0x1 = REF1 0x2 = REF2 0x3 = REF3 0x4 = PLL1 0x5 = PLL2
2	DPLL3_MAN_SWITCH_PIN_MODE	R/W	0x0	DPLL3 Manual Reference Selection Mode. Determines how the manually selected reference is chosen. If this is set to a '1', the manually selected reference is taken from a GPIO input pin. If it is set to a '0', the manually selected reference is taken from a register. ROM=Y, EEPROM=N 0x0 = Register 0x1 = Pin
1:0	DPLL3_SWITCH_MODE	R/W	0x1	DPLL3 Reference Switchover Mode. Selects between Automatic Non-revertive, Automatic Revertive, Manual Selection with Automatic Fallback, and Manual Selection with Automatic Holdover. ROM=Y, EEPROM=N 0x0 = Auto non-revertive 0x1 = Auto revertive 0x2 = Manual with fallback 0x3 = Manual with holdover

1.370 R527 (Offset = 0x20F)

Return to the [Summary Table](#).

Table 1-372. R527 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	DPLL3_REFSEL_STAT	R	0x20	Reads the DPLL3 selected reference ROM=N, EEPROM=N 0x0 = Holdover 0x1 = REF0 0x2 = REF1 0x4 = REF2 0x8 = REF3 0x10 = APLL1 0x20 = APLL2

1.371 R528 (Offset = 0x210)

Return to the [Summary Table](#).

Table 1-373. R528 Field Descriptions

Bit	Field	Type	Reset	Description
7	DPLL3_LOCKDET_PPM_EN	R/W	0x1	DPLL frequency lock detect enable ROM=Y, EEPROM=N

Table 1-373. R528 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
6:0	DPLL3_LOCKDET_PPM_MAX_14:8	R/W	0x0	See Register 529

1.372 R529 (Offset = 0x211)Return to the [Summary Table](#).**Table 1-374. R529 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_LOCKDET_PPM_MAX	R/W	0xA	DPLL frequency lock detect in-lock threshold ROM=Y, EEPROM=N

1.373 R530 (Offset = 0x212)Return to the [Summary Table](#).**Table 1-375. R530 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:0	DPLL3_UNLOCKDET_PPM_MAX_14:8	R/W	0x0	See Register 531

1.374 R531 (Offset = 0x213)Return to the [Summary Table](#).**Table 1-376. R531 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_UNLOCKDET_PPM_MAX	R/W	0x64	DPLL frequency lock detect out-of-lock threshold ROM=Y, EEPROM=N

1.375 R532 (Offset = 0x214)Return to the [Summary Table](#).**Table 1-377. R532 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	DPLL3_LOCKDET2_PPM_CNTSTRT_29:24	R/W	0x0	See Register 535

1.376 R533 (Offset = 0x215)Return to the [Summary Table](#).**Table 1-378. R533 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_LOCKDET2_PPM_CNTSTRT_23:16	R/W	0x3	See Register 535

1.377 R534 (Offset = 0x216)

Return to the [Summary Table](#).

Table 1-379. R534 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_LOCKDET2_PPM_CNTSTRT_15:8	R/W	0xD	See Register 535

1.378 R535 (Offset = 0x217)

Return to the [Summary Table](#).

Table 1-380. R535 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_LOCKDET2_PPM_CNTSTRT	R/W	0x40	DPLL frequency lock detect reference count value used with DPLL1 feedback configuration 2 ROM=Y, EEPROM=N

1.379 R536 (Offset = 0x218)

Return to the [Summary Table](#).

Table 1-381. R536 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	DPLL3_LOCKDET_PPM_CNTSTRT_29:24	R/W	0x0	See Register 539

1.380 R537 (Offset = 0x219)

Return to the [Summary Table](#).

Table 1-382. R537 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_LOCKDET_PPM_CNTSTRT_23:16	R/W	0x10	See Register 539

1.381 R538 (Offset = 0x21A)

Return to the [Summary Table](#).

Table 1-383. R538 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_LOCKDET_PPM_CNTSTRT_15:8	R/W	0x1E	See Register 539

1.382 R539 (Offset = 0x21B)

Return to the [Summary Table](#).

Table 1-384. R539 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_LOCKDET_PPM_CNTSTRT	R/W	0x7A	DPLL frequency lock detect reference count value used with DPLL3 feedback configuration 1 ROM=Y, EEPROM=N

1.383 R540 (Offset = 0x21C)

 Return to the [Summary Table](#).

Table 1-385. R540 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	DPLL3_LOCKDET_VCO_PPM_CNTSTRT_29:24	R/W	0x0	See Register 543

1.384 R541 (Offset = 0x21D)

 Return to the [Summary Table](#).

Table 1-386. R541 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_LOCKDET_VCO_PPM_CNTSTRT_23:16	R/W	0x98	See Register 543

1.385 R542 (Offset = 0x21E)

 Return to the [Summary Table](#).

Table 1-387. R542 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_LOCKDET_VCO_PPM_CNTSTRT_15:8	R/W	0x96	See Register 543

1.386 R543 (Offset = 0x21F)

 Return to the [Summary Table](#).

Table 1-388. R543 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_LOCKDET_VCO_PPM_CNTSTRT	R/W	0x83	DPLL frequency lock detect VCO count value ROM=Y, EEPROM=N

1.387 R544 (Offset = 0x220)

 Return to the [Summary Table](#).

Table 1-389. R544 Field Descriptions

Bit	Field	Type	Reset	Description
7:3	RESERVED	R	0x0	Reserved
2:1	RESERVED	R	0x0	Reserved
0	DPLL3_STATUS_PPM_LOCK	R	0x1	Readback lock indicator from DPLL PPM Checker ROM=N, EEPROM=N

1.388 R547 (Offset = 0x223)

 Return to the [Summary Table](#).

Table 1-390. R547 Field Descriptions

Bit	Field	Type	Reset	Description
7	DPLL3_LOOP_EN	R/W	0x1	Enable DPLL3 loop filter and R-Div mash engine ROM=Y, EEPROM=N

Table 1-390. R547 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
6	DPPLL3_PHASE_CANCEL_EN	R/W	0x1	Enable Phase Cancellation ROM=Y, EEPROM=N
5	DPPLL3_FASTLOCK_ALWAYS	R/W	0x0	Always perform fastlock ROM=Y, EEPROM=N
4	DPPLL3_PHS1_EN	R/W	0x1	Enable holdover exit phase slew control . ROM=Y, EEPROM=N
3	DPPLL3_ZDM_EN	R/W	0x0	Enable Zero Delay mode ROM=Y, EEPROM=N
2	DPPLL3_HIST_EN	R/W	0x1	Enable History word to be used during holdover ROM=Y, EEPROM=N
1	DPPLL3_PHASE_CANCEL_ALWAYS	R/W	0x0	Force phase cancellation to always occur when DPPLL is acquiring lock. ROM=Y, EEPROM=N
0	RESERVED	R	0x0	Reserved

1.389 R548 (Offset = 0x224)

Return to the [Summary Table](#).

Table 1-391. R548 Field Descriptions

Bit	Field	Type	Reset	Description
7	DPPLL3_HOLD_SLEW_LIMIT_EN	R/W	0x0	During holdover enable slew limiter ROM=Y, EEPROM=N
6:0	RESERVED	R	0x0	Reserved

1.390 R550 (Offset = 0x226)

Return to the [Summary Table](#).

Table 1-392. R550 Field Descriptions

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4:0	DPPLL3_PH_OFFSET_44:40	R/W	0x0	See Register 555

1.391 R551 (Offset = 0x227)

Return to the [Summary Table](#).

Table 1-393. R551 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPPLL3_PH_OFFSET_39:32	R/W	0x0	See Register 555

1.392 R552 (Offset = 0x228)

Return to the [Summary Table](#).

Table 1-394. R552 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPPLL3_PH_OFFSET_31:24	R/W	0x0	See Register 555

1.393 R553 (Offset = 0x229)Return to the [Summary Table](#).**Table 1-395. R553 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPDLL3_PH_OFFSET_23:16	R/W	0x0	See Register 555

1.394 R554 (Offset = 0x22A)Return to the [Summary Table](#).**Table 1-396. R554 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPDLL3_PH_OFFSET_15:8	R/W	0x0	See Register 555

1.395 R555 (Offset = 0x22B)Return to the [Summary Table](#).**Table 1-397. R555 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPDLL3_PH_OFFSET	R/W	0x0	Phase offset to adjust and calibrate input to output phase in ZDM. This is a 2s complement number. ROM=Y, EEPROM=N

1.396 R556 (Offset = 0x22C)Return to the [Summary Table](#).**Table 1-398. R556 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPDLL3_FREE_RUN_39:32	R/W	0x0	See Register 560

1.397 R557 (Offset = 0x22D)Return to the [Summary Table](#).**Table 1-399. R557 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPDLL3_FREE_RUN_31:24	R/W	0x0	See Register 560

1.398 R558 (Offset = 0x22E)Return to the [Summary Table](#).**Table 1-400. R558 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPDLL3_FREE_RUN_23:16	R/W	0x0	See Register 560

1.399 R559 (Offset = 0x22F)

Return to the [Summary Table](#).

Table 1-401. R559 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_FREE_RUN_15:8	R/W	0x0	See Register 560

1.400 R560 (Offset = 0x230)

Return to the [Summary Table](#).

Table 1-402. R560 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_FREE_RUN	R/W	0x0	DPLL starting word. Also non-history holdover word. ROM=Y, EEPROM=N

1.401 R561 (Offset = 0x231)

Return to the [Summary Table](#).

Table 1-403. R561 Field Descriptions

Bit	Field	Type	Reset	Description
7	DPLL3_PPM_REF_SEL	R/W	0x0	PPM Detector Reference Selection for DPLL3 LOFL. When set to 0, the selected DPLL input reference is used resulting in DPLL3 LOFL as expected. When set to 1, the XO is used as a frequency enabling LOFL for APLL3, no DPLL is required. This bit enables a "BAW LOCK" indicator. ROM=Y, EEPROM=N 0x0 = LOFL_DPLL3 = DPLL3 DLD 0x1 = LOFL_DPLL3 = APLL3 DLD
6	DPLL3_1PPS_MODE	R/W	0x0	Set when using 1-PPS input ROM=Y, EEPROM=N
5	DPLL3_1PPS_EN	R/W	0x0	Set when using 1-PPS input ROM=Y, EEPROM=N
4:0	RESERVED	R	0x0	Reserved

1.402 R590 (Offset = 0x24E)

Return to the [Summary Table](#).

Table 1-404. R590 Field Descriptions

Bit	Field	Type	Reset	Description
7:2	RESERVED	R	0x0	Reserved
1:0	DPLL3_LCK_TIMER_9:8	R/W	0x3	See Register 591

1.403 R591 (Offset = 0x24F)

Return to the [Summary Table](#).

Table 1-405. R591 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_LCK_TIMER	R/W	0x54	Minimum amount of time until DPLL3_LOPL will be deasserted after starting to lock. Timer begins once device is within valid phase lock window. ROM=Y, EEPROM=N

1.404 R592 (Offset = 0x250)Return to the [Summary Table](#).**Table 1-406. R592 Field Descriptions**

Bit	Field	Type	Reset	Description
7:2	RESERVED	R	0x0	Reserved
1:0	DPLL3_HIST_TIMER_9:8	R/W	0x1	See Register 593

1.405 R593 (Offset = 0x251)Return to the [Summary Table](#).**Table 1-407. R593 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_HIST_TIMER	R/W	0x92	History timer ROM=Y, EEPROM=N

1.406 R594 (Offset = 0x252)Return to the [Summary Table](#).**Table 1-408. R594 Field Descriptions**

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4:2	RESERVED	R	0x0	Reserved
1:0	DPLL3_HOLD_TIMER_9: 8	R/W	0x1	See Register 595

1.407 R595 (Offset = 0x253)Return to the [Summary Table](#).**Table 1-409. R595 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_HOLD_TIMER	R/W	0x42	Rate of change to DPLL or APLL numerator during phase slew control. See DPLLx_HOLD_SLEW_STEP. ROM=Y, EEPROM=N

1.408 R596 (Offset = 0x254)Return to the [Summary Table](#).**Table 1-410. R596 Field Descriptions**

Bit	Field	Type	Reset	Description
7:2	RESERVED	R	0x0	Reserved
1:0	DPLL3_PHS1_TIMER_9:8	R/W	0x1	See Register 597

1.409 R597 (Offset = 0x255)Return to the [Summary Table](#).

Table 1-411. R597 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_PHS1_TIMER	R/W	0x40	Holdover exit phase slew control. Timer controlling update period. ROM=Y, EEPROM=N

1.410 R602 (Offset = 0x25A)

Return to the [Summary Table](#).

Table 1-412. R602 Field Descriptions

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4:0	DPLL3_HIST_GAIN	R/W	0x8	History filter gain ROM=Y, EEPROM=N

1.411 R603 (Offset = 0x25B)

Return to the [Summary Table](#).

Table 1-413. R603 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	DPLL3_PL_THRESH	R/W	0x27	Phase lock in-lock threshold ROM=Y, EEPROM=N

1.412 R604 (Offset = 0x25C)

Return to the [Summary Table](#).

Table 1-414. R604 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	DPLL3_PL_UNLK_THRESH	R/W	0x29	Phase lock out-of-lock threshold ROM=Y, EEPROM=N

1.413 R605 (Offset = 0x25D)

Return to the [Summary Table](#).

Table 1-415. R605 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	DPLL3_PHS1_THRESH	R/W	0x7	Holdover exit phase slew control. Change per timer event. ROM=Y, EEPROM=N

1.414 R610 (Offset = 0x262)

Return to the [Summary Table](#).

Table 1-416. R610 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	RESERVED	R	0x0	Reserved
5	DPLL3_STATUS_PL	R	0x1	Readback the phase lock status ROM=N, EEPROM=N

Table 1-416. R610 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
4:0	RESERVED	R	0x0	Reserved

1.415 R611 (Offset = 0x263)Return to the [Summary Table](#).**Table 1-417. R611 Field Descriptions**

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4	DPLL3_DCO_SLEW_ACTIVE	R	0x0	Readback DCO slew status ROM=N, EEPROM=N
3:0	RESERVED	R	0x0	Reserved

1.416 R614 (Offset = 0x266)Return to the [Summary Table](#).**Table 1-418. R614 Field Descriptions**

Bit	Field	Type	Reset	Description
7:1	RESERVED	R	0x0	Reserved
0	DPLL3_FB_DIV_32:32	R/W	0x0	See Register 618

1.417 R615 (Offset = 0x267)Return to the [Summary Table](#).**Table 1-419. R615 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB_DIV_31:24	R/W	0x0	See Register 618

1.418 R616 (Offset = 0x268)Return to the [Summary Table](#).**Table 1-420. R616 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB_DIV_23:16	R/W	0x0	See Register 618

1.419 R617 (Offset = 0x269)Return to the [Summary Table](#).**Table 1-421. R617 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB_DIV_15:8	R/W	0x0	See Register 618

1.420 R618 (Offset = 0x26A)Return to the [Summary Table](#).

Table 1-422. R618 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB_DIV	R/W	0xE3	DPLL Feedback Divider N Value used with DPLL3 feedback configuration 1. Divide value is programmed value except when using ZDM mode with FB div, actual divide value is +1. ROM=Y, EEPROM=N

1.421 R619 (Offset = 0x26B)

Return to the [Summary Table](#).

Table 1-423. R619 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB_NUM_39:32	R/W	0x31	See Register 623

1.422 R620 (Offset = 0x26C)

Return to the [Summary Table](#).

Table 1-424. R620 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB_NUM_31:24	R/W	0x3	See Register 623

1.423 R621 (Offset = 0x26D)

Return to the [Summary Table](#).

Table 1-425. R621 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB_NUM_23:16	R/W	0xF5	See Register 623

1.424 R622 (Offset = 0x26E)

Return to the [Summary Table](#).

Table 1-426. R622 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB_NUM_15:8	R/W	0x9E	See Register 623

1.425 R623 (Offset = 0x26F)

Return to the [Summary Table](#).

Table 1-427. R623 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB_NUM	R/W	0xEF	DPLL Feedback Divider Numerator Value used with DPLL3 feedback configuration 1 ROM=Y, EEPROM=N

1.426 R624 (Offset = 0x270)

Return to the [Summary Table](#).

Table 1-428. R624 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB_DEN_39:32	R/W	0xFF	See Register 628

1.427 R625 (Offset = 0x271)Return to the [Summary Table](#).**Table 1-429. R625 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB_DEN_31:24	R/W	0xFF	See Register 628

1.428 R626 (Offset = 0x272)Return to the [Summary Table](#).**Table 1-430. R626 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB_DEN_23:16	R/W	0xFF	See Register 628

1.429 R627 (Offset = 0x273)Return to the [Summary Table](#).**Table 1-431. R627 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB_DEN_15:8	R/W	0xFC	See Register 628

1.430 R628 (Offset = 0x274)Return to the [Summary Table](#).**Table 1-432. R628 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB_DEN	R/W	0x7B	DPLL Feedback Divider Denominator Value used with DPLL3 feedback configuration 1 ROM=Y, EEPROM=N

1.431 R629 (Offset = 0x275)Return to the [Summary Table](#).**Table 1-433. R629 Field Descriptions**

Bit	Field	Type	Reset	Description
7:1	RESERVED	R	0x0	Reserved
0	DPLL3_FB2_DIV_32:32	R/W	0x0	See Register 633

1.432 R630 (Offset = 0x276)Return to the [Summary Table](#).**Table 1-434. R630 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB2_DIV_31:24	R/W	0x0	See Register 633

1.433 R631 (Offset = 0x277)Return to the [Summary Table](#).**Table 1-435. R631 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB2_DIV_23:16	R/W	0x0	See Register 633

1.434 R632 (Offset = 0x278)Return to the [Summary Table](#).**Table 1-436. R632 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB2_DIV_15:8	R/W	0x0	See Register 633

1.435 R633 (Offset = 0x279)Return to the [Summary Table](#).**Table 1-437. R633 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB2_DIV	R/W	0xEB	DPLL Feedback Divider N Value used with DPLL3 feedback configuration 2. Divide value is programmed value except when using ZDM mode with FB div, actual divide value is +1. ROM=Y, EEPROM=N

1.436 R634 (Offset = 0x27A)Return to the [Summary Table](#).**Table 1-438. R634 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB2_NUM_39:32	R/W	0xED	See Register 638

1.437 R635 (Offset = 0x27B)Return to the [Summary Table](#).**Table 1-439. R635 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB2_NUM_31:24	R/W	0xFA	See Register 638

1.438 R636 (Offset = 0x27C)Return to the [Summary Table](#).**Table 1-440. R636 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB2_NUM_23:16	R/W	0x43	See Register 638

1.439 R637 (Offset = 0x27D)Return to the [Summary Table](#).

Table 1-441. R637 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB2_NUM_15:8	R/W	0xFD	See Register 638

1.440 R638 (Offset = 0x27E)Return to the [Summary Table](#).**Table 1-442. R638 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB2_NUM	R/W	0x5C	DPLL Feedback Divider Numerator Value used with DPLL3 feedback configuration 2 ROM=Y, EEPROM=N

1.441 R639 (Offset = 0x27F)Return to the [Summary Table](#).**Table 1-443. R639 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB2_DEN_39:32	R/W	0xFF	See Register 643

1.442 R640 (Offset = 0x280)Return to the [Summary Table](#).**Table 1-444. R640 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB2_DEN_31:24	R/W	0xFF	See Register 643

1.443 R641 (Offset = 0x281)Return to the [Summary Table](#).**Table 1-445. R641 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB2_DEN_23:16	R/W	0xFF	See Register 643

1.444 R642 (Offset = 0x282)Return to the [Summary Table](#).**Table 1-446. R642 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB2_DEN_15:8	R/W	0xFE	See Register 643

1.445 R643 (Offset = 0x283)Return to the [Summary Table](#).

Table 1-447. R643 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB2_DEN	R/W	0xEC	DPLL Feedback Divider Denominator Value used with DPLL3 feedback configuration 2 ROM=Y, EEPROM=N

1.446 R644 (Offset = 0x284)

Return to the [Summary Table](#).

Table 1-448. R644 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5	DPLL3_REF5_FB_SEL	R/W	0x0	DPLL Feedback N, NUM, DEN select for REF5. When this bit is a 0, Value 1 is chosen for each of the three parameters. When it is set to a 1, Value 2 is used. ROM=Y, EEPROM=N 0x0 = FB Config 1 0x1 = FB Config 2
4	DPLL3_REF4_FB_SEL	R/W	0x0	DPLL Feedback N, NUM, DEN select for REF4. When this bit is a 0, Value 1 is chosen for each of the three parameters. When it is set to a 1, Value 2 is used. ROM=Y, EEPROM=N 0x0 = FB Config 1 0x1 = FB Config 2
3	DPLL3_REF3_FB_SEL	R/W	0x0	DPLL Feedback N, NUM, DEN select for REF3. When this bit is a 0, Value 1 is chosen for each of the three parameters. When it is set to a 1, Value 2 is used. ROM=Y, EEPROM=N 0x0 = FB Config 1 0x1 = FB Config 2
2	DPLL3_REF2_FB_SEL	R/W	0x0	DPLL Feedback N, NUM, DEN select for REF2. When this bit is a 0, Value 1 is chosen for each of the three parameters. When it is set to a 1, Value 2 is used. ROM=Y, EEPROM=N 0x0 = FB Config 1 0x1 = FB Config 2
1	DPLL3_REF1_FB_SEL	R/W	0x1	DPLL Feedback N, NUM, DEN select for REF1. When this bit is a 0, Value 1 is chosen for each of the three parameters. When it is set to a 1, Value 2 is used. ROM=Y, EEPROM=N 0x0 = FB Config 1 0x1 = FB Config 2
0	DPLL3_REF0_FB_SEL	R/W	0x1	DPLL Feedback N, NUM, DEN select for REF0. When this bit is a 0, Value 1 is chosen for each of the three parameters. When it is set to a 1, Value 2 is used. ROM=Y, EEPROM=N 0x0 = FB Config 1 0x1 = FB Config 2

1.447 R645 (Offset = 0x285)

Return to the [Summary Table](#).

Table 1-449. R645 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:3	RESERVED	R	0x0	Reserved

Table 1-449. R645 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
2:0	DPLL3_FB_MASH_ORDER	R/W	0x2	DPLL Feedback Divider MASH Order. ROM=Y, EEPROM=N 0x0 = Integer 0x1 = 1st order 0x2 = 2nd order 0x3 = 3rd order 0x4 = 4th order

1.448 R646 (Offset = 0x286)Return to the [Summary Table](#).**Table 1-450. R646 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:0	DPLL3_FB_FDEV_37:32	R/W	0x0	See Register 650

1.449 R647 (Offset = 0x287)Return to the [Summary Table](#).**Table 1-451. R647 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB_FDEV_31:24	R/W	0x0	See Register 650

1.450 R648 (Offset = 0x288)Return to the [Summary Table](#).**Table 1-452. R648 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB_FDEV_23:16	R/W	0x0	See Register 650

1.451 R649 (Offset = 0x289)Return to the [Summary Table](#).**Table 1-453. R649 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB_FDEV_15:8	R/W	0x0	See Register 650

1.452 R650 (Offset = 0x28A)Return to the [Summary Table](#).**Table 1-454. R650 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB_FDEV	R/W	0x0	DPLL Feedback Divider DCO Frequency Deviation Value ROM=Y, EEPROM=N

1.453 R651 (Offset = 0x28B)Return to the [Summary Table](#).

Table 1-455. R651 Field Descriptions

Bit	Field	Type	Reset	Description
7:1	RESERVED	R	0x0	Reserved
0	DPLL3_FB_FDEV_UPDATE	R/W	0x0	Increment/Decrement DPLL Feedback Numerator value with DPLL_FB_FDEV value ROM=Y, EEPROM=N

1.454 R652 (Offset = 0x28C)

Return to the [Summary Table](#).

Table 1-456. R652 Field Descriptions

Bit	Field	Type	Reset	Description
7:1	RESERVED	R	0x0	Reserved
0	DPLL3_FB_FDEV_EN	R/W	0x0	Enable DPLL DCO mode ROM=Y, EEPROM=N

1.455 R653 (Offset = 0x28D)

Return to the [Summary Table](#).

Table 1-457. R653 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB_NUM_STAT_3 9:32	R	0x14	See Register 657

1.456 R654 (Offset = 0x28E)

Return to the [Summary Table](#).

Table 1-458. R654 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB_NUM_STAT_3 1:24	R	0x7A	See Register 657

1.457 R655 (Offset = 0x28F)

Return to the [Summary Table](#).

Table 1-459. R655 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB_NUM_STAT_2 3:16	R	0xE1	See Register 657

1.458 R656 (Offset = 0x290)

Return to the [Summary Table](#).

Table 1-460. R656 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB_NUM_STAT_1 5:8	R	0x47	See Register 657

1.459 R657 (Offset = 0x291)Return to the [Summary Table](#).**Table 1-461. R657 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_FB_NUM_STAT	R	0xAE	Readback DPLL Feedback Divider Numerator value as a result of DCO mode ROM=N, EEPROM=N

1.460 R658 (Offset = 0x292)Return to the [Summary Table](#).**Table 1-462. R658 Field Descriptions**

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3	DPLL3_REF0_DBLR_EN	R/W	0x0	DPLL Reference 0 Doubler Enable ROM=Y, EEPROM=N
2	DPLL3_REF1_DBLR_EN	R/W	0x0	DPLL Reference 1 Doubler Enable ROM=Y, EEPROM=N
1	DPLL3_REF2_DBLR_EN	R/W	0x0	DPLL Reference 2 Doubler Enable ROM=Y, EEPROM=N
0	DPLL3_REF3_DBLR_EN	R/W	0x0	DPLL Reference 3 Doubler Enable ROM=Y, EEPROM=N

1.461 R659 (Offset = 0x293)Return to the [Summary Table](#).**Table 1-463. R659 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_REF0_RDIV_15:8	R/W	0x0	See Register 660

1.462 R660 (Offset = 0x294)Return to the [Summary Table](#).**Table 1-464. R660 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_REF0_RDIV	R/W	0xF	DPLL Reference 0 R divider value ROM=Y, EEPROM=N

1.463 R661 (Offset = 0x295)Return to the [Summary Table](#).**Table 1-465. R661 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_REF1_RDIV_15:8	R/W	0x0	See Register 662

1.464 R662 (Offset = 0x296)Return to the [Summary Table](#).

Table 1-466. R662 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_REF1_RDIV	R/W	0xF	DPLL Reference 1 R divider value ROM=Y, EEPROM=N

1.465 R663 (Offset = 0x297)

Return to the [Summary Table](#).

Table 1-467. R663 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_REF2_RDIV_15:8	R/W	0x0	See Register 664

1.466 R664 (Offset = 0x298)

Return to the [Summary Table](#).

Table 1-468. R664 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_REF2_RDIV	R/W	0x1	DPLL Reference 2 R divider value ROM=Y, EEPROM=N

1.467 R665 (Offset = 0x299)

Return to the [Summary Table](#).

Table 1-469. R665 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_REF3_RDIV_15:8	R/W	0x0	See Register 666

1.468 R666 (Offset = 0x29A)

Return to the [Summary Table](#).

Table 1-470. R666 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_REF3_RDIV	R/W	0x1	DPLL Reference 3 R divider value ROM=Y, EEPROM=N

1.469 R667 (Offset = 0x29B)

Return to the [Summary Table](#).

Table 1-471. R667 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_REF4_RDIV_15:8	R/W	0x0	See Register 668

1.470 R668 (Offset = 0x29C)

Return to the [Summary Table](#).

Table 1-472. R668 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	DPLL3_REF4_RDIV	R/W	0x0	DPLL Reference 4 R divider value ROM=Y, EEPROM=N

1.471 R669 (Offset = 0x29D)Return to the [Summary Table](#).**Table 1-473. R669 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_REF5_RDIV_15:8	R/W	0x0	See Register 670

1.472 R670 (Offset = 0x29E)Return to the [Summary Table](#).**Table 1-474. R670 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	DPLL3_REF5_RDIV	R/W	0x34	DPLL Reference 5 R divider value ROM=Y, EEPROM=N

1.473 R707 (Offset = 0x2C3)Return to the [Summary Table](#).

Table 1-475. R707 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	PLL1_CP_PU_R	R/W	0x6D	PLL charge pump pull-up resistor selection ROM=Y, EEPROM=N 0x0 = Disabled 0x1 = 78 kΩ 0x2 = 39 kΩ 0x3 = 26 kΩ 0x4 = 20 kΩ 0x5 = 15.9 kΩ 0x6 = 13.2 kΩ 0x7 = 11.3 kΩ 0x8 = 9.8 kΩ 0x9 = 8.71 kΩ 0xA = 7.83 kΩ 0xB = 7.12 kΩ 0xC = 6.58 kΩ 0xD = 6.07 kΩ 0xE = 5.63 kΩ 0xF = 5.25 kΩ 0x10 = 4.9 kΩ 0x11 = 4.61 kΩ 0x12 = 4.35 kΩ 0x13 = 4.12 kΩ 0x14 = 3.94 kΩ 0x15 = 3.75 kΩ 0x16 = 3.57 kΩ 0x17 = 3.42 kΩ 0x18 = 3.27 kΩ 0x19 = 3.14 kΩ 0x1A = 3.01 kΩ 0x1B = 2.9 kΩ 0x1C = 2.81 kΩ 0x1D = 2.71 kΩ 0x1E = 2.62 kΩ 0x1F = 2.53 kΩ 0x20 = 2.4 kΩ 0x21 = 2.33 kΩ 0x22 = 2.26 kΩ 0x23 = 2.2 kΩ 0x24 = 2.14 kΩ 0x25 = 2.09 kΩ 0x26 = 2.03 kΩ 0x27 = 1.98 kΩ 0x28 = 1.93 kΩ 0x29 = 1.88 kΩ 0x2A = 1.84 kΩ 0x2B = 1.79 kΩ 0x2C = 1.76 kΩ 0x2D = 1.72 kΩ 0x2E = 1.68 kΩ 0x2F = 1.65 kΩ 0x30 = 1.61 kΩ 0x31 = 1.58 kΩ 0x32 = 1.55 kΩ 0x33 = 1.52 kΩ 0x34 = 1.49 kΩ 0x35 = 1.46 kΩ 0x36 = 1.44 kΩ 0x37 = 1.41 kΩ 0x38 = 1.38 kΩ 0x39 = 1.36 kΩ 0x3A = 1.34 kΩ 0x3B = 1.31 kΩ 0x3C = 1.29 kΩ 0x3D = 1.27 kΩ 0x3E = 1.25 kΩ 0x3F = 1.23 kΩ 0x40 = 1.2 kΩ

Table 1-475. R707 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
				0x41 = 1.18 kΩ
				0x42 = 1.16 kΩ
				0x43 = 1.15 kΩ
				0x44 = 1.13 kΩ
				0x45 = 1.12 kΩ
				0x46 = 1.1 kΩ
				0x47 = 1.08 kΩ
				0x48 = 1.07 kΩ
				0x49 = 1.05 kΩ
				0x4A = 1.04 kΩ
				0x4B = 1.03 kΩ
				0x4C = 1.01 kΩ
				0x4D = 1 kΩ
				0x4E = 0.989 kΩ
				0x4F = 0.977 kΩ
				0x50 = 0.964 kΩ
				0x51 = 0.952 kΩ
				0x52 = 0.941 kΩ
				0x53 = 0.929 kΩ
				0x54 = 0.92 kΩ
				0x55 = 0.909 kΩ
				0x56 = 0.898 kΩ
				0x57 = 0.888 kΩ
				0x58 = 0.878 kΩ
				0x59 = 0.868 kΩ
				0x5A = 0.858 kΩ
				0x5B = 0.849 kΩ
				0x5C = 0.841 kΩ
				0x5D = 0.832 kΩ
				0x5E = 0.823 kΩ
				0x5F = 0.814 kΩ
				0x60 = 0.8 kΩ
				0x61 = 0.792 kΩ
				0x62 = 0.784 kΩ
				0x63 = 0.776 kΩ
				0x64 = 0.769 kΩ
				0x65 = 0.762 kΩ
				0x66 = 0.754 kΩ
				0x67 = 0.747 kΩ
				0x68 = 0.74 kΩ
				0x69 = 0.733 kΩ
				0x6A = 0.726 kΩ
				0x6B = 0.719 kΩ
				0x6C = 0.713 kΩ
				0x6D = 0.707 kΩ
				0x6E = 0.7 kΩ
				0x6F = 0.694 kΩ
				0x70 = 0.688 kΩ
				0x71 = 0.682 kΩ
				0x72 = 0.676 kΩ
				0x73 = 0.67 kΩ
				0x74 = 0.665 kΩ
				0x75 = 0.659 kΩ
				0x76 = 0.654 kΩ
				0x77 = 0.648 kΩ
				0x78 = 0.643 kΩ
				0x79 = 0.637 kΩ
				0x7A = 0.632 kΩ
				0x7B = 0.627 kΩ
				0x7C = 0.623 kΩ
				0x7D = 0.618 kΩ
				0x7E = 0.613 kΩ
				0x7F = 0.608 kΩ
				0x80 = 0.6 kΩ
				0x81 = 0.595 kΩ
				0x82 = 0.591 kΩ
				0x83 = 0.586 kΩ

Table 1-475. R707 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
				0x84 = 0.583 kΩ
				0x85 = 0.578 kΩ
				0x86 = 0.574 kΩ
				0x87 = 0.57 kΩ
				0x88 = 0.565 kΩ
				0x89 = 0.561 kΩ
				0x8A = 0.557 kΩ
				0x8B = 0.553 kΩ
				0x8C = 0.55 kΩ
				0x8D = 0.546 kΩ
				0x8E = 0.542 kΩ
				0x8F = 0.538 kΩ
				0x90 = 0.535 kΩ
				0x91 = 0.531 kΩ
				0x92 = 0.527 kΩ
				0x93 = 0.524 kΩ
				0x94 = 0.521 kΩ
				0x95 = 0.517 kΩ
				0x96 = 0.514 kΩ
				0x97 = 0.51 kΩ
				0x98 = 0.507 kΩ
				0x99 = 0.504 kΩ
				0x9A = 0.5 kΩ
				0x9B = 0.497 kΩ
				0x9C = 0.494 kΩ
				0x9D = 0.491 kΩ
				0x9E = 0.488 kΩ
				0x9F = 0.485 kΩ
				0xA0 = 0.48 kΩ
				0xA1 = 0.477 kΩ
				0xA2 = 0.474 kΩ
				0xA3 = 0.471 kΩ
				0xA4 = 0.469 kΩ
				0xA5 = 0.466 kΩ
				0xA6 = 0.463 kΩ
				0xA7 = 0.46 kΩ
				0xA8 = 0.458 kΩ
				0xA9 = 0.455 kΩ
				0xAA = 0.452 kΩ
				0xAB = 0.45 kΩ
				0xAC = 0.447 kΩ
				0xAD = 0.445 kΩ
				0xAE = 0.442 kΩ
				0xAF = 0.44 kΩ
				0xB0 = 0.437 kΩ
				0xB1 = 0.435 kΩ
				0xB2 = 0.432 kΩ
				0xB3 = 0.43 kΩ
				0xB4 = 0.428 kΩ
				0xB5 = 0.425 kΩ
				0xB6 = 0.423 kΩ
				0xB7 = 0.421 kΩ
				0xB8 = 0.419 kΩ
				0xB9 = 0.416 kΩ
				0xBA = 0.414 kΩ
				0xBB = 0.412 kΩ
				0xBC = 0.41 kΩ
				0xBD = 0.408 kΩ
				0xBE = 0.406 kΩ
				0xBF = 0.404 kΩ
				0xC0 = 0.4 kΩ
				0xC1 = 0.398 kΩ
				0xC2 = 0.396 kΩ
				0xC3 = 0.394 kΩ
				0xC4 = 0.392 kΩ
				0xC5 = 0.39 kΩ
				0xC6 = 0.388 kΩ

Table 1-475. R707 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
				0xC7 = 0.386 kΩ
				0xC8 = 0.384 kΩ
				0xC9 = 0.382 kΩ
				0xCA = 0.381 kΩ
				0xCB = 0.379 kΩ
				0xCC = 0.377 kΩ
				0xCD = 0.375 kΩ
				0xCE = 0.373 kΩ
				0xCF = 0.372 kΩ
				0xD0 = 0.37 kΩ
				0xD1 = 0.368 kΩ
				0xD2 = 0.366 kΩ
				0xD3 = 0.365 kΩ
				0xD4 = 0.363 kΩ
				0xD5 = 0.361 kΩ
				0xD6 = 0.36 kΩ
				0xD7 = 0.358 kΩ
				0xD8 = 0.356 kΩ
				0xD9 = 0.355 kΩ
				0xDA = 0.353 kΩ
				0xDB = 0.352 kΩ
				0xDC = 0.35 kΩ
				0xDD = 0.349 kΩ
				0xDE = 0.347 kΩ
				0xDF = 0.345 kΩ
				0xE0 = 0.343 kΩ
				0xE1 = 0.341 kΩ
				0xE2 = 0.34 kΩ
				0xE3 = 0.338 kΩ
				0xE4 = 0.337 kΩ
				0xE5 = 0.336 kΩ
				0xE6 = 0.334 kΩ
				0xE7 = 0.333 kΩ
				0xE8 = 0.331 kΩ
				0xE9 = 0.33 kΩ
				0xEA = 0.328 kΩ
				0xEB = 0.327 kΩ
				0xEC = 0.326 kΩ
				0xED = 0.325 kΩ
				0xEE = 0.323 kΩ
				0xEF = 0.322 kΩ
				0xF0 = 0.32 kΩ
				0xF1 = 0.319 kΩ
				0xF2 = 0.318 kΩ
				0xF3 = 0.317 kΩ
				0xF4 = 0.315 kΩ
				0xF5 = 0.314 kΩ
				0xF6 = 0.313 kΩ
				0xF7 = 0.312 kΩ
				0xF8 = 0.31 kΩ
				0xF9 = 0.309 kΩ
				0xFA = 0.308 kΩ
				0xFB = 0.307 kΩ
				0xFC = 0.306 kΩ
				0xFD = 0.304 kΩ
				0xFE = 0.303 kΩ
				0xFF = 0.302 kΩ

1.474 R708 (Offset = 0x2C4)Return to the [Summary Table](#).**Table 1-476. R708 Field Descriptions**

Bit	Field	Type	Reset	Description
7:2	RESERVED	R	0x0	Reserved

Table 1-476. R708 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
1:0	PLL1_CPG	R/W	0x3	PLL charge pump gain Pump up/down. ROM=Y, EEPROM=Y 0x0 = 1.6 mA 0x1 = 3.2 mA 0x2 = 4.8 mA 0x3 = 6.4 mA

1.475 R709 (Offset = 0x2C5)

Return to the [Summary Table](#).

Table 1-477. R709 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved

Table 1-477. R709 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
5:0	PLL1_LF_R2	R/W	0x9	PLL Loop Filter R2 setting ROM=Y, EEPROM=N 0x0 = 0.016 kΩ 0x1 = 0.262 kΩ 0x2 = 0.357 kΩ 0x3 = 0.166 kΩ 0x4 = 0.642 kΩ 0x5 = 0.199 kΩ 0x6 = 0.244 kΩ 0x7 = 0.142 kΩ 0x8 = 1.14 kΩ 0x9 = 0.222 kΩ 0xA = 0.283 kΩ 0xB = 0.152 kΩ 0xC = 0.425 kΩ 0xD = 0.177 kΩ 0xE = 0.21 kΩ 0xF = 0.132 kΩ 0x10 = 0.847 kΩ 0x11 = 1.06 kΩ 0x12 = 1.16 kΩ 0x13 = 0.966 kΩ 0x14 = 1.44 kΩ 0x15 = 0.998 kΩ 0x16 = 1.04 kΩ 0x17 = 0.941 kΩ 0x18 = 1.94 kΩ 0x19 = 1.02 kΩ 0x1A = 1.08 kΩ 0x1B = 0.951 kΩ 0x1C = 1.22 kΩ 0x1D = 0.976 kΩ 0x1E = 1.01 kΩ 0x1F = 0.931 kΩ 0x20 = 1.66 kΩ 0x21 = 1.88 kΩ 0x22 = 1.97 kΩ 0x23 = 1.78 kΩ 0x24 = 2.26 kΩ 0x25 = 1.81 kΩ 0x26 = 1.86 kΩ 0x27 = 1.76 kΩ 0x28 = 2.75 kΩ 0x29 = 1.84 kΩ 0x2A = 1.9 kΩ 0x2B = 1.77 kΩ 0x2C = 2.04 kΩ 0x2D = 1.79 kΩ 0x2E = 1.82 kΩ 0x2F = 1.75 kΩ 0x30 = 2.46 kΩ 0x31 = 2.68 kΩ 0x32 = 2.77 kΩ 0x33 = 2.58 kΩ 0x34 = 3.06 kΩ 0x35 = 2.61 kΩ 0x36 = 2.66 kΩ 0x37 = 2.56 kΩ 0x38 = 3.55 kΩ 0x39 = 2.64 kΩ 0x3A = 2.7 kΩ 0x3B = 2.57 kΩ 0x3C = 2.84 kΩ 0x3D = 2.59 kΩ 0x3E = 2.62 kΩ 0x3F = 2.55 kΩ

1.476 R710 (Offset = 0x2C6)

Return to the [Summary Table](#).

Table 1-478. R710 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved

Table 1-478. R710 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
5:0	PLL1_LF_R3	R/W	0x2	PLL Loop Filter R3 setting ROM=Y, EEPROM=N 0x0 = 0.016 kΩ 0x1 = 0.277 kΩ 0x2 = 0.657 kΩ 0x3 = 0.214 kΩ 0x4 = 0.754 kΩ 0x5 = 0.221 kΩ 0x6 = 0.375 kΩ 0x7 = 0.183 kΩ 0x8 = 0.863 kΩ 0x9 = 1.08 kΩ 0xA = 1.46 kΩ 0xB = 1.01 kΩ 0xC = 1.55 kΩ 0xD = 1.02 kΩ 0xE = 1.17 kΩ 0xF = 0.982 kΩ 0x10 = 1.68 kΩ 0x11 = 1.89 kΩ 0x12 = 2.27 kΩ 0x13 = 1.83 kΩ 0x14 = 2.37 kΩ 0x15 = 1.84 kΩ 0x16 = 1.99 kΩ 0x17 = 1.8 kΩ 0x18 = 2.48 kΩ 0x19 = 2.69 kΩ 0x1A = 3.07 kΩ 0x1B = 2.63 kΩ 0x1C = 3.17 kΩ 0x1D = 2.63 kΩ 0x1E = 2.79 kΩ 0x1F = 2.6 kΩ 0x20 = 3.31 kΩ 0x21 = 3.52 kΩ 0x22 = 3.9 kΩ 0x23 = 3.46 kΩ 0x24 = 4 kΩ 0x25 = 3.47 kΩ 0x26 = 3.62 kΩ 0x27 = 3.43 kΩ 0x28 = 4.11 kΩ 0x29 = 4.32 kΩ 0x2A = 4.7 kΩ 0x2B = 4.26 kΩ 0x2C = 4.8 kΩ 0x2D = 4.26 kΩ 0x2E = 4.42 kΩ 0x2F = 4.23 kΩ 0x30 = 4.92 kΩ 0x31 = 5.14 kΩ 0x32 = 5.52 kΩ 0x33 = 5.07 kΩ 0x34 = 5.61 kΩ 0x35 = 5.08 kΩ 0x36 = 5.23 kΩ 0x37 = 5.04 kΩ 0x38 = 5.72 kΩ 0x39 = 5.94 kΩ 0x3A = 6.32 kΩ 0x3B = 5.87 kΩ 0x3C = 6.41 kΩ 0x3D = 5.88 kΩ 0x3E = 6.03 kΩ 0x3F = 5.84 kΩ

1.477 R711 (Offset = 0x2C7)

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Table 1-479. R711 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved

Table 1-479. R711 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
5:0	PLL1_LF_R4	R/W	0x2	PLL Loop Filter R4 setting ROM=Y, EEPROM=N 0x0 = 0.016 kΩ 0x1 = 0.277 kΩ 0x2 = 0.657 kΩ 0x3 = 0.214 kΩ 0x4 = 0.754 kΩ 0x5 = 0.221 kΩ 0x6 = 0.375 kΩ 0x7 = 0.183 kΩ 0x8 = 0.863 kΩ 0x9 = 1.08 kΩ 0xA = 1.46 kΩ 0xB = 1.01 kΩ 0xC = 1.55 kΩ 0xD = 1.02 kΩ 0xE = 1.17 kΩ 0xF = 0.982 kΩ 0x10 = 1.68 kΩ 0x11 = 1.89 kΩ 0x12 = 2.27 kΩ 0x13 = 1.83 kΩ 0x14 = 2.37 kΩ 0x15 = 1.84 kΩ 0x16 = 1.99 kΩ 0x17 = 1.8 kΩ 0x18 = 2.48 kΩ 0x19 = 2.69 kΩ 0x1A = 3.07 kΩ 0x1B = 2.63 kΩ 0x1C = 3.17 kΩ 0x1D = 2.63 kΩ 0x1E = 2.79 kΩ 0x1F = 2.6 kΩ 0x20 = 3.31 kΩ 0x21 = 3.52 kΩ 0x22 = 3.9 kΩ 0x23 = 3.46 kΩ 0x24 = 4 kΩ 0x25 = 3.47 kΩ 0x26 = 3.62 kΩ 0x27 = 3.43 kΩ 0x28 = 4.11 kΩ 0x29 = 4.32 kΩ 0x2A = 4.7 kΩ 0x2B = 4.26 kΩ 0x2C = 4.8 kΩ 0x2D = 4.26 kΩ 0x2E = 4.42 kΩ 0x2F = 4.23 kΩ 0x30 = 4.92 kΩ 0x31 = 5.14 kΩ 0x32 = 5.52 kΩ 0x33 = 5.07 kΩ 0x34 = 5.61 kΩ 0x35 = 5.08 kΩ 0x36 = 5.23 kΩ 0x37 = 5.04 kΩ 0x38 = 5.72 kΩ 0x39 = 5.94 kΩ 0x3A = 6.32 kΩ 0x3B = 5.87 kΩ 0x3C = 6.41 kΩ 0x3D = 5.88 kΩ 0x3E = 6.03 kΩ 0x3F = 5.84 kΩ

1.478 R712 (Offset = 0x2C8)

Return to the [Summary Table](#).

Table 1-480. R712 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	PLL1_DISABLE_3RD4TH	R/W	0x3	PLL Loop Filter Disconnects C3 and C4 ROM=Y, EEPROM=N 0x0 = C3/C4 Disconnected 0x1 = C3=Enabled, C4=Disconnected 0x2 = C3=Disconnected, C4=Enabled 0x3 = C3=Enabled, C4=Enabled
5:3	PLL1_LF_C3	R/W	0x7	PLL Loop Filter C3 setting ROM=Y, EEPROM=N 0x0 = 0 pF 0x1 = 10 pF 0x2 = 20 pF 0x3 = 30 pF 0x4 = 40 pF 0x5 = 50 pF 0x6 = 60 pF 0x7 = 70 pF
2:0	PLL1_LF_C4	R/W	0x7	PLL Loop Filter C4 setting ROM=Y, EEPROM=N 0x0 = 0 pF 0x1 = 10 pF 0x2 = 20 pF 0x3 = 30 pF 0x4 = 40 pF 0x5 = 50 pF 0x6 = 60 pF 0x7 = 70 pF

1.479 R713 (Offset = 0x2C9)

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Table 1-481. R713 Field Descriptions

Bit	Field	Type	Reset	Description
7:1	RESERVED	R	0x0	Reserved
0	PLL1_RDIV_8:8	R/W	0x0	See Register 714

1.480 R714 (Offset = 0x2CA)

Return to the [Summary Table](#).

Table 1-482. R714 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	PLL1_RDIV	R/W	0x8	PLL R Divider ROM=Y, EEPROM=Y

1.481 R715 (Offset = 0x2CB)

Return to the [Summary Table](#).

Table 1-483. R715 Field Descriptions

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4	PLL1_RDIV_XO_EN	R/W	0x0	APLL reference source is from XO. Must also enable XO to drive this APLL with XO_OUT_BUF_EN[1] = 1 ROM=Y, EEPROM=Y

Table 1-483. R715 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
3	PLL1_RDIV_XO_DBLR_EN	R/W	0x0	Enables XO Doubler ROM=Y, EEPROM=Y
2	PLL1_RDIV_BYPASS_EN	R/W	0x0	Bypass R Divider ROM=Y, EEPROM=Y
1:0	PLL1_RDIV_MUX_SEL	R/W	0x2	Select R Divider input. When enabling reference from feedback divider, the APLL PLLx_VCO_BUF_2REF_EN bit must also be set appropriately. ROM=Y, EEPROM=Y 0x0 = XO 0x1 = VCO2 feedback divider 0x2 = VCO3 feedback divider

1.482 R716 (Offset = 0x2CC)Return to the [Summary Table](#).**Table 1-484. R716 Field Descriptions**

Bit	Field	Type	Reset	Description
7:1	RESERVED	R	0x0	Reserved
0	PLL1_NDIV_8:8	R/W	0x0	See Register 717

1.483 R717 (Offset = 0x2CD)Return to the [Summary Table](#).**Table 1-485. R717 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	PLL1_NDIV	R/W	0x28	PLL N Divider ROM=Y, EEPROM=Y

1.484 R718 (Offset = 0x2CE)Return to the [Summary Table](#).**Table 1-486. R718 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	PLL1_NUM_MSB	R/W	0x58	When PLL1_MODE is set for 24 bit fractional. PLL1_NUM_MSB is effective PLL1_NUM[23:16]. Other PLL1_NUM and PLL1_DEN bits in programmable mode are in PLL1_NUM field. When in 40-bit fixed denominator PLL mode, then PLL1_NUM_MSB is unused. ROM=Y, EEPROM=Y

1.485 R719 (Offset = 0x2CF)Return to the [Summary Table](#).**Table 1-487. R719 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	PLL1_NUM_39:32	R/W	0x56	See Register 723

1.486 R720 (Offset = 0x2D0)Return to the [Summary Table](#).

Table 1-488. R720 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	PLL1_NUM_31:24	R/W	0x6	See Register 723

1.487 R721 (Offset = 0x2D1)

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Table 1-489. R721 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	PLL1_NUM_23:16	R/W	0x80	See Register 723

1.488 R722 (Offset = 0x2D2)

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Table 1-490. R722 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	PLL1_NUM_15:8	R/W	0x1	See Register 723

1.489 R723 (Offset = 0x2D3)

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Table 1-491. R723 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	PLL1_NUM	R/W	0x0	When PLL1_MODE = 1 (40-bit fixed denominator) mode then PLL1_NUM contains the APLL1 numerator. When PLL1_MODE = 0 (24-bit programmable denominator) then PLL1_NUM[23:0] stores the programmable PLL1 denominator and PLL1_NUM[39:24] stores the 16 LSBs of the PLL1 numerator. Total PLL1 numerator is calculated with PLL1_NUM_MSB as the 8 MSBs. In 24-bit programmable denominator mode PLL1_NUM[23:0] = 0 is 2 ²⁴ . ROM=Y, EEPROM=Y

1.490 R724 (Offset = 0x2D4)

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Table 1-492. R724 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:4	PLL1_DTHRMODE	R/W	0x3	PLL MASH Dither Mode ROM=Y, EEPROM=N 0x0 = Constant Dither MACC2 0x1 = Constant Dither MACC2 and MACC3 0x2 = LFSR Dither MACC2 0x3 = Dither Disabled
3:1	PLL1_ORDER	R/W	0x3	PLL MASH Order ROM=Y, EEPROM=N 0x0 = Integer Mode Divider 0x1 = 1st 0x2 = 2nd 0x3 = 3rd

Table 1-492. R724 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
0	PLL1_MODE	R/W	0x0	In APLL 24-bit num/den mode, APLL denominator is programmable. Recommended not for use with DPLL mode. In 24-bit mode, the denominator is stored in PLL1_NUM[23:0] The numerator is stored in (PLL1_NUM_MSB << 16) + PLL1_NUM[39:24]. In APLL 40-bit mode, APLL denominator is fixed. For use with DPLL. ROM=Y, EEPROM=Y 0x0 = APLL 24-bit num/den 0x1 = APLL 40-bit num (Req for DPLL)

1.491 R725 (Offset = 0x2D5)Return to the [Summary Table](#).**Table 1-493. R725 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	APLL1_NUM_STAT_39:32	R	0xE5	See Register 729

1.492 R726 (Offset = 0x2D6)Return to the [Summary Table](#).**Table 1-494. R726 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	APLL1_NUM_STAT_31:24	R	0xAA	See Register 729

1.493 R727 (Offset = 0x2D7)Return to the [Summary Table](#).**Table 1-495. R727 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	APLL1_NUM_STAT_23:16	R	0xAA	See Register 729

1.494 R728 (Offset = 0x2D8)Return to the [Summary Table](#).**Table 1-496. R728 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	APLL1_NUM_STAT_15:8	R	0xAA	See Register 729

1.495 R729 (Offset = 0x2D9)Return to the [Summary Table](#).**Table 1-497. R729 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	APLL1_NUM_STAT	R	0xAB	Readback current effective APLL1 Numerator after FDEV and/or DPLL correction ROM=N, EEPROM=N

1.496 R731 (Offset = 0x2DB)

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Table 1-498. R731 Field Descriptions

Bit	Field	Type	Reset	Description
7	PLL1_PRI_DIV_SYNC_EN	R/W	0x1	PLL1 P1 Divider Sync Enable. Enables synchronization of PLL1 P1 post-divider. ROM=Y, EEPROM=N
6	PLL1_PRI_DIV_EN	R/W	0x1	Enables the VCO1 P1 divider ROM=Y, EEPROM=Y
5:3	PLL1_PRI_DIV	R/W	0x4	Sets the VCO post-divider VCO1 P1 from 2 to 7. ROM=Y, EEPROM=Y 0x0 = 2 (Reserved) 0x1 = 2 0x2 = 3 0x3 = 4 0x4 = 5 0x5 = 6 0x6 = 7
2	PLL1_P1_DIV_OUT0_1_EN	R/W	0x0	Enables VCO1 P1 divider output driver to channel output bank OUT0_1 ROM=Y, EEPROM=Y
1	PLL1_P1_DIV_OUT2_3_EN	R/W	0x0	Enables VCO1 P1 divider output driver to channel output bank OUT2_3 ROM=Y, EEPROM=Y
0	PLL1_P1_DIV_OUT14_15_EN	R/W	0x0	Enables VCO1 P1 divider output driver to channel output bank OUT14_15 ROM=Y, EEPROM=Y

1.497 R732 (Offset = 0x2DC)

Return to the [Summary Table](#).

Table 1-499. R732 Field Descriptions

Bit	Field	Type	Reset	Description
7	PLL1_SEC_DIV_SYNC_EN	R/W	0x1	PLL1 P2 Divider Sync Enable. Enables synchronization of PLL1 P2 post-divider. ROM=Y, EEPROM=N
6	PLL1_SEC_DIV_EN	R/W	0x0	Enables the VCO1 P2 divider ROM=Y, EEPROM=Y
5:3	PLL1_SEC_DIV	R/W	0x1	Sets the VCO post-divider VCO1 P2 from 2 to 7. ROM=Y, EEPROM=Y 0x0 = 2 (Reserved) 0x1 = 2 0x2 = 3 0x3 = 4 0x4 = 5 0x5 = 6 0x6 = 7
2	PLL1_P2_DIV_OUT0_1_EN	R/W	0x0	Enables the VCO1 P2 divider output driver to channel output bank OUT0_1 ROM=Y, EEPROM=Y
1	RESERVED	R	0x0	Enables the VCO1 P2 divider output driver to channel output bank Reserved ROM=Y, EEPROM=Y
0	RESERVED	R	0x0	Enables the VCO1 P2 divider output driver to channel output bank Reserved ROM=Y, EEPROM=Y

1.498 R733 (Offset = 0x2DD)Return to the [Summary Table](#).**Table 1-500. R733 Field Descriptions**

Bit	Field	Type	Reset	Description
7	PLL1_VCO_BUF_EN	R/W	0x0	Enables the VCO1 Buffer which drives the DPLL feedback, reference window detector, DPLL reference for cascade mode, and test mode ROM=Y, EEPROM=N
6:5	PLL1_VCO_BUF_2REF_EN	R/W	0x0	Enables the APLL1 Div-by-4 cascade divider to APLL2/3 reference input for cascade mode. [0] -> APLL2, [1] -> APLL3 ROM=Y, EEPROM=Y
4	PLL1_VCO_BUF_2DPLL_EN	R/W	0x0	Enables the VCO1 Buffer output driver to DPLL feedback divider ROM=Y, EEPROM=N
3	RESERVED	R	0x0	Reserved
2	PLL1_VCO_BUF_PPM_CHECK_EN	R/W	0x0	Enables the APLL1 Div-by-4/8 cascade divider to DPLL/PPM frequency detector ROM=Y, EEPROM=N
1:0	PLL1_VCO_BUF_FB_TDC_EN	R/W	0x0	Enables APLL1 Div-by-8 cascade divider to TDC2 and TDC3 for cascade mode [0] = TDC2 driver enable [1] = TDC3 driver enable ROM=Y, EEPROM=N

1.499 R736 (Offset = 0x2E0)Return to the [Summary Table](#).**Table 1-501. R736 Field Descriptions**

Bit	Field	Type	Reset	Description
7	PLL1_NCLK_TEST_EN	R/W	0x0	Unused ROM=N, EEPROM=N
6:4	RESERVED	R	0x0	Reserved
3	PLL1_RDIV_OUTPUT_EN	R/W	0x0	If GPIOx_SEL selects PLL1 R/2 as an output. Then this bit must be set along with STATUS_MUX_DIV2_EN=1. ROM=N, EEPROM=N
2:0	RESERVED	R	0x0	Reserved

1.500 R741 (Offset = 0x2E5)Return to the [Summary Table](#).**Table 1-502. R741 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5	PLL1_VM_INSIDE	R	0x1	Denotes if the VCO tuning voltage is within operational range. ROM=N, EEPROM=N
4	PLL1_VM_HI	R	0x0	Denotes if the charge pump voltage is too high and outside range. If PLL1_VM_INSIDE = 0 and VM_HI = 0, then charge pump voltage is too low. ROM=N, EEPROM=N
3:0	RESERVED	R	0x0	Reserved

1.501 R745 (Offset = 0x2E9)Return to the [Summary Table](#).

Table 1-503. R745 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	RESERVED	R	0x0	Reserved
5	PLL1_NDIV_OUTPUT_EN	R/W	0x0	If GPIOx_SEL selects PLL1 N/2 as an output. Then this bit must be set along with STATUS_MUX_DIV2_EN=1. ROM=N, EEPROM=N
4:0	RESERVED	R	0x0	Reserved

1.502 R746 (Offset = 0x2EA)

Return to the [Summary Table](#).

Table 1-504. R746 Field Descriptions

Bit	Field	Type	Reset	Description
7:1	RESERVED	R	0x0	Reserved
0	PLL1_VCO_PREBUF_EN	R/W	0x1	Set to same value as APLL1_EN. ROM=Y, EEPROM=Y

1.503 R773 (Offset = 0x305)

Return to the [Summary Table](#).

Table 1-505. R773 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:0	RESERVED	R	0x0	Reserved

1.504 R777 (Offset = 0x309)

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Table 1-506. R777 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	PLL2_CP_PU_R	R/W	0x22	PLL charge pump pull-up resistor selection ROM=Y, EEPROM=N 0x0 = Disabled 0x1 = 78 kΩ 0x2 = 39 kΩ 0x3 = 26 kΩ 0x4 = 20 kΩ 0x5 = 15.9 kΩ 0x6 = 13.2 kΩ 0x7 = 11.3 kΩ 0x8 = 9.8 kΩ 0x9 = 8.71 kΩ 0xA = 7.83 kΩ 0xB = 7.12 kΩ 0xC = 6.58 kΩ 0xD = 6.07 kΩ 0xE = 5.63 kΩ 0xF = 5.25 kΩ 0x10 = 4.9 kΩ 0x11 = 4.61 kΩ 0x12 = 4.35 kΩ 0x13 = 4.12 kΩ 0x14 = 3.94 kΩ 0x15 = 3.75 kΩ 0x16 = 3.57 kΩ 0x17 = 3.42 kΩ 0x18 = 3.27 kΩ 0x19 = 3.14 kΩ 0x1A = 3.01 kΩ 0x1B = 2.9 kΩ 0x1C = 2.81 kΩ 0x1D = 2.71 kΩ 0x1E = 2.62 kΩ 0x1F = 2.53 kΩ 0x20 = 2.4 kΩ 0x21 = 2.33 kΩ 0x22 = 2.26 kΩ 0x23 = 2.2 kΩ 0x24 = 2.14 kΩ 0x25 = 2.09 kΩ 0x26 = 2.03 kΩ 0x27 = 1.98 kΩ 0x28 = 1.93 kΩ 0x29 = 1.88 kΩ 0x2A = 1.84 kΩ 0x2B = 1.79 kΩ 0x2C = 1.76 kΩ 0x2D = 1.72 kΩ 0x2E = 1.68 kΩ 0x2F = 1.65 kΩ 0x30 = 1.61 kΩ 0x31 = 1.58 kΩ 0x32 = 1.55 kΩ 0x33 = 1.52 kΩ 0x34 = 1.49 kΩ 0x35 = 1.46 kΩ 0x36 = 1.44 kΩ 0x37 = 1.41 kΩ 0x38 = 1.38 kΩ 0x39 = 1.36 kΩ 0x3A = 1.34 kΩ 0x3B = 1.31 kΩ 0x3C = 1.29 kΩ 0x3D = 1.27 kΩ 0x3E = 1.25 kΩ 0x3F = 1.23 kΩ 0x40 = 1.2 kΩ

Table 1-506. R777 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
				0x41 = 1.18 kΩ
				0x42 = 1.16 kΩ
				0x43 = 1.15 kΩ
				0x44 = 1.13 kΩ
				0x45 = 1.12 kΩ
				0x46 = 1.1 kΩ
				0x47 = 1.08 kΩ
				0x48 = 1.07 kΩ
				0x49 = 1.05 kΩ
				0x4A = 1.04 kΩ
				0x4B = 1.03 kΩ
				0x4C = 1.01 kΩ
				0x4D = 1 kΩ
				0x4E = 0.989 kΩ
				0x4F = 0.977 kΩ
				0x50 = 0.964 kΩ
				0x51 = 0.952 kΩ
				0x52 = 0.941 kΩ
				0x53 = 0.929 kΩ
				0x54 = 0.92 kΩ
				0x55 = 0.909 kΩ
				0x56 = 0.898 kΩ
				0x57 = 0.888 kΩ
				0x58 = 0.878 kΩ
				0x59 = 0.868 kΩ
				0x5A = 0.858 kΩ
				0x5B = 0.849 kΩ
				0x5C = 0.841 kΩ
				0x5D = 0.832 kΩ
				0x5E = 0.823 kΩ
				0x5F = 0.814 kΩ
				0x60 = 0.8 kΩ
				0x61 = 0.792 kΩ
				0x62 = 0.784 kΩ
				0x63 = 0.776 kΩ
				0x64 = 0.769 kΩ
				0x65 = 0.762 kΩ
				0x66 = 0.754 kΩ
				0x67 = 0.747 kΩ
				0x68 = 0.74 kΩ
				0x69 = 0.733 kΩ
				0x6A = 0.726 kΩ
				0x6B = 0.719 kΩ
				0x6C = 0.713 kΩ
				0x6D = 0.707 kΩ
				0x6E = 0.7 kΩ
				0x6F = 0.694 kΩ
				0x70 = 0.688 kΩ
				0x71 = 0.682 kΩ
				0x72 = 0.676 kΩ
				0x73 = 0.67 kΩ
				0x74 = 0.665 kΩ
				0x75 = 0.659 kΩ
				0x76 = 0.654 kΩ
				0x77 = 0.648 kΩ
				0x78 = 0.643 kΩ
				0x79 = 0.637 kΩ
				0x7A = 0.632 kΩ
				0x7B = 0.627 kΩ
				0x7C = 0.623 kΩ
				0x7D = 0.618 kΩ
				0x7E = 0.613 kΩ
				0x7F = 0.608 kΩ
				0x80 = 0.6 kΩ
				0x81 = 0.595 kΩ
				0x82 = 0.591 kΩ
				0x83 = 0.586 kΩ

Table 1-506. R777 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
				0x84 = 0.583 kΩ
				0x85 = 0.578 kΩ
				0x86 = 0.574 kΩ
				0x87 = 0.57 kΩ
				0x88 = 0.565 kΩ
				0x89 = 0.561 kΩ
				0x8A = 0.557 kΩ
				0x8B = 0.553 kΩ
				0x8C = 0.55 kΩ
				0x8D = 0.546 kΩ
				0x8E = 0.542 kΩ
				0x8F = 0.538 kΩ
				0x90 = 0.535 kΩ
				0x91 = 0.531 kΩ
				0x92 = 0.527 kΩ
				0x93 = 0.524 kΩ
				0x94 = 0.521 kΩ
				0x95 = 0.517 kΩ
				0x96 = 0.514 kΩ
				0x97 = 0.51 kΩ
				0x98 = 0.507 kΩ
				0x99 = 0.504 kΩ
				0x9A = 0.5 kΩ
				0x9B = 0.497 kΩ
				0x9C = 0.494 kΩ
				0x9D = 0.491 kΩ
				0x9E = 0.488 kΩ
				0x9F = 0.485 kΩ
				0xA0 = 0.48 kΩ
				0xA1 = 0.477 kΩ
				0xA2 = 0.474 kΩ
				0xA3 = 0.471 kΩ
				0xA4 = 0.469 kΩ
				0xA5 = 0.466 kΩ
				0xA6 = 0.463 kΩ
				0xA7 = 0.46 kΩ
				0xA8 = 0.458 kΩ
				0xA9 = 0.455 kΩ
				0xAA = 0.452 kΩ
				0xAB = 0.45 kΩ
				0xAC = 0.447 kΩ
				0xAD = 0.445 kΩ
				0xAE = 0.442 kΩ
				0xAF = 0.44 kΩ
				0xB0 = 0.437 kΩ
				0xB1 = 0.435 kΩ
				0xB2 = 0.432 kΩ
				0xB3 = 0.43 kΩ
				0xB4 = 0.428 kΩ
				0xB5 = 0.425 kΩ
				0xB6 = 0.423 kΩ
				0xB7 = 0.421 kΩ
				0xB8 = 0.419 kΩ
				0xB9 = 0.416 kΩ
				0xBA = 0.414 kΩ
				0xBB = 0.412 kΩ
				0xBC = 0.41 kΩ
				0xBD = 0.408 kΩ
				0xBE = 0.406 kΩ
				0xBF = 0.404 kΩ
				0xC0 = 0.4 kΩ
				0xC1 = 0.398 kΩ
				0xC2 = 0.396 kΩ
				0xC3 = 0.394 kΩ
				0xC4 = 0.392 kΩ
				0xC5 = 0.39 kΩ
				0xC6 = 0.388 kΩ

Table 1-506. R777 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
				0xC7 = 0.386 kΩ
				0xC8 = 0.384 kΩ
				0xC9 = 0.382 kΩ
				0xCA = 0.381 kΩ
				0xCB = 0.379 kΩ
				0xCC = 0.377 kΩ
				0xCD = 0.375 kΩ
				0xCE = 0.373 kΩ
				0xCF = 0.372 kΩ
				0xD0 = 0.37 kΩ
				0xD1 = 0.368 kΩ
				0xD2 = 0.366 kΩ
				0xD3 = 0.365 kΩ
				0xD4 = 0.363 kΩ
				0xD5 = 0.361 kΩ
				0xD6 = 0.36 kΩ
				0xD7 = 0.358 kΩ
				0xD8 = 0.356 kΩ
				0xD9 = 0.355 kΩ
				0xDA = 0.353 kΩ
				0xDB = 0.352 kΩ
				0xDC = 0.35 kΩ
				0xDD = 0.349 kΩ
				0xDE = 0.347 kΩ
				0xDF = 0.345 kΩ
				0xE0 = 0.343 kΩ
				0xE1 = 0.341 kΩ
				0xE2 = 0.34 kΩ
				0xE3 = 0.338 kΩ
				0xE4 = 0.337 kΩ
				0xE5 = 0.336 kΩ
				0xE6 = 0.334 kΩ
				0xE7 = 0.333 kΩ
				0xE8 = 0.331 kΩ
				0xE9 = 0.33 kΩ
				0xEA = 0.328 kΩ
				0xEB = 0.327 kΩ
				0xEC = 0.326 kΩ
				0xED = 0.325 kΩ
				0xEE = 0.323 kΩ
				0xEF = 0.322 kΩ
				0xF0 = 0.32 kΩ
				0xF1 = 0.319 kΩ
				0xF2 = 0.318 kΩ
				0xF3 = 0.317 kΩ
				0xF4 = 0.315 kΩ
				0xF5 = 0.314 kΩ
				0xF6 = 0.313 kΩ
				0xF7 = 0.312 kΩ
				0xF8 = 0.31 kΩ
				0xF9 = 0.309 kΩ
				0xFA = 0.308 kΩ
				0xFB = 0.307 kΩ
				0xFC = 0.306 kΩ
				0xFD = 0.304 kΩ
				0xFE = 0.303 kΩ
				0xFF = 0.302 kΩ

1.505 R778 (Offset = 0x30A)

Return to the [Summary Table](#).

Table 1-507. R778 Field Descriptions

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved

Table 1-507. R778 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
4	PLL2_CP_PU_DIS	R/W	0x0	PLL charge pump - pump up disable ROM=Y, EEPROM=N
3:0	PLL2_CPG	R/W	0x9	PLL charge pump gain ROM=Y, EEPROM=Y 0x0 = 0 mA 0x1 = 0.4 mA 0x2 = 0.8 mA 0x3 = 1.2 mA 0x4 = 1.6 mA 0x5 = 2.0 mA 0x6 = 2.4 mA 0x7 = 2.8 mA 0x8 = 3.0 mA 0x9 = 3.4 mA 0xA = 3.8 mA 0xB = 4.2 mA 0xC = 4.6 mA 0xD = 5.0 mA 0xE = 5.4 mA 0xF = 5.8 mA

1.506 R779 (Offset = 0x30B)Return to the [Summary Table](#).

Table 1-508. R779 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	PLL2_LF_R2	R/W	0x7	PLL Loop Filter R2 setting ROM=Y, EEPROM=N 0x0 = 0.016 kΩ 0x1 = 0.301 kΩ 0x2 = 0.551 kΩ 0x3 = 0.209 kΩ 0x4 = 1.05 kΩ 0x5 = 0.244 kΩ 0x6 = 0.375 kΩ 0x7 = 0.183 kΩ 0x8 = 2.05 kΩ 0x9 = 0.269 kΩ 0xA = 0.444 kΩ 0xB = 0.194 kΩ 0xC = 0.709 kΩ 0xD = 0.224 kΩ 0xE = 0.0446 kΩ 0xF = 0.0421 kΩ 0x10 = 0.932 kΩ 0x11 = 1.18 kΩ 0x12 = 1.43 kΩ 0x13 = 1.09 kΩ 0x14 = 1.93 kΩ 0x15 = 1.13 kΩ 0x16 = 1.26 kΩ 0x17 = 1.07 kΩ 0x18 = 2.93 kΩ 0x19 = 1.15 kΩ 0x1A = 1.33 kΩ 0x1B = 1.08 kΩ 0x1C = 1.59 kΩ 0x1D = 1.11 kΩ 0x1E = 0.929 kΩ 0x1F = 0.926 kΩ 0x20 = 1.83 kΩ 0x21 = 2.08 kΩ 0x22 = 2.33 kΩ 0x23 = 1.99 kΩ 0x24 = 2.83 kΩ 0x25 = 2.03 kΩ 0x26 = 2.16 kΩ 0x27 = 1.97 kΩ 0x28 = 3.83 kΩ 0x29 = 2.05 kΩ 0x2A = 2.23 kΩ 0x2B = 1.98 kΩ 0x2C = 2.49 kΩ 0x2D = 2.01 kΩ 0x2E = 1.83 kΩ 0x2F = 1.83 kΩ 0x30 = 2.72 kΩ 0x31 = 2.97 kΩ 0x32 = 3.22 kΩ 0x33 = 2.88 kΩ 0x34 = 3.72 kΩ 0x35 = 2.91 kΩ 0x36 = 3.04 kΩ 0x37 = 2.85 kΩ 0x38 = 4.72 kΩ 0x39 = 2.94 kΩ 0x3A = 3.11 kΩ 0x3B = 2.86 kΩ 0x3C = 3.38 kΩ 0x3D = 2.89 kΩ 0x3E = 2.71 kΩ 0x3F = 2.71 kΩ

1.507 R780 (Offset = 0x30C)

Return to the [Summary Table](#).

Table 1-509. R780 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved

Table 1-509. R780 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
5:0	PLL2_LF_R3	R/W	0x2	PLL Loop Filter R3 setting ROM=Y, EEPROM=N 0x0 = 0.016 kΩ 0x1 = 0.277 kΩ 0x2 = 0.657 kΩ 0x3 = 0.214 kΩ 0x4 = 0.754 kΩ 0x5 = 0.221 kΩ 0x6 = 0.375 kΩ 0x7 = 0.183 kΩ 0x8 = 0.863 kΩ 0x9 = 1.08 kΩ 0xA = 1.46 kΩ 0xB = 1.01 kΩ 0xC = 1.55 kΩ 0xD = 1.02 kΩ 0xE = 1.17 kΩ 0xF = 0.982 kΩ 0x10 = 1.68 kΩ 0x11 = 1.89 kΩ 0x12 = 2.27 kΩ 0x13 = 1.83 kΩ 0x14 = 2.37 kΩ 0x15 = 1.84 kΩ 0x16 = 1.99 kΩ 0x17 = 1.8 kΩ 0x18 = 2.48 kΩ 0x19 = 2.69 kΩ 0x1A = 3.07 kΩ 0x1B = 2.63 kΩ 0x1C = 3.17 kΩ 0x1D = 2.63 kΩ 0x1E = 2.79 kΩ 0x1F = 2.6 kΩ 0x20 = 3.31 kΩ 0x21 = 3.52 kΩ 0x22 = 3.9 kΩ 0x23 = 3.46 kΩ 0x24 = 4 kΩ 0x25 = 3.47 kΩ 0x26 = 3.62 kΩ 0x27 = 3.43 kΩ 0x28 = 4.11 kΩ 0x29 = 4.32 kΩ 0x2A = 4.7 kΩ 0x2B = 4.26 kΩ 0x2C = 4.8 kΩ 0x2D = 4.26 kΩ 0x2E = 4.42 kΩ 0x2F = 4.23 kΩ 0x30 = 4.92 kΩ 0x31 = 5.14 kΩ 0x32 = 5.52 kΩ 0x33 = 5.07 kΩ 0x34 = 5.61 kΩ 0x35 = 5.08 kΩ 0x36 = 5.23 kΩ 0x37 = 5.04 kΩ 0x38 = 5.72 kΩ 0x39 = 5.94 kΩ 0x3A = 6.32 kΩ 0x3B = 5.87 kΩ 0x3C = 6.41 kΩ 0x3D = 5.88 kΩ 0x3E = 6.03 kΩ 0x3F = 5.84 kΩ

1.508 R781 (Offset = 0x30D)

Return to the [Summary Table](#).

Table 1-510. R781 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved

Table 1-510. R781 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
5:0	PLL2_LF_R4	R/W	0x2	PLL Loop Filter R4 setting ROM=Y, EEPROM=N 0x0 = 0.016 kΩ 0x1 = 0.277 kΩ 0x2 = 0.657 kΩ 0x3 = 0.214 kΩ 0x4 = 0.754 kΩ 0x5 = 0.221 kΩ 0x6 = 0.375 kΩ 0x7 = 0.183 kΩ 0x8 = 0.863 kΩ 0x9 = 1.08 kΩ 0xA = 1.46 kΩ 0xB = 1.01 kΩ 0xC = 1.55 kΩ 0xD = 1.02 kΩ 0xE = 1.17 kΩ 0xF = 0.982 kΩ 0x10 = 1.68 kΩ 0x11 = 1.89 kΩ 0x12 = 2.27 kΩ 0x13 = 1.83 kΩ 0x14 = 2.37 kΩ 0x15 = 1.84 kΩ 0x16 = 1.99 kΩ 0x17 = 1.8 kΩ 0x18 = 2.48 kΩ 0x19 = 2.69 kΩ 0x1A = 3.07 kΩ 0x1B = 2.63 kΩ 0x1C = 3.17 kΩ 0x1D = 2.63 kΩ 0x1E = 2.79 kΩ 0x1F = 2.6 kΩ 0x20 = 3.31 kΩ 0x21 = 3.52 kΩ 0x22 = 3.9 kΩ 0x23 = 3.46 kΩ 0x24 = 4 kΩ 0x25 = 3.47 kΩ 0x26 = 3.62 kΩ 0x27 = 3.43 kΩ 0x28 = 4.11 kΩ 0x29 = 4.32 kΩ 0x2A = 4.7 kΩ 0x2B = 4.26 kΩ 0x2C = 4.8 kΩ 0x2D = 4.26 kΩ 0x2E = 4.42 kΩ 0x2F = 4.23 kΩ 0x30 = 4.92 kΩ 0x31 = 5.14 kΩ 0x32 = 5.52 kΩ 0x33 = 5.07 kΩ 0x34 = 5.61 kΩ 0x35 = 5.08 kΩ 0x36 = 5.23 kΩ 0x37 = 5.04 kΩ 0x38 = 5.72 kΩ 0x39 = 5.94 kΩ 0x3A = 6.32 kΩ 0x3B = 5.87 kΩ 0x3C = 6.41 kΩ 0x3D = 5.88 kΩ 0x3E = 6.03 kΩ 0x3F = 5.84 kΩ

1.509 R782 (Offset = 0x30E)Return to the [Summary Table](#).**Table 1-511. R782 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	PLL2_DISABLE_3RD4TH	R/W	0x3	PLL Loop Filter Disconnects C3 and C4 ROM=Y, EEPROM=N 0x0 = C3/C4 Disconnected 0x1 = C3=Enabled, C4=Disconnected 0x2 = C3=Disconnected, C4=Enabled 0x3 = C3=Enabled, C4=Enabled
5:3	PLL2_LF_C3	R/W	0x7	PLL Loop Filter C3 setting ROM=Y, EEPROM=N 0x0 = 0 pF 0x1 = 10 pF 0x2 = 20 pF 0x3 = 30 pF 0x4 = 40 pF 0x5 = 50 pF 0x6 = 60 pF 0x7 = 70 pF
2:0	PLL2_LF_C4	R/W	0x7	PLL Loop Filter C4 setting ROM=Y, EEPROM=N 0x0 = 0 pF 0x1 = 10 pF 0x2 = 20 pF 0x3 = 30 pF 0x4 = 40 pF 0x5 = 50 pF 0x6 = 60 pF 0x7 = 70 pF

1.510 R783 (Offset = 0x30F)Return to the [Summary Table](#).**Table 1-512. R783 Field Descriptions**

Bit	Field	Type	Reset	Description
7:1	RESERVED	R	0x0	Reserved
0	PLL2_RDIV_8:8	R/W	0x0	See Register 784

1.511 R784 (Offset = 0x310)Return to the [Summary Table](#).**Table 1-513. R784 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	PLL2_RDIV	R/W	0xA	PLL R Divider ROM=Y, EEPROM=Y

1.512 R785 (Offset = 0x311)Return to the [Summary Table](#).**Table 1-514. R785 Field Descriptions**

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4	PLL2_RDIV_XO_EN	R/W	0x1	APLL reference source is from XO. Must also enable XO to drive this APLL with XO_OUT_BUF_EN[2] = 1 ROM=Y, EEPROM=Y

Table 1-514. R785 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
3	PLL2_RDIV_XO_DBLR_EN	R/W	0x1	Enables XO Doubler ROM=Y, EEPROM=Y
2	PLL2_RDIV_BYPASS_EN	R/W	0x1	Bypass R Divider ROM=Y, EEPROM=Y
1:0	PLL2_RDIV_MUX_SEL	R/W	0x0	Select R Divider input: 0=XO, 1=VCO1 feedback divider, 2=VCO3 feedback divider ROM=Y, EEPROM=Y 0x0 = XO 0x1 = VCO1 feedback divider 0x2 = VCO3 feedback divider

1.513 R786 (Offset = 0x312)

Return to the [Summary Table](#).

Table 1-515. R786 Field Descriptions

Bit	Field	Type	Reset	Description
7:1	RESERVED	R	0x0	Reserved
0	PLL2_NDIV_8:8	R/W	0x0	See Register 787

1.514 R787 (Offset = 0x313)

Return to the [Summary Table](#).

Table 1-516. R787 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	PLL2_NDIV	R/W	0x3A	PLL N Divider ROM=Y, EEPROM=Y

1.515 R788 (Offset = 0x314)

Return to the [Summary Table](#).

Table 1-517. R788 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	PLL2_NUM_MSB	R/W	0x77	When PLL2_MODE is set for 24 bit fractional. PLL2_NUM_MSB is effective PLL2_NUM[23:16]. Other PLL2_NUM and PLL2_DEN bits in programmable mode are in PLL2_NUM field. When in 40-bit fixed denominator PLL mode, then PLL2_NUM_MSB is unused. ROM=Y, EEPROM=Y

1.516 R789 (Offset = 0x315)

Return to the [Summary Table](#).

Table 1-518. R789 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	PLL2_NUM_39:32	R/W	0x98	See Register 793

1.517 R790 (Offset = 0x316)

Return to the [Summary Table](#).

Table 1-519. R790 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	PLL2_NUM_31:24	R/W	0x0	See Register 793

1.518 R791 (Offset = 0x317)Return to the [Summary Table](#).**Table 1-520. R791 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	PLL2_NUM_23:16	R/W	0x0	See Register 793

1.519 R792 (Offset = 0x318)Return to the [Summary Table](#).**Table 1-521. R792 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	PLL2_NUM_15:8	R/W	0x0	See Register 793

1.520 R793 (Offset = 0x319)Return to the [Summary Table](#).**Table 1-522. R793 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	PLL2_NUM	R/W	0x0	When PLL2_MODE = 1 (40-bit fixed denominator) mode then PLL2_NUM contains the APLL2 numerator. When PLL2_MODE = 0 (24-bit programmable denominator) then PLL2_NUM[23:0] stores the programmable PLL2 denominator and PLL2_NUM[39:24] stores the 16 LSBs of the PLL2 numerator. Total PLL2 numerator is calculated with PLL2_NUM_MSB as the 8 MSBs. In 24-bit programmable denominator mode PLL2_NUM[23:0] = 0 is 2 ²⁴ . ROM=Y, EEPROM=Y

1.521 R794 (Offset = 0x31A)Return to the [Summary Table](#).**Table 1-523. R794 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:4	PLL2_DTHRMODE	R/W	0x0	PLL MASH Dither Mode ROM=Y, EEPROM=N 0x0 = Constant Dither MACC2 0x1 = Constant Dither MACC2 and MACC3 0x2 = LFSR Dither MACC2 0x3 = Dither Disabled
3:1	PLL2_ORDER	R/W	0x3	PLL MASH Order ROM=Y, EEPROM=N 0x0 = Integer Mode Divider 0x1 = 1st 0x2 = 2nd 0x3 = 3rd

Table 1-523. R794 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
0	PLL2_MODE	R/W	0x1	In APLL 24-bit num/den mode, APLL denominator is programmable. Not for use with DPLL mode. In 24-bit mode, the denominator is stored in PLL2_NUM[23:0] The numerator is stored in (PLL2_NUM_MSB << 16) + PLL2_NUM[39:24]. In APLL 40-bit mode, APLL denominator is fixed. For use with DPLL. ROM=Y, EEPROM=Y 0x0 = APLL 24-bit num/den 0x1 = APLL 40-bit num (Req for DPLL)

1.522 R795 (Offset = 0x31B)

Return to the [Summary Table](#).

Table 1-524. R795 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	APLL2_NUM_STAT_39:32	R	0x56	See Register 799

1.523 R796 (Offset = 0x31C)

Return to the [Summary Table](#).

Table 1-525. R796 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	APLL2_NUM_STAT_31:24	R	0x84	See Register 799

1.524 R797 (Offset = 0x31D)

Return to the [Summary Table](#).

Table 1-526. R797 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	APLL2_NUM_STAT_23:16	R	0xBD	See Register 799

1.525 R798 (Offset = 0x31E)

Return to the [Summary Table](#).

Table 1-527. R798 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	APLL2_NUM_STAT_15:8	R	0xA1	See Register 799

1.526 R799 (Offset = 0x31F)

Return to the [Summary Table](#).

Table 1-528. R799 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	APLL2_NUM_STAT	R	0x2F	Readback current effective APLL2 Numerator after FDEV and/or DPLL correction ROM=N, EEPROM=N

1.527 R803 (Offset = 0x323)Return to the [Summary Table](#).**Table 1-529. R803 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:5	RESERVED	R	0x0	Reserved
4	PLL2_VCO_BUF_EN	R/W	0x1	Enables the VCO2 Buffer which drives the DPLL feedback, reference window detector, DPLL reference for cascade mode, and test mode ROM=Y, EEPROM=N
3:2	PLL2_VCO_BUF_2REF_EN	R/W	0x0	Enables the APLL2 Div-by-4 cascade divider to [0] -> APLL1 and [1] -> APLL3 reference input for cascade mode. ROM=Y, EEPROM=Y
1	PLL2_VCO_BUF_2DPLL_EN	R/W	0x1	Enables the VCO2 Buffer output driver to DPLL2 feedback divider ROM=Y, EEPROM=N
0	PLL2_VCO_BUF_2WNDDT_EN	R/W	0x1	Enables the APLL2 Div-by-5 cascade divider to reference window detectors input buffer and prepares pre-divided clock for DPLL2 loop filter and PPM/Frequency detector. ROM=Y, EEPROM=N

1.528 R804 (Offset = 0x324)Return to the [Summary Table](#).**Table 1-530. R804 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5	PLL2_VCO_DIV_SYNC_EN	R/W	0x1	PLL2 Divider Sync Enable. Enables synchronization of post-dividers and reference dividers for PLL2. ROM=Y, EEPROM=N
4	PLL2_VCO_DIV_EN	R/W	0x1	Enables the VCO2 Div By 2 to 13 divide block. ROM=Y, EEPROM=Y
3:0	PLL2_VCO_DIV	R/W	0x9	Sets the VCO2 divider divide value from 2 to 13 ROM=Y, EEPROM=Y 0x0 = 2 (Reserved) 0x1 = 2 (Reserved) 0x2 = 2 0x3 = 3 0x4 = 4 0x5 = 5 0x6 = 6 0x7 = 7 0x8 = 8 0x9 = 9 0xA = 10 0xB = 11 0xC = 12 0xD = 13

1.529 R805 (Offset = 0x325)Return to the [Summary Table](#).**Table 1-531. R805 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:5	PLL2_VCO_BUF_FB_TDC_EN	R/W	0x2	Enables APLL2 Div-by-10 cascade divider to TDC1 and TDC3 for cascade mode [0] = TDC1 driver enable [1] = TDC3 driver enable ROM=Y, EEPROM=N

Table 1-531. R805 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
4	PLL2_P1_OUT14_15_EN	R/W	0x0	Enable VCO2 P1 divider output driver to channel output bank OUT14_15 ROM=Y, EEPROM=Y
3	PLL2_P1_OUT8_13_EN	R/W	0x0	Enable VCO2 P1 divider output driver to channel output bank OUT8_13 ROM=Y, EEPROM=Y
2	PLL2_P1_OUT4_7_EN	R/W	0x0	Enable VCO2 P1 divider output driver to channel output bank OUT4_7 ROM=Y, EEPROM=Y
1	PLL2_P1_OUT2_3_EN	R/W	0x0	Enable VCO2 P1 divider output driver to channel output bank OUT2_3 ROM=Y, EEPROM=Y
0	PLL2_P1_OUT0_1_EN	R/W	0x0	Enable VCO2 P1 divider output driver to channel output bank OUT0_1 ROM=Y, EEPROM=Y

1.530 R808 (Offset = 0x328)

Return to the [Summary Table](#).

Table 1-532. R808 Field Descriptions

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3	PLL2_RDIV_OUTPUT_EN	R/W	0x0	If GPIOx_SEL selects PLL2 R/2 as an output. Then this bit must be set along with STATUS_MUX_DIV2_EN=1. ROM=N, EEPROM=N
2:0	RESERVED	R	0x0	Reserved

1.531 R813 (Offset = 0x32D)

Return to the [Summary Table](#).

Table 1-533. R813 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5	PLL2_VM_INSIDE	R	0x1	Denotes if the VCO tuning voltage is within operational range. ROM=N, EEPROM=N
4	PLL2_VM_HI	R	0x0	Denotes if the charge pump voltage is too high and outside range. If PLL2_VM_INSIDE = 0 and VM_HI = 0, then charge pump voltage is too low. ROM=N, EEPROM=N
3:0	RESERVED	R	0x0	Reserved

1.532 R818 (Offset = 0x332)

Return to the [Summary Table](#).

Table 1-534. R818 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	RESERVED	R	0x0	Reserved
5	PLL2_NDIV_OUTPUT_EN	R/W	0x0	If GPIOx_SEL selects PLL2 N/2 as an output. Then this bit must be set along with STATUS_MUX_DIV2_EN=1. ROM=N, EEPROM=N

Table 1-534. R818 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
4:0	RESERVED	R	0x0	Reserved

1.533 R819 (Offset = 0x333)

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Table 1-535. R819 Field Descriptions

Bit	Field	Type	Reset	Description
7:1	RESERVED	R	0x0	Reserved
0	PLL2_VCO_PREBUF_EN	R/W	0x1	Set to same value as APLL2_EN. ROM=Y, EEPROM=Y

1.534 R840 (Offset = 0x348)

Return to the [Summary Table](#).

Table 1-536. R840 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	PLL3_CPBAW_BLEED	R/W	0x22	PLL charge pump pull-up resistor selection ROM=Y, EEPROM=N 0x0 = Disabled 0x1 = 78 kΩ 0x2 = 39 kΩ 0x3 = 26 kΩ 0x4 = 20 kΩ 0x5 = 15.9 kΩ 0x6 = 13.2 kΩ 0x7 = 11.3 kΩ 0x8 = 9.8 kΩ 0x9 = 8.71 kΩ 0xA = 7.83 kΩ 0xB = 7.12 kΩ 0xC = 6.58 kΩ 0xD = 6.07 kΩ 0xE = 5.63 kΩ 0xF = 5.25 kΩ 0x10 = 4.9 kΩ 0x11 = 4.61 kΩ 0x12 = 4.35 kΩ 0x13 = 4.12 kΩ 0x14 = 3.94 kΩ 0x15 = 3.75 kΩ 0x16 = 3.57 kΩ 0x17 = 3.42 kΩ 0x18 = 3.27 kΩ 0x19 = 3.14 kΩ 0x1A = 3.01 kΩ 0x1B = 2.9 kΩ 0x1C = 2.81 kΩ 0x1D = 2.71 kΩ 0x1E = 2.62 kΩ 0x1F = 2.53 kΩ 0x20 = 2.4 kΩ 0x21 = 2.33 kΩ 0x22 = 2.26 kΩ 0x23 = 2.2 kΩ 0x24 = 2.14 kΩ 0x25 = 2.09 kΩ 0x26 = 2.03 kΩ 0x27 = 1.98 kΩ 0x28 = 1.93 kΩ 0x29 = 1.88 kΩ 0x2A = 1.84 kΩ 0x2B = 1.79 kΩ 0x2C = 1.76 kΩ 0x2D = 1.72 kΩ 0x2E = 1.68 kΩ 0x2F = 1.65 kΩ 0x30 = 1.61 kΩ 0x31 = 1.58 kΩ 0x32 = 1.55 kΩ 0x33 = 1.52 kΩ 0x34 = 1.49 kΩ 0x35 = 1.46 kΩ 0x36 = 1.44 kΩ 0x37 = 1.41 kΩ 0x38 = 1.38 kΩ 0x39 = 1.36 kΩ 0x3A = 1.34 kΩ 0x3B = 1.31 kΩ 0x3C = 1.29 kΩ 0x3D = 1.27 kΩ 0x3E = 1.25 kΩ 0x3F = 1.23 kΩ 0x40 = 1.2 kΩ

Table 1-536. R840 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
				0x41 = 1.18 kΩ
				0x42 = 1.16 kΩ
				0x43 = 1.15 kΩ
				0x44 = 1.13 kΩ
				0x45 = 1.12 kΩ
				0x46 = 1.1 kΩ
				0x47 = 1.08 kΩ
				0x48 = 1.07 kΩ
				0x49 = 1.05 kΩ
				0x4A = 1.04 kΩ
				0x4B = 1.03 kΩ
				0x4C = 1.01 kΩ
				0x4D = 1 kΩ
				0x4E = 0.989 kΩ
				0x4F = 0.977 kΩ
				0x50 = 0.964 kΩ
				0x51 = 0.952 kΩ
				0x52 = 0.941 kΩ
				0x53 = 0.929 kΩ
				0x54 = 0.92 kΩ
				0x55 = 0.909 kΩ
				0x56 = 0.898 kΩ
				0x57 = 0.888 kΩ
				0x58 = 0.878 kΩ
				0x59 = 0.868 kΩ
				0x5A = 0.858 kΩ
				0x5B = 0.849 kΩ
				0x5C = 0.841 kΩ
				0x5D = 0.832 kΩ
				0x5E = 0.823 kΩ
				0x5F = 0.814 kΩ
				0x60 = 0.8 kΩ
				0x61 = 0.792 kΩ
				0x62 = 0.784 kΩ
				0x63 = 0.776 kΩ
				0x64 = 0.769 kΩ
				0x65 = 0.762 kΩ
				0x66 = 0.754 kΩ
				0x67 = 0.747 kΩ
				0x68 = 0.74 kΩ
				0x69 = 0.733 kΩ
				0x6A = 0.726 kΩ
				0x6B = 0.719 kΩ
				0x6C = 0.713 kΩ
				0x6D = 0.707 kΩ
				0x6E = 0.7 kΩ
				0x6F = 0.694 kΩ
				0x70 = 0.688 kΩ
				0x71 = 0.682 kΩ
				0x72 = 0.676 kΩ
				0x73 = 0.67 kΩ
				0x74 = 0.665 kΩ
				0x75 = 0.659 kΩ
				0x76 = 0.654 kΩ
				0x77 = 0.648 kΩ
				0x78 = 0.643 kΩ
				0x79 = 0.637 kΩ
				0x7A = 0.632 kΩ
				0x7B = 0.627 kΩ
				0x7C = 0.623 kΩ
				0x7D = 0.618 kΩ
				0x7E = 0.613 kΩ
				0x7F = 0.608 kΩ
				0x80 = 0.6 kΩ
				0x81 = 0.595 kΩ
				0x82 = 0.591 kΩ
				0x83 = 0.586 kΩ

Table 1-536. R840 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
				0x84 = 0.583 kΩ
				0x85 = 0.578 kΩ
				0x86 = 0.574 kΩ
				0x87 = 0.57 kΩ
				0x88 = 0.565 kΩ
				0x89 = 0.561 kΩ
				0x8A = 0.557 kΩ
				0x8B = 0.553 kΩ
				0x8C = 0.55 kΩ
				0x8D = 0.546 kΩ
				0x8E = 0.542 kΩ
				0x8F = 0.538 kΩ
				0x90 = 0.535 kΩ
				0x91 = 0.531 kΩ
				0x92 = 0.527 kΩ
				0x93 = 0.524 kΩ
				0x94 = 0.521 kΩ
				0x95 = 0.517 kΩ
				0x96 = 0.514 kΩ
				0x97 = 0.51 kΩ
				0x98 = 0.507 kΩ
				0x99 = 0.504 kΩ
				0x9A = 0.5 kΩ
				0x9B = 0.497 kΩ
				0x9C = 0.494 kΩ
				0x9D = 0.491 kΩ
				0x9E = 0.488 kΩ
				0x9F = 0.485 kΩ
				0xA0 = 0.48 kΩ
				0xA1 = 0.477 kΩ
				0xA2 = 0.474 kΩ
				0xA3 = 0.471 kΩ
				0xA4 = 0.469 kΩ
				0xA5 = 0.466 kΩ
				0xA6 = 0.463 kΩ
				0xA7 = 0.46 kΩ
				0xA8 = 0.458 kΩ
				0xA9 = 0.455 kΩ
				0xAA = 0.452 kΩ
				0xAB = 0.45 kΩ
				0xAC = 0.447 kΩ
				0xAD = 0.445 kΩ
				0xAE = 0.442 kΩ
				0xAF = 0.44 kΩ
				0xB0 = 0.437 kΩ
				0xB1 = 0.435 kΩ
				0xB2 = 0.432 kΩ
				0xB3 = 0.43 kΩ
				0xB4 = 0.428 kΩ
				0xB5 = 0.425 kΩ
				0xB6 = 0.423 kΩ
				0xB7 = 0.421 kΩ
				0xB8 = 0.419 kΩ
				0xB9 = 0.416 kΩ
				0xBA = 0.414 kΩ
				0xBB = 0.412 kΩ
				0xBC = 0.41 kΩ
				0xBD = 0.408 kΩ
				0xBE = 0.406 kΩ
				0xBF = 0.404 kΩ
				0xC0 = 0.4 kΩ
				0xC1 = 0.398 kΩ
				0xC2 = 0.396 kΩ
				0xC3 = 0.394 kΩ
				0xC4 = 0.392 kΩ
				0xC5 = 0.39 kΩ
				0xC6 = 0.388 kΩ

Table 1-536. R840 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
				0xC7 = 0.386 kΩ
				0xC8 = 0.384 kΩ
				0xC9 = 0.382 kΩ
				0xCA = 0.381 kΩ
				0xCB = 0.379 kΩ
				0xCC = 0.377 kΩ
				0xCD = 0.375 kΩ
				0xCE = 0.373 kΩ
				0xCF = 0.372 kΩ
				0xD0 = 0.37 kΩ
				0xD1 = 0.368 kΩ
				0xD2 = 0.366 kΩ
				0xD3 = 0.365 kΩ
				0xD4 = 0.363 kΩ
				0xD5 = 0.361 kΩ
				0xD6 = 0.36 kΩ
				0xD7 = 0.358 kΩ
				0xD8 = 0.356 kΩ
				0xD9 = 0.355 kΩ
				0xDA = 0.353 kΩ
				0xDB = 0.352 kΩ
				0xDC = 0.35 kΩ
				0xDD = 0.349 kΩ
				0xDE = 0.347 kΩ
				0xDF = 0.345 kΩ
				0xE0 = 0.343 kΩ
				0xE1 = 0.341 kΩ
				0xE2 = 0.34 kΩ
				0xE3 = 0.338 kΩ
				0xE4 = 0.337 kΩ
				0xE5 = 0.336 kΩ
				0xE6 = 0.334 kΩ
				0xE7 = 0.333 kΩ
				0xE8 = 0.331 kΩ
				0xE9 = 0.33 kΩ
				0xEA = 0.328 kΩ
				0xEB = 0.327 kΩ
				0xEC = 0.326 kΩ
				0xED = 0.325 kΩ
				0xEE = 0.323 kΩ
				0xEF = 0.322 kΩ
				0xF0 = 0.32 kΩ
				0xF1 = 0.319 kΩ
				0xF2 = 0.318 kΩ
				0xF3 = 0.317 kΩ
				0xF4 = 0.315 kΩ
				0xF5 = 0.314 kΩ
				0xF6 = 0.313 kΩ
				0xF7 = 0.312 kΩ
				0xF8 = 0.31 kΩ
				0xF9 = 0.309 kΩ
				0xFA = 0.308 kΩ
				0xFB = 0.307 kΩ
				0xFC = 0.306 kΩ
				0xFD = 0.304 kΩ
				0xFE = 0.303 kΩ
				0xFF = 0.302 kΩ

1.535 R841 (Offset = 0x349)Return to the [Summary Table](#).**Table 1-537. R841 Field Descriptions**

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved

Table 1-537. R841 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
4	PLL3_CP_PU_DIS	R/W	0x1	PLL charge pump pump-up disable ROM=Y, EEPROM=N
3:0	PLL3_CPG	R/W	0x5	PLL charge pump gain ROM=Y, EEPROM=N 0x0 = 0 mA 0x1 = 0.4 mA 0x2 = 0.8 mA 0x3 = 1.2 mA 0x4 = 1.6 mA 0x5 = 2.0 mA 0x6 = 2.4 mA 0x7 = 2.8 mA 0x8 = 3.0 mA 0x9 = 3.4 mA 0xA = 3.8 mA 0xB = 4.2 mA 0xC = 4.6 mA 0xD = 5.0 mA 0xE = 5.4 mA 0xF = 5.8 mA

1.536 R842 (Offset = 0x34A)

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Table 1-538. R842 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved

Table 1-538. R842 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
5:0	PLL3_LF_R2	R/W	0x1	PLL Loop Filter R2 setting ROM=Y, EEPROM=N 0x0 = 0.016 kΩ 0x1 = 0.301 kΩ 0x2 = 0.551 kΩ 0x3 = 0.209 kΩ 0x4 = 1.05 kΩ 0x5 = 0.244 kΩ 0x6 = 0.375 kΩ 0x7 = 0.183 kΩ 0x8 = 2.05 kΩ 0x9 = 0.269 kΩ 0xA = 0.444 kΩ 0xB = 0.194 kΩ 0xC = 0.709 kΩ 0xD = 0.224 kΩ 0xE = 0.0446 kΩ 0xF = 0.0421 kΩ 0x10 = 0.932 kΩ 0x11 = 1.18 kΩ 0x12 = 1.43 kΩ 0x13 = 1.09 kΩ 0x14 = 1.93 kΩ 0x15 = 1.13 kΩ 0x16 = 1.26 kΩ 0x17 = 1.07 kΩ 0x18 = 2.93 kΩ 0x19 = 1.15 kΩ 0x1A = 1.33 kΩ 0x1B = 1.08 kΩ 0x1C = 1.59 kΩ 0x1D = 1.11 kΩ 0x1E = 0.929 kΩ 0x1F = 0.926 kΩ 0x20 = 1.83 kΩ 0x21 = 2.08 kΩ 0x22 = 2.33 kΩ 0x23 = 1.99 kΩ 0x24 = 2.83 kΩ 0x25 = 2.03 kΩ 0x26 = 2.16 kΩ 0x27 = 1.97 kΩ 0x28 = 3.83 kΩ 0x29 = 2.05 kΩ 0x2A = 2.23 kΩ 0x2B = 1.98 kΩ 0x2C = 2.49 kΩ 0x2D = 2.01 kΩ 0x2E = 1.83 kΩ 0x2F = 1.83 kΩ 0x30 = 2.72 kΩ 0x31 = 2.97 kΩ 0x32 = 3.22 kΩ 0x33 = 2.88 kΩ 0x34 = 3.72 kΩ 0x35 = 2.91 kΩ 0x36 = 3.04 kΩ 0x37 = 2.85 kΩ 0x38 = 4.72 kΩ 0x39 = 2.94 kΩ 0x3A = 3.11 kΩ 0x3B = 2.86 kΩ 0x3C = 3.38 kΩ 0x3D = 2.89 kΩ 0x3E = 2.71 kΩ 0x3F = 2.71 kΩ

1.537 R843 (Offset = 0x34B)

Return to the [Summary Table](#).

Table 1-539. R843 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved

Table 1-539. R843 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
5:0	PLL3_LF_R3	R/W	0xD	PLL Loop Filter R3 setting ROM=Y, EEPROM=N 0x0 = 0.0139 kΩ 0x1 = 0.51 kΩ 0x2 = 0.826 kΩ 0x3 = 1.23 kΩ 0x4 = 1.85 kΩ 0x5 = 2.26 kΩ 0x6 = 2.57 kΩ 0x7 = 2.97 kΩ 0x8 = 3.3 kΩ 0x9 = 3.75 kΩ 0xA = 4.07 kΩ 0xB = 4.47 kΩ 0xC = 5.09 kΩ 0xD = 5.5 kΩ 0xE = 5.81 kΩ 0xF = 6.22 kΩ 0x10 = 6.57 kΩ 0x11 = 7.01 kΩ 0x12 = 7.33 kΩ 0x13 = 7.73 kΩ 0x14 = 8.36 kΩ 0x15 = 8.76 kΩ 0x16 = 9.08 kΩ 0x17 = 9.48 kΩ 0x18 = 9.81 kΩ 0x19 = 10.3 kΩ 0x1A = 10.6 kΩ 0x1B = 11 kΩ 0x1C = 11.6 kΩ 0x1D = 12 kΩ 0x1E = 12.3 kΩ 0x1F = 12.7 kΩ 0x20 = 13 kΩ 0x21 = 13.5 kΩ 0x22 = 13.8 kΩ 0x23 = 14.2 kΩ 0x24 = 14.8 kΩ 0x25 = 15.2 kΩ 0x26 = 15.6 kΩ 0x27 = 16 kΩ 0x28 = 16.3 kΩ 0x29 = 16.7 kΩ 0x2A = 17.1 kΩ 0x2B = 17.5 kΩ 0x2C = 18.1 kΩ 0x2D = 18.5 kΩ 0x2E = 18.8 kΩ 0x2F = 19.2 kΩ 0x30 = 19.6 kΩ 0x31 = 20 kΩ 0x32 = 20.3 kΩ 0x33 = 20.7 kΩ 0x34 = 21.3 kΩ 0x35 = 21.7 kΩ 0x36 = 22.1 kΩ 0x37 = 22.5 kΩ 0x38 = 22.8 kΩ 0x39 = 23.2 kΩ 0x3A = 23.6 kΩ 0x3B = 24 kΩ 0x3C = 24.6 kΩ 0x3D = 25 kΩ 0x3E = 25.3 kΩ 0x3F = 25.7 kΩ

1.538 R844 (Offset = 0x34C)

Return to the [Summary Table](#).

Table 1-540. R844 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved

Table 1-540. R844 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
5:0	PLL3_LF_R4	R/W	0xD	PLL Loop Filter R4 setting ROM=Y, EEPROM=N 0x0 = 0.0139 kΩ 0x1 = 0.51 kΩ 0x2 = 0.826 kΩ 0x3 = 1.23 kΩ 0x4 = 1.85 kΩ 0x5 = 2.26 kΩ 0x6 = 2.57 kΩ 0x7 = 2.97 kΩ 0x8 = 3.3 kΩ 0x9 = 3.75 kΩ 0xA = 4.07 kΩ 0xB = 4.47 kΩ 0xC = 5.09 kΩ 0xD = 5.5 kΩ 0xE = 5.81 kΩ 0xF = 6.22 kΩ 0x10 = 6.57 kΩ 0x11 = 7.01 kΩ 0x12 = 7.33 kΩ 0x13 = 7.73 kΩ 0x14 = 8.36 kΩ 0x15 = 8.76 kΩ 0x16 = 9.08 kΩ 0x17 = 9.48 kΩ 0x18 = 9.81 kΩ 0x19 = 10.3 kΩ 0x1A = 10.6 kΩ 0x1B = 11 kΩ 0x1C = 11.6 kΩ 0x1D = 12 kΩ 0x1E = 12.3 kΩ 0x1F = 12.7 kΩ 0x20 = 13 kΩ 0x21 = 13.5 kΩ 0x22 = 13.8 kΩ 0x23 = 14.2 kΩ 0x24 = 14.8 kΩ 0x25 = 15.2 kΩ 0x26 = 15.6 kΩ 0x27 = 16 kΩ 0x28 = 16.3 kΩ 0x29 = 16.7 kΩ 0x2A = 17.1 kΩ 0x2B = 17.5 kΩ 0x2C = 18.1 kΩ 0x2D = 18.5 kΩ 0x2E = 18.8 kΩ 0x2F = 19.2 kΩ 0x30 = 19.6 kΩ 0x31 = 20 kΩ 0x32 = 20.3 kΩ 0x33 = 20.7 kΩ 0x34 = 21.3 kΩ 0x35 = 21.7 kΩ 0x36 = 22.1 kΩ 0x37 = 22.5 kΩ 0x38 = 22.8 kΩ 0x39 = 23.2 kΩ 0x3A = 23.6 kΩ 0x3B = 24 kΩ 0x3C = 24.6 kΩ 0x3D = 25 kΩ 0x3E = 25.3 kΩ 0x3F = 25.7 kΩ

1.539 R845 (Offset = 0x34D)

Return to the [Summary Table](#).

Table 1-541. R845 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:3	PLL3_LF_C3	R/W	0x7	PLL Loop Filter C3 setting ROM=Y, EEPROM=N 0x0 = 0 pF 0x1 = 10 pF 0x2 = 20 pF 0x3 = 30 pF 0x4 = 40 pF 0x5 = 50 pF 0x6 = 60 pF 0x7 = 70 pF
2:0	PLL3_LF_C4	R/W	0x7	PLL Loop Filter C4 setting ROM=Y, EEPROM=N 0x0 = 0 pF 0x1 = 10 pF 0x2 = 20 pF 0x3 = 30 pF 0x4 = 40 pF 0x5 = 50 pF 0x6 = 60 pF 0x7 = 70 pF

1.540 R846 (Offset = 0x34E)

Return to the [Summary Table](#).

Table 1-542. R846 Field Descriptions

Bit	Field	Type	Reset	Description
7:1	RESERVED	R	0x0	Reserved
0	PLL3_RDIV_8:8	R/W	0x0	See Register 847

1.541 R847 (Offset = 0x34F)

Return to the [Summary Table](#).

Table 1-543. R847 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	PLL3_RDIV	R/W	0xA	PLL R Divider ROM=Y, EEPROM=Y

1.542 R848 (Offset = 0x350)

Return to the [Summary Table](#).

Table 1-544. R848 Field Descriptions

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4	PLL3_RDIV_XO_EN	R/W	0x1	APLL reference source is from XO. Must also enable XO to drive this APLL with XO_OUT_BUF_EN[3] = 1 ROM=Y, EEPROM=Y
3	PLL3_RDIV_XO_DBLR_EN	R/W	0x1	Enables XO Doubler ROM=Y, EEPROM=Y
2	PLL3_RDIV_BYPASS_EN	R/W	0x1	Bypass R Divider ROM=Y, EEPROM=Y

Table 1-544. R848 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
1:0	PLL3_RDIV_MUX_SEL	R/W	0x0	Select R Divider input: 0=XO, 1=VCO1 feedback divider, 2=VCO2 feedback divider ROM=Y, EEPROM=Y 0x0 = XO 0x1 = VCO1 feedback divider 0x2 = VCO2 feedback divider

1.543 R849 (Offset = 0x351)Return to the [Summary Table](#).**Table 1-545. R849 Field Descriptions**

Bit	Field	Type	Reset	Description
7:1	RESERVED	R	0x0	Reserved
0	PLL3_NDIV_8:8	R/W	0x0	See Register 850

1.544 R850 (Offset = 0x352)Return to the [Summary Table](#).**Table 1-546. R850 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	PLL3_NDIV	R/W	0x19	PLL N Divider ROM=Y, EEPROM=Y

1.545 R851 (Offset = 0x353)Return to the [Summary Table](#).**Table 1-547. R851 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	PLL3_NUM_MSB	R/W	0x4C	When PLL3_MODE is set for 24 bit fractional. PLL3_NUM_MSB is effective PLL3_NUM[23:16]. Other PLL3_NUM and PLL3_DEN bits in programmable mode are in PLL3_NUM field. When in 40-bit fixed denominator PLL mode, then PLL3_NUM_MSB is unused. ROM=Y, EEPROM=Y

1.546 R852 (Offset = 0x354)Return to the [Summary Table](#).**Table 1-548. R852 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	PLL3_NUM_39:32	R/W	0x99	See Register 856

1.547 R853 (Offset = 0x355)Return to the [Summary Table](#).**Table 1-549. R853 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	PLL3_NUM_31:24	R/W	0x99	See Register 856

1.548 R854 (Offset = 0x356)

Return to the [Summary Table](#).

Table 1-550. R854 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	PLL3_NUM_23:16	R/W	0x99	See Register 856

1.549 R855 (Offset = 0x357)

Return to the [Summary Table](#).

Table 1-551. R855 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	PLL3_NUM_15:8	R/W	0x99	See Register 856

1.550 R856 (Offset = 0x358)

Return to the [Summary Table](#).

Table 1-552. R856 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	PLL3_NUM	R/W	0x9A	When PLL3_MODE = 1 (40-bit fixed denominator) mode then PLL3_NUM contains the APLL3 numerator. When PLL3_MODE = 0 (24-bit programmable denominator) then PLL3_NUM[23:0] stores the programmable PLL3 denominator and PLL3_NUM[39:24] stores the 16 LSBs of the PLL3 numerator. Total PLL3 numerator is calculated with PLL3_NUM_MSB as the 8 MSBs. In 24-bit programmable denominator mode PLL3_NUM[23:0] = 0 is 2 ²⁴ . ROM=Y, EEPROM=Y

1.551 R857 (Offset = 0x359)

Return to the [Summary Table](#).

Table 1-553. R857 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:4	PLL3_DTHRMODE	R/W	0x0	PLL MASH Dither Mode ROM=Y, EEPROM=N 0x0 = Constant Dither MACC2 0x1 = Constant Dither MACC2 and MACC3 0x2 = LFSR Dither MACC2 0x3 = Dither Disabled
3:1	PLL3_ORDER	R/W	0x2	PLL MASH Order ROM=Y, EEPROM=N 0x0 = Integer Mode Divider 0x1 = 1st 0x2 = 2nd 0x3 = 3rd
0	PLL3_MODE	R/W	0x1	In APLL 24-bit num/den mode, APLL denominator is programmable. Recommended not for use with DPLL mode. In 24-bit mode, the denominator is stored in PLL3_NUM[23:0] The numerator is stored in (PLL3_NUM_MSB << 16) + PLL3_NUM[39:24]. In APLL 40-bit mode, APLL denominator is fixed. For use with DPLL. ROM=Y, EEPROM=Y 0x0 = APLL 24-bit num/den 0x1 = APLL 40-bit num (Req for DPLL)

1.552 R858 (Offset = 0x35A)Return to the [Summary Table](#).**Table 1-554. R858 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	APLL3_NUM_STAT_39:32	R	0x9A	See Register 862

1.553 R859 (Offset = 0x35B)Return to the [Summary Table](#).**Table 1-555. R859 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	APLL3_NUM_STAT_31:24	R	0xDD	See Register 862

1.554 R860 (Offset = 0x35C)Return to the [Summary Table](#).**Table 1-556. R860 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	APLL3_NUM_STAT_23:16	R	0x3C	See Register 862

1.555 R861 (Offset = 0x35D)Return to the [Summary Table](#).**Table 1-557. R861 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	APLL3_NUM_STAT_15:8	R	0xC	See Register 862

1.556 R862 (Offset = 0x35E)Return to the [Summary Table](#).**Table 1-558. R862 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	APLL3_NUM_STAT	R	0xA4	Readback current effective APLL3 Numerator after FDEV and/or DPLL correction ROM=N, EEPROM=N

1.557 R864 (Offset = 0x360)Return to the [Summary Table](#).**Table 1-559. R864 Field Descriptions**

Bit	Field	Type	Reset	Description
7:4	PLL3_VCO_BUF_OUT_EN	R/W	0xF	Enables VCO3 to: [0] -> VCO3 Post-divider, [1] -> VCO3 Auxiliary Buffer (TDC1 Reference Clock Buffer, TDC2 Reference Clock Buffer, APLL1 Reference Clock Buffer, APLL2 Reference Clock Buffer, Window Monitor), [2] -> APLL3 N-Divider, [3] -> DPLL3 N-Divider ROM=Y, EEPROM=Y
3	PLL3_VCO_DIV_SYNC_EN	R/W	0x0	PLL3 Divider Sync Enable. Enables synchronization of post-dividers and reference dividers for PLL3. ROM=Y, EEPROM=N

Table 1-559. R864 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
2:0	PLL3_PRI_DIV	R/W	0x4	Sets the VCO3 primary divider divide value from 1 to 8 (div = field value + 1) ROM=Y, EEPROM=Y 0x0 = 1 0x1 = 2 0x2 = 3 0x3 = 4 0x4 = 5 0x5 = 6 0x6 = 7 0x7 = 8

1.558 R865 (Offset = 0x361)

Return to the [Summary Table](#).

Table 1-560. R865 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	PLL3_VCO_DIV_SEL	R/W	0x0	Selects APLL3 P1 post-divider block or APLL3 P1 followed by additional divide-by 2 block. ROM=Y, EEPROM=Y 0x0 = PLL3 drive off 0x1 = Reserved 0x2 = Divide-by-1-to-8 direct 0x3 = Divide-by-1-to-8 and /2
5	PLL3_VCO_CHAN_DRVR_IN_EN	R/W	0x1	Enables the selected clock (div1to8 or div2) to the VCO3 to Outputs Output Buffer. See PLL3_VCO_DIV1TO8_EN and PLL3_VCO_DIV2_EN. Optimization to prevent unused domain from interacting with active domains. Always on if using PLL3. Might be on to help reduce crosstalk from APLL3. ROM=Y, EEPROM=Y
4	PLL3_P1_OUT14_15_EN	R/W	0x0	Enable VCO3 P1 divider output driver to channel output bank OUT14_15 ROM=Y, EEPROM=Y
3	PLL3_P1_OUT8_13_EN	R/W	0x0	Enable VCO3 P1 divider output driver to channel output bank OUT8_13 ROM=Y, EEPROM=Y
2	PLL3_P1_OUT4_7_EN	R/W	0x0	Enable VCO3 P1 divider output driver to channel output bank OUT4_7 ROM=Y, EEPROM=Y
1	PLL3_P1_OUT2_3_EN	R/W	0x0	Enable VCO3 P1 divider output driver to channel output bank OUT2_3 ROM=Y, EEPROM=Y
0	PLL3_P1_OUT0_1_EN	R/W	0x0	Enable VCO3 P1 divider output driver to channel output bank OUT0_1 ROM=Y, EEPROM=Y

1.559 R866 (Offset = 0x362)

Return to the [Summary Table](#).

Table 1-561. R866 Field Descriptions

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4:3	PLL3_VCO_BUF_2REF_EN	R/W	0x1	Enables the APLL3 Div-by-2 cascade divider to [0] -> APLL1 and [1] -> APLL2 reference input for cascade mode. ROM=Y, EEPROM=Y

Table 1-561. R866 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
2	PLL3_WIN_DET_DRVR_EN	R/W	0x1	Enables the APLL3 Div-by-2 cascade divider to reference window detectors input buffer, ROM=Y, EEPROM=N
1:0	PLL3_VCO_BUF_FB_TD_C_EN	R/W	0x0	Enables APLL3 Div-by-4 cascade divider to TDC1 and TDC2 for cascade mode [0] = TDC1 driver enable [1] = TDC2 driver enable. ROM=Y, EEPROM=N

1.560 R872 (Offset = 0x368)Return to the [Summary Table](#).**Table 1-562. R872 Field Descriptions**

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5:4	RESERVED	R	0x0	Reserved
3	PLL3_RDIV_OUTPUT_EN	R/W	0x0	If GPIOx_SEL selects PLL3 R/2 as an output. Then this bit must be set along with STATUS_MUX_DIV2_EN=1. ROM=N, EEPROM=N
2:0	RESERVED	R	0x0	Reserved

1.561 R882 (Offset = 0x372)Return to the [Summary Table](#).**Table 1-563. R882 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	RESERVED	R	0x0	Reserved
5	PLL3_NDIV_OUTPUT_EN	R/W	0x0	If GPIOx_SEL selects PLL3 N/2 as an output. Then this bit must be set along with STATUS_MUX_DIV2_EN=1. ROM=N, EEPROM=N
4:0	RESERVED	R	0x0	Reserved

1.562 R961 (Offset = 0x3C1)Return to the [Summary Table](#).**Table 1-564. R961 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_0_EN	R/W	0x0	OUT0 Enable. If CMOS on OUT0 is used, this enable must also be set. ROM=Y, EEPROM=Y

Table 1-564. R961 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
5:0	OUT_0_FMT	R/W	0x0	Remix of OUT_0_VOD and OUT_0_VOS to display datasheet specified settings available to user. ROM=Y, EEPROM=Y 0x8 = HSDS 400 mV, Vcm = 0.35 V 0x9 = HSDS 500 mV, Vcm = 0.4 V 0xA = HSDS 600 mV, Vcm = 0.45 V 0xB = HSDS 700 mV, Vcm = 0.5 V 0xC = HSDS 800 mV, Vcm = 0.55 V 0xD = HSDS 900 mV, Vcm = 0.6 V 0xE = HSDS 1000 mV, Vcm = 0.65 V 0xF = HCSL 750 mV (fast) 0x10 = HSDS 400 mV, Vcm = 0.7 V 0x20 = LVDS, Vcm = 1.25 V 0x32 = HSDS 600 mV, Vcm = 0.8 V 0x33 = HSDS 700 mV, Vcm = 0.9 V 0x34 = HSDS 800 mV, Vcm = 1 V 0x4F = HCSL 750 mV

1.563 R962 (Offset = 0x3C2)

Return to the [Summary Table](#).

Table 1-565. R962 Field Descriptions

Bit	Field	Type	Reset	Description
7	OUT_0_CAP_EN	R/W	0x0	If enable, this output capacitor reduces the slew rate of the output clock. ROM=Y, EEPROM=N
6	OUT_0_STATIC_LOW	R/W	0x0	When OUT0 is forced to a static output, this bit determines if the output voltage will be 0: Static Low 1: Static High ROM=Y, EEPROM=N 0x0 = L 0x1 = H
5	OUT_0_P_CMOS_EN	R/W	0x0	OUT0P CMOS Enable. Overrides the OUT_0_VOD setting and makes OUT_0 CMOS. Setting this bit enables of the positive terminal of OUT0 for CMOS outputs. OUT_0_ENABLE must also be set. ROM=Y, EEPROM=Y
4	OUT_0_N_CMOS_EN	R/W	0x0	OUT0N CMOS Enable. Setting this bit enables of the negative terminal of OUT0 for CMOS outputs. OUT_0_ENABLE must also be set. ROM=Y, EEPROM=Y
3	OUT_0_P_INVERT_POLARITY	R/W	0x0	OUT0P CMOS Invert Polarity. Setting this bit inverts the polarity of the positive terminal of OUT0 for CMOS outputs. ROM=Y, EEPROM=N
2	OUT_0_N_INVERT_POLARITY	R/W	0x0	OUT0N CMOS Invert Polarity. Setting this bit inverts the polarity of the negative terminal of OUT0 for CMOS outputs. ROM=Y, EEPROM=N
1	OUT_0_P_FORCELOW	R/W	0x0	OUT0P CMOS Force Low. Setting this bit forces the positive terminal of OUT0 low. ROM=Y, EEPROM=N
0	OUT_0_N_FORCELOW	R/W	0x0	OUT0N CMOS Force Low. Setting this bit forces the negative terminal of OUT0 low. ROM=Y, EEPROM=N

1.564 R963 (Offset = 0x3C3)

Return to the [Summary Table](#).

Table 1-566. R963 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	OUT_0_CONFIGURATIO N	R/W	0x0	OUT0 configuration. Selects from CH0 Bypass, CH1 Bypass, CHDIV0, CHDIV1, CH0/2 low-noise divide by two path, SYSREF, SYSREF + Analog Delay, or static DC H/L. ROM=Y, EEPROM=Y and N 0x0 = CH0/2 0x14 = CHDIV1 0x20 = SYSREF+ADLY 0x21 = SYSREF 0x22 = Static DC 0x28 = CHDIV0 0x40 = CH1 Bypass 0x80 = CH0 Bypass

1.565 R964 (Offset = 0x3C4)Return to the [Summary Table](#).**Table 1-567. R964 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_1_EN	R/W	0x1	OUT1 Enable. If CMOS on OUT1 is used, this enable must also be set. ROM=Y, EEPROM=Y
5:0	OUT_1_FMT	R/W	0x0	Remix of OUT_1_VOD and OUT_1_VOS to display datasheet specified settings available to user. ROM=Y, EEPROM=Y 0x8 = HSDS 400 mV, Vcm = 0.35 V 0x9 = HSDS 500 mV, Vcm = 0.4 V 0xA = HSDS 600 mV, Vcm = 0.45 V 0xB = HSDS 700 mV, Vcm = 0.5 V 0xC = HSDS 800 mV, Vcm = 0.55 V 0xD = HSDS 900 mV, Vcm = 0.6 V 0xE = HSDS 1000 mV, Vcm = 0.65 V 0xF = HCSL 750 mV (fast) 0x10 = HSDS 400 mV, Vcm = 0.7 V 0x20 = LVDS, Vcm = 1.25 V 0x32 = HSDS 600 mV, Vcm = 0.8 V 0x33 = HSDS 700 mV, Vcm = 0.9 V 0x34 = HSDS 800 mV, Vcm = 1 V 0x4F = HCSL 750 mV

1.566 R965 (Offset = 0x3C5)Return to the [Summary Table](#).**Table 1-568. R965 Field Descriptions**

Bit	Field	Type	Reset	Description
7	OUT_1_CAP_EN	R/W	0x0	ROM=Y, EEPROM=N
6	OUT_1_STATIC_LOW	R/W	0x0	When OUT1 is forced to a static output, this bit determines if the output voltage will be 0=Static Low or 1=Static High ROM=Y, EEPROM=N 0x0 = L 0x1 = H
5	OUT_1_P_CMOS_EN	R/W	0x1	OUT1P CMOS Enable. Setting this bit enables the positive terminal of OUT1 for CMOS outputs. ROM=Y, EEPROM=Y
4	OUT_1_N_CMOS_EN	R/W	0x1	OUT1N CMOS Enable. Setting this bit enables the negative terminal of OUT1 for CMOS outputs. ROM=Y, EEPROM=Y

Table 1-568. R965 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
3	OUT_1_P_INVERT_POLARITY	R/W	0x0	OUT1P CMOS Invert Polarity. Setting this bit inverts the polarity of the positive terminal of OUT1 for CMOS outputs. ROM=Y, EEPROM=N
2	OUT_1_N_INVERT_POLARITY	R/W	0x0	OUT1N CMOS Invert Polarity. Setting this bit inverts the polarity of the negative terminal of OUT1 for CMOS outputs. ROM=Y, EEPROM=N
1	OUT_1_P_FORCELOW	R/W	0x0	OUT1P CMOS Force Low. Setting this bit forces the positive terminal of OUT1 low. ROM=Y, EEPROM=N
0	OUT_1_N_FORCELOW	R/W	0x0	OUT1N CMOS Force Low. Setting this bit forces the negative terminal of OUT1 low. ROM=Y, EEPROM=N

1.567 R966 (Offset = 0x3C6)

Return to the [Summary Table](#).

Table 1-569. R966 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	OUT_1_CONFIGURATION	R/W	0x0	OUT1 configuration. Selects from CH0 Bypass, CH1 Bypass, CHDIV0, CHDIV1, CH0/2 low-noise divide by two path, SYSREF, SYSREF + Analog Delay, or static DC H/L. ROM=Y, EEPROM=Y and N 0x0 = CH0/2 0x14 = CHDIV1 0x20 = SYSREF+ADLY 0x21 = SYSREF 0x22 = Static DC 0x28 = CHDIV0 0x40 = CH1 Bypass 0x80 = CH0 Bypass

1.568 R967 (Offset = 0x3C7)

Return to the [Summary Table](#).

Table 1-570. R967 Field Descriptions

Bit	Field	Type	Reset	Description
7:2	RESERVED	R	0x0	Reserved
1	OUT_0_1_CMOS_OUT_VOLTAGE_SEL	R/W	0x0	CMOS LDO Voltage. Selects CMOS LDO voltage. ROM=Y, EEPROM=Y 0x0 = 1.8 V 0x1 = 2.65 V
0	OUT_0_1_CMOS_OUT_LDO_EN	R/W	0x1	CMOS LDO Enable. Enables LDO used for CMOS outputs. Must be enabled for CMOS mode. ROM=Y, EEPROM=Y

1.569 R968 (Offset = 0x3C8)

Return to the [Summary Table](#).

Table 1-571. R968 Field Descriptions

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved

Table 1-571. R968 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
3:1	OUT_0_1_ZDM_TDC_SEL	R/W	0x0	Select zero delay output to TDC's ROM=Y, EEPROM=N 0x0 = None 0x1 = TDC1 0x2 = TDC2 0x4 = TDC3
0	OUT_0_1_ZDM_EN	R/W	0x0	Enable the output from CH_DIV0_1 to be used as DPLL feedback input for zero delay mode ROM=Y, EEPROM=N

1.570 R969 (Offset = 0x3C9)Return to the [Summary Table](#).**Table 1-572. R969 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_0_1_DIV_MUTE_EN	R/W	0x0	Mute enable. ROM=Y, EEPROM=N
5	OUT_0_1_DIV_SYNC_EN	R/W	0x1	OUT0_1 Divider Sync Enable. Enables synchronization of chandiv and div2 dividers for OUT0_1. ROM=Y, EEPROM=N
4	OUT_0_1_SR_DIV_SYNC_EN	R/W	0x1	OUT0_1 SYSREF Divider Sync Enable. Enables synchronization of SYSREF dividers for OUT0_1. ROM=Y, EEPROM=N
3	OUT_0_1_CH0_CHAN_POL_SEL	R/W	0x0	OUT0_1 Ch0 ChanDiv Polarity Select. When cleared, this bit inverts the polarity of the input to the Ch0 channel divider. ROM=Y, EEPROM=N
2	OUT_0_1_CH1_CHAN_POL_SEL	R/W	0x0	OUT0_1 Ch1 ChanDiv Polarity Select. When cleared, this bit inverts the polarity of the input to the Ch1 channel divider. ROM=Y, EEPROM=N
1	OUT_0_1_CH0_DIV_EN	R/W	0x1	OUT0_1 Ch0 ChanDiv Enable. Enables the Ch0 channel divider. Note: SYSREF/chandiv mode must be configured separately. ROM=Y, EEPROM=Y
0	OUT_0_1_CH1_DIV_EN	R/W	0x1	OUT0_1 Ch1 ChanDiv Enable. Enables the Ch1 channel divider. Note: SYSREF/chandiv mode must be configured separately. ROM=Y, EEPROM=Y

1.571 R972 (Offset = 0x3CC)Return to the [Summary Table](#).**Table 1-573. R972 Field Descriptions**

Bit	Field	Type	Reset	Description
7:2	RESERVED	R	0x0	Reserved
1	OUT_0_1_CH0_CH_DIV_SR_MUX_CLK_SEL	R/W	0x0	OUT0_1 Ch0 ChanDiv to SYSREF Input Clock Select. When set, the Ch0 channel divider output is inverted before being fed to the SYSREF. ROM=Y, EEPROM=N 0x0 = POS POL to SR_DIV 0x1 = NEG POL to SR_DIV
0	RESERVED	R	0x0	Reserved

1.572 R973 (Offset = 0x3CD)Return to the [Summary Table](#).

Table 1-574. R973 Field Descriptions

Bit	Field	Type	Reset	Description
7:2	OUT_0_1_CLK_IN_FANOUT	R/W	0x0	OUT0_1 input clock fanout. Distributes the input clock to the channel dividers and the standalone divide-by-2s. ROM=Y, EEPROM=Y 0x0 = DISABLED 0x3 = IN1 to CHDIV1 0x4 = IN0 to SYSREF 0x7 = IN0 to SYSREF, IN1 to CHDIV1 0xC = IN0 to CHDIV0 0xF = IN0 to CHDIV0, IN1 to CHDIV1 0x10 = IN0 to CH0/2 (OUT0) 0x13 = IN0 to CH0/2 (OUT0), IN1 to CHDIV1 (OUT1) 0x14 = IN0 to CH0/2 (OUT0) and SYSREF (OUT1) 0x1C = IN0 to CH0/2 (OUT0) and CHDIV0 (OUT1) 0x20 = IN0 to CH0/2 (OUT1) 0x23 = IN0 to CH0/2 (OUT1), IN1 to CHDIV1 (OUT0) 0x24 = IN0 to CH0/2 (OUT1) and SYSREF (OUT0) 0x2C = IN0 to CH0/2 (OUT1) and CHDIV0 (OUT0) 0x30 = IN0 to CH0/2 (OUT0 and OUT1)
1:0	RESERVED	R	0x0	Reserved

1.573 R974 (Offset = 0x3CE)

Return to the [Summary Table](#).

Table 1-575. R974 Field Descriptions

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3:0	OUT_0_1_CH0_CH_STAT_IC_OFFSET_11:8	R/W	0x0	See Register 975

1.574 R975 (Offset = 0x3CF)

Return to the [Summary Table](#).

Table 1-576. R975 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	OUT_0_1_CH0_CH_STAT_IC_OFFSET	R/W	0x0	CH0_CH_DIV static digital delay value. Delays divider start by specified number of full clock cycles of divider input. This results in specified digital delay upon divider synchronization. Lower 8 bits are stored in EEPROM. ROM=Y, EEPROM=Y

1.575 R976 (Offset = 0x3D0)

Return to the [Summary Table](#).

Table 1-577. R976 Field Descriptions

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3:0	OUT_0_1_CH1_CH_STAT_IC_OFFSET_11:8	R/W	0x0	See Register 977

1.576 R977 (Offset = 0x3D1)

Return to the [Summary Table](#).

Table 1-578. R977 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	OUT_0_1_CH1_CH_STAT_IC_OFFSET	R/W	0x0	CH1_CH_DIV static digital delay value. Delays divider start by specified number of full clock cycles of divider input. This results in specified digital delay upon divider synchronization. Lower 8 bits are stored in EEPROM. ROM=Y, EEPROM=Y

1.577 R978 (Offset = 0x3D2)Return to the [Summary Table](#).**Table 1-579. R978 Field Descriptions**

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3:0	OUT_0_1_CH0_CH_DIV_11:8	R/W	0x3	See Register 979

1.578 R979 (Offset = 0x3D3)Return to the [Summary Table](#).**Table 1-580. R979 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	OUT_0_1_CH0_CH_DIV	R/W	0xE8	OUT0_1 Ch0 Channel Divider (ChanDiv) Divide Value. ROM=Y, EEPROM=Y

1.579 R980 (Offset = 0x3D4)Return to the [Summary Table](#).**Table 1-581. R980 Field Descriptions**

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3:0	OUT_0_1_CH1_CH_DIV_11:8	R/W	0x0	See Register 981

1.580 R981 (Offset = 0x3D5)Return to the [Summary Table](#).**Table 1-582. R981 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	OUT_0_1_CH1_CH_DIV	R/W	0x8	OUT0_1 Ch1 Channel Divider (ChanDiv) Divide Value. ROM=Y, EEPROM=Y

1.581 R982 (Offset = 0x3D6)Return to the [Summary Table](#).**Table 1-583. R982 Field Descriptions**

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved

Table 1-583. R982 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
4:0	OUT_0_1_SR_ANA_DELAY	R/W	0x0	OUT0_1 SYSREF Analog Delay. Specified here in multiples of one delay step duration. ROM=Y, EEPROM=N

1.582 R983 (Offset = 0x3D7)

Return to the [Summary Table](#).

Table 1-584. R983 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5	OUT_0_1_SR_ANA_DELAY_DIV2_SEL	R/W	0x0	OUT0_1 SYSREF Analog Delay Div By 2 Select. Divides the incoming clock by 2 to double the delay step size. Useful for increasing analog delay range, given high incoming clock frequencies. ROM=Y, EEPROM=N
4	OUT_0_1_SR_ANA_DELAY_EN	R/W	0x0	OUT0_1 SYSREF Analog Delay Enable. ROM=Y, EEPROM=N
3	OUT_0_1_SR_ANA_DELAY_SMALL_STEP_EN	R/W	0x1	OUT0_1 SYSREF Analog Delay Small Step Enable. If set to 1, the analog delay generator will use both rising and falling edges of the incoming clock to halve delay step size. Useful for when large pre-divider values have been used. ROM=Y, EEPROM=N
2:0	OUT_0_1_SR_ANA_DELAY_RANGE	R/W	0x3	Analog delay range is set according to the period entering the SYSREF analog delay block. The period can be calculated as $(OUT_x_y_SR_ANA_DELAY_DIV2_SEL + 1) / (OUT_x_y_SR_ANA_DELAY_SMALL_STEP_EN + 1) / VCO$ post divider frequency. Calculated range must fall between 333 ps and 1050 ps. ROM=Y, EEPROM=N 0x0 = Reserved 0x1 = Reserved 0x2 = 333 ps to 450 ps 0x3 = > 450 ps to 600 ps 0x4 = > 600 ps to 750 ps 0x5 = > 750 ps to 1050 ps 0x6 = Reserved 0x7 = Reserved

1.583 R984 (Offset = 0x3D8)

Return to the [Summary Table](#).

Table 1-585. R984 Field Descriptions

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4:0	OUT_0_1_SR_DDLY	R/W	0x0	OUT0_1 SYSREF Digital Delay Value. Measured in VCO half-cycles. ROM=Y, EEPROM=N

1.584 R985 (Offset = 0x3D9)

Return to the [Summary Table](#).

Table 1-586. R985 Field Descriptions

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3:0	OUT_0_1_SR_DIV_19:16	R/W	0xF	See Register 987

1.585 R986 (Offset = 0x3DA)Return to the [Summary Table](#).**Table 1-587. R986 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	OUT_0_1_SR_DIV_15:8	R/W	0x42	See Register 987

1.586 R987 (Offset = 0x3DB)Return to the [Summary Table](#).**Table 1-588. R987 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	OUT_0_1_SR_DIV	R/W	0x40	OUT0_1 SYSREF Divide Value. ROM=Y, EEPROM=N

1.587 R988 (Offset = 0x3DC)Return to the [Summary Table](#).**Table 1-589. R988 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:0	OUT_0_1_SR_DIV_STATI C_OFFSET_14:8	R/W	0x0	See Register 989

1.588 R989 (Offset = 0x3DD)Return to the [Summary Table](#).**Table 1-590. R989 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	OUT_0_1_SR_DIV_STATI C_OFFSET	R/W	0x0	OUT_0_1_SR_DIV static digital delay value. Delays divider start by specified number of full clock cycles of divider input. This results in specified digital delay upon divider synchronization ROM=Y, EEPROM=N

1.589 R990 (Offset = 0x3DE)Return to the [Summary Table](#).**Table 1-591. R990 Field Descriptions**

Bit	Field	Type	Reset	Description
7	OUT_0_1_SR_REQ_MOD E	R/W	0x0	OUT0_1 SYSREF Mute Enable ROM=Y, EEPROM=N
6	OUT_0_1_SR_GPIO_EN	R/W	0x0	Enable SYSREF to digital for SYSREF request resampling, continuous SYSREF, 1-PPS GPIO output, 1-PPS phase validation. Only one OUT_x_y_SR_GPIO_EN should be enabled at a time. ROM=Y, EEPROM=N
5	RESERVED	R	0x0	Reserved
4:2	OUT_0_1_PULSE_COUN T	R/W	0x0	OUT0_1 SYSREF Pulse Count. The number of SYSREF pulses which will be generated by a SYSREF request. ROM=Y, EEPROM=N

Table 1-591. R990 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
1:0	OUT_0_1_SR_MODE	R/W	0x0	OUT0_1 SYSREF Mode. Selects Pulser mode, Continuous mode, or None. ROM=Y, EEPROM=N 0x0 = None 0x1 = Continuous 0x2 = Pulser

1.590 R991 (Offset = 0x3DF)

Return to the [Summary Table](#).

Table 1-592. R991 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5	OUT_0_1_SR_CH0_DIV_BYPASS	R/W	0x0	OUT0_1 cascaded SYSREF bypass mux. If set, bypasses CHDIV0 for the SYSREF input clock. This is useful for minimizing the step size of the digital delay adjustments on the SYSREF clock. ROM=Y, EEPROM=N 0x0 = ChanDiv input to SysRef 0x1 = Bypass ChanDiv
4:0	RESERVED	R	0x0	Reserved

1.591 R1024 (Offset = 0x400)

Return to the [Summary Table](#).

Table 1-593. R1024 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_2_EN	R/W	0x1	OUT2 Enable. ROM=Y, EEPROM=Y
5:0	OUT_2_FMT	R/W	0x0	Remix of OUT_2_VOD and OUT_2_VOS to display datasheet specified settings available to user. ROM=Y, EEPROM=Y 0x8 = HSDS 400 mV, Vcm = 0.35 V 0x9 = HSDS 500 mV, Vcm = 0.4 V 0xA = HSDS 600 mV, Vcm = 0.45 V 0xB = HSDS 700 mV, Vcm = 0.5 V 0xC = HSDS 800 mV, Vcm = 0.55 V 0xD = HSDS 900 mV, Vcm = 0.6 V 0xE = HSDS 1000 mV, Vcm = 0.65 V 0xF = HCSL 750 mV (fast) 0x10 = HSDS 400 mV, Vcm = 0.7 V 0x20 = LVDS, Vcm = 1.25 V 0x32 = HSDS 600 mV, Vcm = 0.8 V 0x33 = HSDS 700 mV, Vcm = 0.9 V 0x34 = HSDS 800 mV, Vcm = 1 V 0x4F = HCSL 750 mV

1.592 R1025 (Offset = 0x401)

Return to the [Summary Table](#).

Table 1-594. R1025 Field Descriptions

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3	OUT_2_CAP_EN	R/W	0x1	ROM=Y, EEPROM=N

Table 1-594. R1025 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
2:0	OUT_2_CONFIGURATIO N	R/W	0x0	OUT2 configuration. ROM=Y, EEPROM=Y and N 0x2 = Static DC 0x3 = CHDIV 0x4 = BYPASS 0x5 = BYPASS

1.593 R1026 (Offset = 0x402)Return to the [Summary Table](#).**Table 1-595. R1026 Field Descriptions**

Bit	Field	Type	Reset	Description
7	OUT_2_CHAN_POL_SEL	R/W	0x0	OUT2 ChanDiv Polarity Select. When cleared, this bit inverts the polarity of the input to the channel divider. ROM=Y, EEPROM=N
6:5	OUT_2_CLK_MUX	R/W	0x0	OUT2 Input Clock Select. Selects the input clock which will be used to drive the output. ROM=Y, EEPROM=Y 0x0 = PLL3 0x1 = PLL2 0x2 = PLL1_PRI
4	RESERVED	R	0x0	Reserved
3	OUT_2_DIV_EN	R/W	0x1	OUT2 ChanDiv Enable. Enables the channel divider. Note: SYSREF/ chandiv mode must be configured separately. ROM=Y, EEPROM=Y
2:0	OUT_2_CH_MUX_SEL	R/W	0x7	OUT2 Clock Enable. Bit 2, if set, passes the selected VCO1 clock (VCO1P or VCO1S), to the second stage of clock selection. Bit 1 and Bit0 enable the selected clock to drive the channel divider and the channel divider retimer respectively. ROM=Y, EEPROM=Y 0x0 = PLL2->BYPASS 0x3 = PLL2->CHDIV 0x4 = PLL1->BYPASS 0x7 = PLL1->CHDIV

1.594 R1027 (Offset = 0x403)Return to the [Summary Table](#).**Table 1-596. R1027 Field Descriptions**

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4	OUT_2_MUTE_EN	R/W	0x0	Mute enable. ROM=Y, EEPROM=N
3	OUT_2_SYNC_EN	R/W	0x1	OUT2 ChanDiv Sync Enable. Enables synchronization of chandiv dividers for OUT2. ROM=Y, EEPROM=N
2:0	RESERVED	R	0x0	Reserved

1.595 R1028 (Offset = 0x404)Return to the [Summary Table](#).**Table 1-597. R1028 Field Descriptions**

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved

Table 1-597. R1028 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
3:0	OUT_2_CH_STATIC_OFF SET_11:8	R/W	0x0	See Register 1029

1.596 R1029 (Offset = 0x405)

Return to the [Summary Table](#).

Table 1-598. R1029 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	OUT_2_CH_STATIC_OFF SET	R/W	0x0	OUT_2_CH_DIV static digital delay value. Delays divider start by specified number of full clock cycles of divider input. This results in specified digital delay upon divider synchronization. Lower 8 bits are stored in EEPROM. ROM=Y, EEPROM=Y

1.597 R1030 (Offset = 0x406)

Return to the [Summary Table](#).

Table 1-599. R1030 Field Descriptions

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3:0	OUT_2_CH_DIV_11:8	R/W	0x0	See Register 1031

1.598 R1031 (Offset = 0x407)

Return to the [Summary Table](#).

Table 1-600. R1031 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	OUT_2_CH_DIV	R/W	0xA	OUT2 ChanDiv Divide Value. ROM=Y, EEPROM=Y

1.599 R1056 (Offset = 0x420)

Return to the [Summary Table](#).

Table 1-601. R1056 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_3_EN	R/W	0x1	OUT3 Enable. ROM=Y, EEPROM=Y

Table 1-601. R1056 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
5:0	OUT_3_FMT	R/W	0x0	Remix of OUT_3_VOD and OUT_3_VOS to display datasheet specified settings available to user. ROM=Y, EEPROM=Y 0x8 = HSDS 400 mV, Vcm = 0.35 V 0x9 = HSDS 500 mV, Vcm = 0.4 V 0xA = HSDS 600 mV, Vcm = 0.45 V 0xB = HSDS 700 mV, Vcm = 0.5 V 0xC = HSDS 800 mV, Vcm = 0.55 V 0xD = HSDS 900 mV, Vcm = 0.6 V 0xE = HSDS 1000 mV, Vcm = 0.65 V 0xF = HCSL 750 mV (fast) 0x10 = HSDS 400 mV, Vcm = 0.7 V 0x20 = LVDS, Vcm = 1.25 V 0x32 = HSDS 600 mV, Vcm = 0.8 V 0x33 = HSDS 700 mV, Vcm = 0.9 V 0x34 = HSDS 800 mV, Vcm = 1 V 0x4F = HCSL 750 mV

1.600 R1057 (Offset = 0x421)Return to the [Summary Table](#).**Table 1-602. R1057 Field Descriptions**

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3	OUT_3_CAP_EN	R/W	0x1	ROM=Y, EEPROM=N
2:0	OUT_3_CONFIGURATIO N	R/W	0x0	OUT3 configuration. ROM=Y, EEPROM=Y and N 0x2 = Static DC 0x3 = CHDIV 0x4 = BYPASS 0x5 = BYPASS

1.601 R1058 (Offset = 0x422)Return to the [Summary Table](#).**Table 1-603. R1058 Field Descriptions**

Bit	Field	Type	Reset	Description
7	OUT_3_CHAN_POL_SEL	R/W	0x0	OUT3 ChanDiv Polarity Select. When cleared, this bit inverts the polarity of the input to the channel divider. ROM=Y, EEPROM=N
6:5	OUT_3_CLK_MUX	R/W	0x0	OUT3 Input Clock Select. Selects the input clock which will be used to drive the output. ROM=Y, EEPROM=Y 0x0 = PLL3 0x1 = PLL2 0x2 = PLL1_PRI
4	RESERVED	R	0x0	Reserved
3	OUT_3_DIV_EN	R/W	0x1	OUT3 ChanDiv Enable. Enables the channel divider. Note: SYSREF/ chandiv mode must be configured separately. ROM=Y, EEPROM=Y

Table 1-603. R1058 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
2:0	OUT_3_CH_MUX_SEL	R/W	0x7	OUT3 Clock Enable. Bit 2, if set, passes the selected VCO1 clock (VCO1P or VCO1S), to the second stage of clock selection. Bit 1 and Bit0 enable the selected clock to drive the channel divider and the channel divider retimer respectively. ROM=Y, EEPROM=Y 0x0 = PLL2->BYPASS 0x3 = PLL2->CHDIV 0x4 = PLL1->BYPASS 0x7 = PLL1->CHDIV

1.602 R1059 (Offset = 0x423)

Return to the [Summary Table](#).

Table 1-604. R1059 Field Descriptions

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4	OUT_3_MUTE_EN	R/W	0x0	Mute enable. ROM=Y, EEPROM=N
3	OUT_3_SYNC_EN	R/W	0x1	OUT3 ChanDiv Sync Enable. Enables synchronization of chandiv dividers for OUT3. ROM=Y, EEPROM=N
2:0	RESERVED	R	0x0	Reserved

1.603 R1060 (Offset = 0x424)

Return to the [Summary Table](#).

Table 1-605. R1060 Field Descriptions

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3:0	OUT_3_CH_STATIC_OFF SET_11:8	R/W	0x0	See Register 1061

1.604 R1061 (Offset = 0x425)

Return to the [Summary Table](#).

Table 1-606. R1061 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	OUT_3_CH_STATIC_OFF SET	R/W	0x0	OUT_3_CH_DIV static digital delay value. Delays divider start by specified number of full clock cycles of divider input. This results in specified digital delay upon divider synchronization. Lower 8 bits are stored in EEPROM. ROM=Y, EEPROM=Y

1.605 R1062 (Offset = 0x426)

Return to the [Summary Table](#).

Table 1-607. R1062 Field Descriptions

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3:0	OUT_3_CH_DIV_11:8	R/W	0x0	See Register 1063

1.606 R1063 (Offset = 0x427)Return to the [Summary Table](#).**Table 1-608. R1063 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	OUT_3_CH_DIV	R/W	0xA	OUT3 ChanDiv Divide Value. ROM=Y, EEPROM=Y

1.607 R1088 (Offset = 0x440)Return to the [Summary Table](#).**Table 1-609. R1088 Field Descriptions**

Bit	Field	Type	Reset	Description
7:3	RESERVED	R	0x0	Reserved
2:0	OUT_4_5_SR_ANA_DLY_BIASTRIM	R/W	0x4	Channel Analog Delay Bias Trim ROM=N, EEPROM=Y

1.608 R1089 (Offset = 0x441)Return to the [Summary Table](#).**Table 1-610. R1089 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_4_EN	R/W	0x1	OUT4 Enable. ROM=Y, EEPROM=Y
5:0	OUT_4_FMT	R/W	0x0	Remix of OUT_4_VOD and OUT_4_VOS to display datasheet specified settings available to user. ROM=Y, EEPROM=Y 0x8 = HSDS 400 mV, Vcm = 0.35 V 0x9 = HSDS 500 mV, Vcm = 0.4 V 0xA = HSDS 600 mV, Vcm = 0.45 V 0xB = HSDS 700 mV, Vcm = 0.5 V 0xC = HSDS 800 mV, Vcm = 0.55 V 0xD = HSDS 900 mV, Vcm = 0.6 V 0xE = HSDS 1000 mV, Vcm = 0.65 V 0xF = HCSL 750 mV (fast) 0x10 = HSDS 400 mV, Vcm = 0.7 V 0x20 = LVDS, Vcm = 1.25 V 0x32 = HSDS 600 mV, Vcm = 0.8 V 0x33 = HSDS 700 mV, Vcm = 0.9 V 0x34 = HSDS 800 mV, Vcm = 1 V 0x4F = HCSL 750 mV

1.609 R1090 (Offset = 0x442)Return to the [Summary Table](#).**Table 1-611. R1090 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_4_CAP_EN	R/W	0x0	ROM=Y, EEPROM=N
5	RESERVED	R	0x0	Reserved

Table 1-611. R1090 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
4:0	OUT_4_CONFIGURATIO N	R/W	0x0	OUT4 configuration. ROM=Y, EEPROM=Y and N 0x0 = CH/2 0x8 = SYSREF+ADLY 0x9 = SYSREF 0xA = Static DC 0xC = CHDIV 0x10 = BYPASS

1.610 R1091 (Offset = 0x443)

Return to the [Summary Table](#).

Table 1-612. R1091 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_5_EN	R/W	0x0	OUT5 Enable. ROM=Y, EEPROM=Y
5:0	OUT_5_FMT	R/W	0x0	Remix of OUT_5_VOD and OUT_5_VOS to display datasheet specified settings available to user. ROM=Y, EEPROM=Y 0x8 = HSDS 400 mV, Vcm = 0.35 V 0x9 = HSDS 500 mV, Vcm = 0.4 V 0xA = HSDS 600 mV, Vcm = 0.45 V 0xB = HSDS 700 mV, Vcm = 0.5 V 0xC = HSDS 800 mV, Vcm = 0.55 V 0xD = HSDS 900 mV, Vcm = 0.6 V 0xE = HSDS 1000 mV, Vcm = 0.65 V 0xF = HCSL 750 mV (fast) 0x10 = HSDS 400 mV, Vcm = 0.7 V 0x20 = LVDS, Vcm = 1.25 V 0x32 = HSDS 600 mV, Vcm = 0.8 V 0x33 = HSDS 700 mV, Vcm = 0.9 V 0x34 = HSDS 800 mV, Vcm = 1 V 0x4F = HCSL 750 mV

1.611 R1092 (Offset = 0x444)

Return to the [Summary Table](#).

Table 1-613. R1092 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_5_CAP_EN	R/W	0x0	ROM=Y, EEPROM=N
5	RESERVED	R	0x0	Reserved
4:0	OUT_5_CONFIGURATIO N	R/W	0x0	OUT5 configuration. ROM=Y, EEPROM=Y and N 0x0 = CH/2 0x8 = SYSREF+ADLY 0x9 = SYSREF 0xA = Static DC 0xC = CHDIV 0x10 = BYPASS

1.612 R1093 (Offset = 0x445)

Return to the [Summary Table](#).

Table 1-614. R1093 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5	OUT_4_5_DIV_SYNC_EN	R/W	0x1	OUT4_5 Divider Sync Enable. Enables synchronization of chandiv dividers for OUT4_5. ROM=Y, EEPROM=N
4	OUT_4_5_SR_DIV_SYNC_EN	R/W	0x1	OUT4_5 SYSREF Divider Sync Enable. Enables synchronization of SYSREF dividers for OUT4_5. ROM=Y, EEPROM=N
3:2	RESERVED	R	0x0	Reserved
1	OUT_4_5_CHAN_POL_SEL	R/W	0x0	OUT4_5 ChanDiv Polarity Select. When cleared, this bit inverts the polarity of the input to the channel divider. ROM=Y, EEPROM=N
0	OUT_4_5_DIV_EN	R/W	0x1	OUT4_5 ChanDiv Enable. Enables the channel divider. Note: SYSREF/chandiv mode must be configured separately. ROM=Y, EEPROM=Y

1.613 R1094 (Offset = 0x446)Return to the [Summary Table](#).**Table 1-615. R1094 Field Descriptions**

Bit	Field	Type	Reset	Description
7	OUT_4_5_MUTE_EN	R/W	0x0	Mute enable. ROM=Y, EEPROM=N
6	OUT_4_5_ZDM_EN	R/W	0x0	OUT4_5 zero delay output enable ROM=Y, EEPROM=N
5	OUT_4_5_CLK_IN_SEL	R/W	0x0	OUT4_5 Input Clock Select. Selects the input clock which will be used to drive the output: 0 = VCO2, 1 = VCO3 ROM=Y, EEPROM=Y 0x0 = PLL2 0x1 = PLL3
4	OUT_4_5_CH_DIV_SR_MUX_CLK_SEL	R/W	0x0	OUT4_5 ChanDiv to SYSREF Clock Select. When set, the channel divider output is inverted before being fed to the SYSREF. ROM=Y, EEPROM=N
3:0	OUT_4_5_CH_MUX_SEL	R/W	0x3	OUT4_5 Input Clock Enable. Enables the selected clock to various inputs: [0] -> ChanDiv, [1] -> ChanDiv Retimer, [2] -> Div2 to OUT4, [3] -> Div2 to OUT5 ROM=Y, EEPROM=Y 0x0 = OFF 0x1 = SYSREF 0x3 = CHDIV 0x4 = DIV2->OUT4 0x5 = DIV2->OUT4, SYSREF->OUT5 0x7 = DIV2->OUT4, CHDIV->OUT5 0x8 = DIV2->OUT5 0x9 = SYSREF->OUT4, DIV2->OUT5 0xB = CHDIV->OUT4, DIV2->OUT5 0xC = DIV2->OUT4, DIV2->OUT5

1.614 R1095 (Offset = 0x447)Return to the [Summary Table](#).**Table 1-616. R1095 Field Descriptions**

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3:0	OUT_4_5_CH_STATIC_OFFSET_11:8	R/W	0x0	See Register 1096

1.615 R1096 (Offset = 0x448)

Return to the [Summary Table](#).

Table 1-617. R1096 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	OUT_4_5_CH_STATIC_OFFSET	R/W	0x0	OUT_4_5_CH_DIV static digital delay value. Delays divider start by specified number of full clock cycles of divider input. This results in specified digital delay upon divider synchronization. Lower 8 bits are stored in EEPROM. ROM=Y, EEPROM=Y

1.616 R1097 (Offset = 0x449)

Return to the [Summary Table](#).

Table 1-618. R1097 Field Descriptions

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3:0	OUT_4_5_CH_DIV_11:8	R/W	0x0	See Register 1098

1.617 R1098 (Offset = 0x44A)

Return to the [Summary Table](#).

Table 1-619. R1098 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	OUT_4_5_CH_DIV	R/W	0x5	OUT4_5 ChanDiv Divide Value. ROM=Y, EEPROM=Y

1.618 R1099 (Offset = 0x44B)

Return to the [Summary Table](#).

Table 1-620. R1099 Field Descriptions

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4:0	OUT_4_5_SR_ANA_DELAY	R/W	0x0	OUT4_5 SYSREF Analog Delay. Specified here in multiples of one delay step duration. ROM=Y, EEPROM=N

1.619 R1100 (Offset = 0x44C)

Return to the [Summary Table](#).

Table 1-621. R1100 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5	OUT_4_5_SR_ANA_DELAY_DIV2_SEL	R/W	0x0	OUT4_5 SYSREF Analog Delay Div By 2 Select. Divides the incoming clock by 2 to double the delay step size. Useful for increasing analog delay range, given high incoming clock frequencies. ROM=Y, EEPROM=N
4	OUT_4_5_SR_ANA_DELAY_EN	R/W	0x0	OUT4_5 SYSREF Analog Delay Enable. Enables the analog delay generator. Set to a 0 to save power if analog delay generator is not needed. ROM=Y, EEPROM=N

Table 1-621. R1100 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
3	OUT_4_5_SR_ANA_DELAY_SMALL_STEP_EN	R/W	0x1	OUT4_5 SYSREF Analog Delay Small Step Enable. If set to 1, the analog delay generator will use both rising and falling edges of the incoming clock to halve delay step size. Useful for when large pre-divider values have been used. ROM=Y, EEPROM=N
2:0	OUT_4_5_SR_ANA_DELAY_RANGE	R/W	0x5	Analog delay range is set according to the period entering the SYSREF analog delay block. The period can be calculated as $(OUT_x_y_SR_ANA_DELAY_DIV2_SEL + 1) / (OUT_x_y_SR_ANA_DELAY_SMALL_STEP_EN + 1) / VCO$ post divider frequency. Calculated range must fall between 333 ps and 1050 ps. ROM=Y, EEPROM=N 0x0 = Reserved 0x1 = Reserved 0x2 = 333 ps to 450 ps 0x3 = > 450 ps to 600 ps 0x4 = > 600 ps to 750 ps 0x5 = > 750 ps to 1050 ps 0x6 = Reserved 0x7 = Reserved

1.620 R1101 (Offset = 0x44D)Return to the [Summary Table](#).**Table 1-622. R1101 Field Descriptions**

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4:0	OUT_4_5_SR_DDLY	R/W	0x0	OUT4_5 SYSREF Digital Delay Value. Measured in VCO half-cycles. ROM=Y, EEPROM=N

1.621 R1102 (Offset = 0x44E)Return to the [Summary Table](#).**Table 1-623. R1102 Field Descriptions**

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3:0	OUT_4_5_SR_DIV_19:16	R/W	0x0	See Register 1104

1.622 R1103 (Offset = 0x44F)Return to the [Summary Table](#).**Table 1-624. R1103 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	OUT_4_5_SR_DIV_15:8	R/W	0x0	See Register 1104

1.623 R1104 (Offset = 0x450)Return to the [Summary Table](#).

Table 1-625. R1104 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	OUT_4_5_SR_DIV	R/W	0x19	OUT4_5 SYSREF Divide Value. ROM=Y, EEPROM=N

1.624 R1105 (Offset = 0x451)

Return to the [Summary Table](#).

Table 1-626. R1105 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:0	OUT_4_5_SR_DIV_STATI C_OFFSET_14:8	R/W	0x0	See Register 1106

1.625 R1106 (Offset = 0x452)

Return to the [Summary Table](#).

Table 1-627. R1106 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	OUT_4_5_SR_DIV_STATI C_OFFSET	R/W	0x0	OUT_4_5_SR_DIV static digital delay value. Delays divider start by specified number of full clock cycles of divider input. This results in specified digital delay upon divider synchronization ROM=Y, EEPROM=N

1.626 R1107 (Offset = 0x453)

Return to the [Summary Table](#).

Table 1-628. R1107 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_4_5_SR_REQ_MOD E	R/W	0x0	OUT4_5 SYSREF Mute Enable ROM=Y, EEPROM=N
5:3	OUT_4_5_PULSE_COUN T	R/W	0x0	OUT4_5 SYSREF Pulse Count. The number of SYSREF pulses which will be generated by a SYSREF request. ROM=Y, EEPROM=N
2	OUT_4_5_SR_GPIO_EN	R/W	0x0	Enables SYSREF to digital for SYSREF request resampling, continuous SYSREF, or 1-PPS GPIO output. Only one OUT_x_y_SR_GPIO_EN should be enabled at a time. ROM=Y, EEPROM=N
1:0	OUT_4_5_SR_MODE	R/W	0x0	OUT4_5 SYSREF Mode. When these bits are set, the SYSREF operates in Continuous Mode. When cleared, the SYSREF operates in Pulse Mode. ROM=Y, EEPROM=N 0x0 = None 0x1 = Continuous 0x2 = Pulser

1.627 R1108 (Offset = 0x454)

Return to the [Summary Table](#).

Table 1-629. R1108 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved

Table 1-629. R1108 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
6:5	RESERVED	R	0x0	Reserved
4	OUT_4_5_SR_CH_DIV_BYPASS	R/W	0x1	OUT4_5 cascaded SYSREF bypass mux. If set, bypasses OUT4_5 channel divider for the SYSREF input clock. This is useful for minimizing the step size of the digital delay adjustments on the SYSREF clock. ROM=Y, EEPROM=N
3:0	RESERVED	R	0x0	Reserved

1.628 R1121 (Offset = 0x461)Return to the [Summary Table](#).**Table 1-630. R1121 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_6_EN	R/W	0x1	OUT6 Enable. ROM=Y, EEPROM=Y
5:0	OUT_6_FMT	R/W	0x0	Remix of OUT_6_VOD and OUT_6_VOS to display datasheet specified settings available to user. ROM=Y, EEPROM=Y 0x8 = HSDS 400 mV, Vcm = 0.35 V 0x9 = HSDS 500 mV, Vcm = 0.4 V 0xA = HSDS 600 mV, Vcm = 0.45 V 0xB = HSDS 700 mV, Vcm = 0.5 V 0xC = HSDS 800 mV, Vcm = 0.55 V 0xD = HSDS 900 mV, Vcm = 0.6 V 0xE = HSDS 1000 mV, Vcm = 0.65 V 0xF = HCSL 750 mV (fast) 0x10 = HSDS 400 mV, Vcm = 0.7 V 0x20 = LVDS, Vcm = 1.25 V 0x32 = HSDS 600 mV, Vcm = 0.8 V 0x33 = HSDS 700 mV, Vcm = 0.9 V 0x34 = HSDS 800 mV, Vcm = 1 V 0x4F = HCSL 750 mV

1.629 R1122 (Offset = 0x462)Return to the [Summary Table](#).**Table 1-631. R1122 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_6_CAP_EN	R/W	0x1	ROM=Y, EEPROM=N
5	RESERVED	R	0x0	Reserved
4:0	OUT_6_CONFIGURATION	R/W	0x0	OUT6 configuration. ROM=Y, EEPROM=Y and N 0x0 = CH/2 0x8 = SYSREF+ADLY 0x9 = SYSREF 0xA = Static DC 0xC = CHDIV 0x10 = BYPASS

1.630 R1123 (Offset = 0x463)Return to the [Summary Table](#).

Table 1-632. R1123 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_7_EN	R/W	0x0	OUT7 Enable. ROM=Y, EEPROM=Y
5:0	OUT_7_FMT	R/W	0x0	Remix of OUT_7_VOD and OUT_7_VOS to display datasheet specified settings available to user. ROM=Y, EEPROM=Y 0x8 = HSDS 400 mV, Vcm = 0.35 V 0x9 = HSDS 500 mV, Vcm = 0.4 V 0xA = HSDS 600 mV, Vcm = 0.45 V 0xB = HSDS 700 mV, Vcm = 0.5 V 0xC = HSDS 800 mV, Vcm = 0.55 V 0xD = HSDS 900 mV, Vcm = 0.6 V 0xE = HSDS 1000 mV, Vcm = 0.65 V 0xF = HCSL 750 mV (fast) 0x10 = HSDS 400 mV, Vcm = 0.7 V 0x20 = LVDS, Vcm = 1.25 V 0x32 = HSDS 600 mV, Vcm = 0.8 V 0x33 = HSDS 700 mV, Vcm = 0.9 V 0x34 = HSDS 800 mV, Vcm = 1 V 0x4F = HCSL 750 mV

1.631 R1124 (Offset = 0x464)

Return to the [Summary Table](#).

Table 1-633. R1124 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_7_CAP_EN	R/W	0x0	ROM=Y, EEPROM=N
5	RESERVED	R	0x0	Reserved
4:0	OUT_7_CONFIGURATIO N	R/W	0x0	OUT7 configuration. ROM=Y, EEPROM=Y and N 0x0 = CH/2 0x8 = SYSREF+ADLY 0x9 = SYSREF 0xA = Static DC 0xC = CHDIV 0x10 = BYPASS

1.632 R1125 (Offset = 0x465)

Return to the [Summary Table](#).

Table 1-634. R1125 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5	OUT_6_7_DIV_SYNC_EN	R/W	0x1	OUT6_7 Divider Sync Enable. Enables synchronization of chandiv dividers for OUT6_7. ROM=Y, EEPROM=N
4	OUT_6_7_SR_DIV_SYNC _EN	R/W	0x1	OUT6_7 SYSREF Divider Sync Enable. Enables synchronization of SYSREF dividers for OUT6_7. ROM=Y, EEPROM=N
3:2	RESERVED	R	0x0	Reserved
1	OUT_6_7_CHAN_POL_S EL	R/W	0x0	OUT6_7 ChanDiv Polarity Select. When cleared, this bit inverts the polarity of the input to the channel divider. ROM=Y, EEPROM=N

Table 1-634. R1125 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
0	OUT_6_7_DIV_EN	R/W	0x1	OUT6_7 ChanDiv Enable. Enables the channel divider. Note: SYSREF/chandiv mode must be configured separately. ROM=Y, EEPROM=Y

1.633 R1126 (Offset = 0x466)Return to the [Summary Table](#).**Table 1-635. R1126 Field Descriptions**

Bit	Field	Type	Reset	Description
7	OUT_6_7_MUTE_EN	R/W	0x0	Mute enable. ROM=Y, EEPROM=N
6	RESERVED	R	0x0	Reserved
5	OUT_6_7_CLK_IN_SEL	R/W	0x0	OUT6_7 Input Clock Select. Selects the input clock which will be used to drive the output: 0 = VCO2, 1 = VCO3 ROM=Y, EEPROM=Y 0x0 = PLL2 0x1 = PLL3
4	OUT_6_7_CH_DIV_SR_MUX_CLK_SEL	R/W	0x0	OUT6_7 ChanDiv to SYSREF Clock Select. When set, the channel divider output is inverted before being fed to the SYSREF. ROM=Y, EEPROM=N
3:0	OUT_6_7_CH_MUX_SEL	R/W	0x3	OUT6_7 Input Clock Enable. Enables the selected clock to various inputs: [0] -> ChanDiv, [1] -> ChanDiv Retimer, [2] -> Div2 to OUT6, [3] -> Div2 to OUT7 ROM=Y, EEPROM=Y 0x0 = OFF 0x1 = SYSREF 0x3 = CHDIV 0x4 = DIV2->OUT6 0x5 = DIV2->OUT6, SYSREF->OUT7 0x7 = DIV2->OUT6, CHDIV->OUT7 0x8 = DIV2->OUT7 0x9 = SYSREF->OUT6, DIV2->OUT7 0xB = CHDIV->OUT6, DIV2->OUT7 0xC = DIV2->OUT6, DIV2->OUT7

1.634 R1127 (Offset = 0x467)Return to the [Summary Table](#).**Table 1-636. R1127 Field Descriptions**

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3:0	OUT_6_7_CH_STATIC_OFFSET_11:8	R/W	0x0	See Register 1128

1.635 R1128 (Offset = 0x468)Return to the [Summary Table](#).**Table 1-637. R1128 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	OUT_6_7_CH_STATIC_OFFSET	R/W	0x0	OUT_6_7_CH_DIV static digital delay value. Delays divider start by specified number of full clock cycles of divider input. This results in specified digital delay upon divider synchronization. Lower 8 bits are stored in EEPROM. ROM=Y, EEPROM=Y

1.636 R1129 (Offset = 0x469)

Return to the [Summary Table](#).

Table 1-638. R1129 Field Descriptions

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3:0	OUT_6_7_CH_DIV_11:8	R/W	0x0	See Register 1130

1.637 R1130 (Offset = 0x46A)

Return to the [Summary Table](#).

Table 1-639. R1130 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	OUT_6_7_CH_DIV	R/W	0x4	OUT6_7 ChanDiv Divide Value. ROM=Y, EEPROM=Y

1.638 R1131 (Offset = 0x46B)

Return to the [Summary Table](#).

Table 1-640. R1131 Field Descriptions

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4:0	OUT_6_7_SR_ANA_DELAY	R/W	0x0	OUT6_7 SYSREF Analog Delay. Specified here in multiples of one delay step duration. ROM=Y, EEPROM=N

1.639 R1132 (Offset = 0x46C)

Return to the [Summary Table](#).

Table 1-641. R1132 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5	OUT_6_7_SR_ANA_DELAY_DIV2_SEL	R/W	0x0	OUT6_7 SYSREF Analog Delay Div By 2 Select. Divides the incoming clock by 2 to double the delay step size. Useful for increasing analog delay range, given high incoming clock frequencies. ROM=Y, EEPROM=N
4	OUT_6_7_SR_ANA_DELAY_EN	R/W	0x0	OUT6_7 SYSREF Analog Delay Enable. Enables the analog delay generator. Set to a 0 to save power if analog delay generator is not needed. ROM=Y, EEPROM=N
3	OUT_6_7_SR_ANA_DELAY_SMALL_STEP_EN	R/W	0x1	OUT6_7 SYSREF Analog Delay Small Step Enable. If set to 1, the analog delay generator will use both rising and falling edges of the incoming clock to halve delay step size. Useful for when large pre-divider values have been used. ROM=Y, EEPROM=N

Table 1-641. R1132 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
2:0	OUT_6_7_SR_ANA_DELAY_RANGE	R/W	0x5	Analog delay range is set according to the period entering the SYSREF analog delay block. The period can be calculated as $(OUT_x_y_SR_ANA_DELAY_DIV2_SEL + 1) / (OUT_x_y_SR_ANA_DELAY_SMALL_STEP_EN + 1) / VCO$ post divider frequency. Calculated range must fall between 333 ps and 1050 ps. ROM=Y, EEPROM=N 0x0 = Reserved 0x1 = Reserved 0x2 = 333 ps to 450 ps 0x3 = > 450 ps to 600 ps 0x4 = > 600 ps to 750 ps 0x5 = > 750 ps to 1050 ps 0x6 = Reserved 0x7 = Reserved

1.640 R1133 (Offset = 0x46D)Return to the [Summary Table](#).**Table 1-642. R1133 Field Descriptions**

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4:0	OUT_6_7_SR_DDLY	R/W	0x0	OUT6_7 SYSREF Digital Delay Value. Measured in VCO half-cycles. ROM=Y, EEPROM=N

1.641 R1134 (Offset = 0x46E)Return to the [Summary Table](#).**Table 1-643. R1134 Field Descriptions**

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3:0	OUT_6_7_SR_DIV_19:16	R/W	0x0	See Register 1136

1.642 R1135 (Offset = 0x46F)Return to the [Summary Table](#).**Table 1-644. R1135 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	OUT_6_7_SR_DIV_15:8	R/W	0x0	See Register 1136

1.643 R1136 (Offset = 0x470)Return to the [Summary Table](#).**Table 1-645. R1136 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	OUT_6_7_SR_DIV	R/W	0x18	OUT6_7 SYSREF Divide Value. ROM=Y, EEPROM=N

1.644 R1137 (Offset = 0x471)Return to the [Summary Table](#).

Table 1-646. R1137 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:0	OUT_6_7_SR_DIV_STATI C_OFFSET_14:8	R/W	0x0	See Register 1138

1.645 R1138 (Offset = 0x472)

Return to the [Summary Table](#).

Table 1-647. R1138 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	OUT_6_7_SR_DIV_STATI C_OFFSET	R/W	0x0	OUT_6_7_SR_DIV static digital delay value. Delays divider start by specified number of full clock cycles of divider input. This results in specified digital delay upon divider synchronization ROM=Y, EEPROM=N

1.646 R1139 (Offset = 0x473)

Return to the [Summary Table](#).

Table 1-648. R1139 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_6_7_SR_REQ_MOD E	R/W	0x0	OUT6_7 SYSREF Mute Enable ROM=Y, EEPROM=N
5:3	OUT_6_7_PULSE_COUN T	R/W	0x0	OUT6_7 SYSREF Pulse Count. The number of SYSREF pulses which will be generated by a SYSREF request. ROM=Y, EEPROM=N
2	OUT_6_7_SR_GPIO_EN	R/W	0x0	Enables SYSREF to digital for SYSREF request resampling, continuous SYSREF, or 1-PPS GPIO output. Only one OUT_x_y_SR_GPIO_EN should be enabled at a time. ROM=Y, EEPROM=N
1:0	OUT_6_7_SR_MODE	R/W	0x0	OUT6_7 SYSREF Mode. When these bits are set, the SYSREF operates in Continuous Mode. When cleared, the SYSREF operates in PULSE MODE. ROM=Y, EEPROM=N 0x0 = None 0x1 = Continuous 0x2 = Pulser

1.647 R1140 (Offset = 0x474)

Return to the [Summary Table](#).

Table 1-649. R1140 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:5	RESERVED	R	0x0	Reserved
4	OUT_6_7_SR_CH_DIV_B YPASS	R/W	0x1	OUT6_7 cascaded SYSREF bypass mux. If set, bypasses OUT6_7 channel divider for the SYSREF input clock. This is useful for minimizing the step size of the digital delay adjustments on the SYSREF clock. ROM=Y, EEPROM=N
3:0	RESERVED	R	0x0	Reserved

1.648 R1153 (Offset = 0x481)Return to the [Summary Table](#).**Table 1-650. R1153 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_8_EN	R/W	0x0	OUT8 Enable. ROM=Y, EEPROM=Y
5:0	OUT_8_FMT	R/W	0x0	Remix of OUT_8_VOD and OUT_8_VOS to display datasheet specified settings available to user. ROM=Y, EEPROM=Y 0x8 = HSDS 400 mV, Vcm = 0.35 V 0x9 = HSDS 500 mV, Vcm = 0.4 V 0xA = HSDS 600 mV, Vcm = 0.45 V 0xB = HSDS 700 mV, Vcm = 0.5 V 0xC = HSDS 800 mV, Vcm = 0.55 V 0xD = HSDS 900 mV, Vcm = 0.6 V 0xE = HSDS 1000 mV, Vcm = 0.65 V 0xF = HCSL 750 mV (fast) 0x10 = HSDS 400 mV, Vcm = 0.7 V 0x20 = LVDS, Vcm = 1.25 V 0x32 = HSDS 600 mV, Vcm = 0.8 V 0x33 = HSDS 700 mV, Vcm = 0.9 V 0x34 = HSDS 800 mV, Vcm = 1 V 0x4F = HCSL 750 mV

1.649 R1154 (Offset = 0x482)Return to the [Summary Table](#).**Table 1-651. R1154 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_8_CAP_EN	R/W	0x0	ROM=Y, EEPROM=N
5	RESERVED	R	0x0	Reserved
4:0	OUT_8_CONFIGURATIO N	R/W	0x0	OUT8 configuration. ROM=Y, EEPROM=Y and N 0x0 = CH/2 0x8 = SYSREF+ADLY 0x9 = SYSREF 0xA = Static DC 0xC = CHDIV 0x10 = BYPASS

1.650 R1155 (Offset = 0x483)Return to the [Summary Table](#).**Table 1-652. R1155 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_9_EN	R/W	0x0	OUT9 Enable. ROM=Y, EEPROM=Y

Table 1-652. R1155 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
5:0	OUT_9_FMT	R/W	0x0	Remix of OUT_9_VOD and OUT_9_VOS to display datasheet specified settings available to user. ROM=Y, EEPROM=Y 0x8 = HSDS 400 mV, Vcm = 0.35 V 0x9 = HSDS 500 mV, Vcm = 0.4 V 0xA = HSDS 600 mV, Vcm = 0.45 V 0xB = HSDS 700 mV, Vcm = 0.5 V 0xC = HSDS 800 mV, Vcm = 0.55 V 0xD = HSDS 900 mV, Vcm = 0.6 V 0xE = HSDS 1000 mV, Vcm = 0.65 V 0xF = HCSL 750 mV (fast) 0x10 = HSDS 400 mV, Vcm = 0.7 V 0x20 = LVDS, Vcm = 1.25 V 0x32 = HSDS 600 mV, Vcm = 0.8 V 0x33 = HSDS 700 mV, Vcm = 0.9 V 0x34 = HSDS 800 mV, Vcm = 1 V 0x4F = HCSL 750 mV

1.651 R1156 (Offset = 0x484)

Return to the [Summary Table](#).

Table 1-653. R1156 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_9_CAP_EN	R/W	0x0	ROM=Y, EEPROM=N
5	RESERVED	R	0x0	Reserved
4:0	OUT_9_CONFIGURATIO N	R/W	0x0	OUT9 configuration. ROM=Y, EEPROM=Y and N 0x0 = CH/2 0x8 = SYSREF+ADLY 0x9 = SYSREF 0xA = Static DC 0xC = CHDIV 0x10 = BYPASS

1.652 R1157 (Offset = 0x485)

Return to the [Summary Table](#).

Table 1-654. R1157 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5	OUT_8_9_DIV_SYNC_EN	R/W	0x1	OUT8_9 Divider Sync Enable. Enables synchronization of chandiv dividers for OUT8_9. ROM=Y, EEPROM=N
4	OUT_8_9_SR_DIV_SYNC _EN	R/W	0x1	OUT8_9 SYSREF Divider Sync Enable. Enables synchronization of SYSREF dividers for OUT8_9. ROM=Y, EEPROM=N
3:2	RESERVED	R	0x0	Reserved
1	OUT_8_9_CHAN_POL_S EL	R/W	0x0	OUT8_9 ChanDiv Polarity Select. When cleared, this bit inverts the polarity of the input to the channel divider. ROM=Y, EEPROM=N
0	OUT_8_9_DIV_EN	R/W	0x1	OUT8_9 ChanDiv Enable. Enables the channel divider. Note: SYSREF/chandiv mode must be configured separately. ROM=Y, EEPROM=Y

1.653 R1158 (Offset = 0x486)Return to the [Summary Table](#).**Table 1-655. R1158 Field Descriptions**

Bit	Field	Type	Reset	Description
7	OUT_8_9_MUTE_EN	R/W	0x0	Mute enable. ROM=Y, EEPROM=N
6	RESERVED	R	0x0	Reserved
5	OUT_8_9_CLK_IN_SEL	R/W	0x1	OUT8_9 Input Clock Select. Selects the input clock which will be used to drive the output: 0 = VCO2, 1 = VCO3 ROM=Y, EEPROM=Y 0x0 = PLL2 0x1 = PLL3
4	OUT_8_9_CH_DIV_SR_MUX_CLK_SEL	R/W	0x0	OUT8_9 ChanDiv to SYSREF Clock Select. When set, the channel divider output is inverted before being fed to the SYSREF. ROM=Y, EEPROM=N
3:0	OUT_8_9_CH_MUX_SEL	R/W	0x3	OUT8_9 Input Clock Enable. Enables the selected clock to various inputs: [0] -> ChanDiv, [1] -> ChanDiv Retimer, [2] -> Div2 to OUT8, [3] -> Div2 to OUT9 ROM=Y, EEPROM=Y 0x0 = OFF 0x1 = SYSREF 0x3 = CHDIV 0x4 = DIV2->OUT8 0x5 = DIV2->OUT8, SYSREF->OUT9 0x7 = DIV2->OUT8, CHDIV->OUT9 0x8 = DIV2->OUT9 0x9 = SYSREF->OUT8, DIV2->OUT9 0xB = CHDIV->OUT8, DIV2->OUT9 0xC = DIV2->OUT8, DIV2->OUT9

1.654 R1159 (Offset = 0x487)Return to the [Summary Table](#).**Table 1-656. R1159 Field Descriptions**

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3:0	OUT_8_9_CH_STATIC_OFFSET_11:8	R/W	0x0	See Register 1160

1.655 R1160 (Offset = 0x488)Return to the [Summary Table](#).**Table 1-657. R1160 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	OUT_8_9_CH_STATIC_OFFSET	R/W	0x0	OUT_8_9_CH_DIV static digital delay value. Delays divider start by specified number of full clock cycles of divider input. This results in specified digital delay upon divider synchronization. Lower 8 bits are stored in EEPROM. ROM=Y, EEPROM=Y

1.656 R1161 (Offset = 0x489)Return to the [Summary Table](#).

Table 1-658. R1161 Field Descriptions

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3:0	OUT_8_9_CH_DIV_11:8	R/W	0x0	See Register 1162

1.657 R1162 (Offset = 0x48A)

Return to the [Summary Table](#).

Table 1-659. R1162 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	OUT_8_9_CH_DIV	R/W	0x2	OUT8_9 ChanDiv Divide Value. ROM=Y, EEPROM=Y

1.658 R1163 (Offset = 0x48B)

Return to the [Summary Table](#).

Table 1-660. R1163 Field Descriptions

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4:0	OUT_8_9_SR_ANA_DELAY	R/W	0x0	OUT8_9 SYSREF Analog Delay. Specified here in multiples of one delay step duration. ROM=Y, EEPROM=N

1.659 R1164 (Offset = 0x48C)

Return to the [Summary Table](#).

Table 1-661. R1164 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5	OUT_8_9_SR_ANA_DELAY_DIV2_SEL	R/W	0x0	OUT8_9 SYSREF Analog Delay Div By 2 Select. Divides the incoming clock by 2 to double the delay step size. Useful for increasing analog delay range, given high incoming clock frequencies. ROM=Y, EEPROM=N
4	OUT_8_9_SR_ANA_DELAY_EN	R/W	0x0	OUT8_9 SYSREF Analog Delay Enable. Enables the analog delay generator. Set to a 0 to save power if analog delay generator is not needed. ROM=Y, EEPROM=N
3	OUT_8_9_SR_ANA_DELAY_SMALL_STEP_EN	R/W	0x1	OUT8_9 SYSREF Analog Delay Small Step Enable. If set to 1, the analog delay generator will use both rising and falling edges of the incoming clock to halve delay step size. Useful for when large pre-divider values have been used. ROM=Y, EEPROM=N

Table 1-661. R1164 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
2:0	OUT_8_9_SR_ANA_DELAY_RANGE	R/W	0x5	Analog delay range is set according to the period entering the SYSREF analog delay block. The period can be calculated as $(OUT_x_y_SR_ANA_DELAY_DIV2_SEL + 1) / (OUT_x_y_SR_ANA_DELAY_SMALL_STEP_EN + 1) / VCO$ post divider frequency. Calculated range must fall between 333 ps and 1050 ps. ROM=Y, EEPROM=N 0x0 = Reserved 0x1 = Reserved 0x2 = 333 ps to 450 ps 0x3 = > 450 ps to 600 ps 0x4 = > 600 ps to 750 ps 0x5 = > 750 ps to 1050 ps 0x6 = Reserved 0x7 = Reserved

1.660 R1165 (Offset = 0x48D)Return to the [Summary Table](#).**Table 1-662. R1165 Field Descriptions**

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4:0	OUT_8_9_SR_DDLY	R/W	0x0	OUT8_9 SYSREF Digital Delay Value. Measured in VCO half-cycles. ROM=Y, EEPROM=N

1.661 R1166 (Offset = 0x48E)Return to the [Summary Table](#).**Table 1-663. R1166 Field Descriptions**

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3:0	OUT_8_9_SR_DIV_19:16	R/W	0x0	See Register 1168

1.662 R1167 (Offset = 0x48F)Return to the [Summary Table](#).**Table 1-664. R1167 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	OUT_8_9_SR_DIV_15:8	R/W	0x0	See Register 1168

1.663 R1168 (Offset = 0x490)Return to the [Summary Table](#).**Table 1-665. R1168 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	OUT_8_9_SR_DIV	R/W	0x40	OUT8_9 SYSREF Divide Value. ROM=Y, EEPROM=N

1.664 R1169 (Offset = 0x491)Return to the [Summary Table](#).

Table 1-666. R1169 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:0	OUT_8_9_SR_DIV_STATI C_OFFSET_14:8	R/W	0x0	See Register 1170

1.665 R1170 (Offset = 0x492)

Return to the [Summary Table](#).

Table 1-667. R1170 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	OUT_8_9_SR_DIV_STATI C_OFFSET	R/W	0x0	OUT_8_9_SR_DIV static digital delay value. Delays divider start by specified number of full clock cycles of divider input. This results in specified digital delay upon divider synchronization ROM=Y, EEPROM=N

1.666 R1171 (Offset = 0x493)

Return to the [Summary Table](#).

Table 1-668. R1171 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_8_9_SR_REQ_MOD E	R/W	0x0	OUT8_9 SYSREF Mute Enable ROM=Y, EEPROM=N
5:3	OUT_8_9_PULSE_COUN T	R/W	0x0	OUT8_9 SYSREF Pulse Count. The number of SYSREF pulses which will be generated by a SYSREF request. ROM=Y, EEPROM=N
2	OUT_8_9_SR_GPIO_EN	R/W	0x1	Enables SYSREF to digital for SYSREF request resampling, continuous SYSREF, or 1-PPS GPIO output. Only one OUT_x_y_SR_GPIO_EN should be enabled at a time. ROM=Y, EEPROM=N
1:0	OUT_8_9_SR_MODE	R/W	0x0	OUT8_9 SYSREF Mode. When these bits are set, the SYSREF operates in Continuous Mode. When cleared, the SYSREF operates in PULSE MODE. ROM=Y, EEPROM=N 0x0 = None 0x1 = Continuous 0x2 = Pulser

1.667 R1185 (Offset = 0x4A1)

Return to the [Summary Table](#).

Table 1-669. R1185 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_10_EN	R/W	0x0	OUT10 Enable. ROM=Y, EEPROM=Y

Table 1-669. R1185 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
5:0	OUT_10_FMT	R/W	0x0	Remix of OUT_10_VOD and OUT_10_VOS to display datasheet specified settings available to user. ROM=Y, EEPROM=Y 0x8 = HSDS 400 mV, Vcm = 0.35 V 0x9 = HSDS 500 mV, Vcm = 0.4 V 0xA = HSDS 600 mV, Vcm = 0.45 V 0xB = HSDS 700 mV, Vcm = 0.5 V 0xC = HSDS 800 mV, Vcm = 0.55 V 0xD = HSDS 900 mV, Vcm = 0.6 V 0xE = HSDS 1000 mV, Vcm = 0.65 V 0xF = HCSL 750 mV (fast) 0x10 = HSDS 400 mV, Vcm = 0.7 V 0x20 = LVDS, Vcm = 1.25 V 0x32 = HSDS 600 mV, Vcm = 0.8 V 0x33 = HSDS 700 mV, Vcm = 0.9 V 0x34 = HSDS 800 mV, Vcm = 1 V 0x4F = HCSL 750 mV

1.668 R1186 (Offset = 0x4A2)Return to the [Summary Table](#).**Table 1-670. R1186 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_10_CAP_EN	R/W	0x0	ROM=Y, EEPROM=N
5	RESERVED	R	0x0	Reserved
4:0	OUT_10_CONFIGURATI ON	R/W	0x0	OUT10 configuration. ROM=Y, EEPROM=Y and N 0x0 = CH/2 0x8 = SYSREF+ADLY 0x9 = SYSREF 0xA = Static DC 0xC = CHDIV 0x10 = BYPASS

1.669 R1187 (Offset = 0x4A3)Return to the [Summary Table](#).**Table 1-671. R1187 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_11_EN	R/W	0x0	OUT11 Enable. ROM=Y, EEPROM=Y

Table 1-671. R1187 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
5:0	OUT_11_FMT	R/W	0x0	Remix of OUT_11_VOD and OUT_11_VOS to display datasheet specified settings available to user. ROM=Y, EEPROM=Y 0x8 = HSDS 400 mV, Vcm = 0.35 V 0x9 = HSDS 500 mV, Vcm = 0.4 V 0xA = HSDS 600 mV, Vcm = 0.45 V 0xB = HSDS 700 mV, Vcm = 0.5 V 0xC = HSDS 800 mV, Vcm = 0.55 V 0xD = HSDS 900 mV, Vcm = 0.6 V 0xE = HSDS 1000 mV, Vcm = 0.65 V 0xF = HCSL 750 mV (fast) 0x10 = HSDS 400 mV, Vcm = 0.7 V 0x20 = LVDS, Vcm = 1.25 V 0x32 = HSDS 600 mV, Vcm = 0.8 V 0x33 = HSDS 700 mV, Vcm = 0.9 V 0x34 = HSDS 800 mV, Vcm = 1 V 0x4F = HCSL 750 mV

1.670 R1188 (Offset = 0x4A4)

Return to the [Summary Table](#).

Table 1-672. R1188 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_11_CAP_EN	R/W	0x0	ROM=Y, EEPROM=N
5	RESERVED	R	0x0	Reserved
4:0	OUT_11_CONFIGURATIO N	R/W	0x0	OUT11 configuration. ROM=Y, EEPROM=Y and N 0x0 = CH/2 0x8 = SYSREF+ADLY 0x9 = SYSREF 0xA = Static DC 0xC = CHDIV 0x10 = BYPASS

1.671 R1189 (Offset = 0x4A5)

Return to the [Summary Table](#).

Table 1-673. R1189 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5	OUT_10_11_DIV_SYNC_ EN	R/W	0x1	OUT10_11 Divider Sync Enable. Enables synchronization of chandiv dividers for OUT10_11. ROM=Y, EEPROM=N
4	OUT_10_11_SR_DIV_SY NC_EN	R/W	0x1	OUT10_11 SYSREF Divider Sync Enable. Enables synchronization of SYSREF dividers for OUT10_11. ROM=Y, EEPROM=N
3:2	RESERVED	R	0x0	Reserved
1	OUT_10_11_CHAN_POL_ SEL	R/W	0x0	OUT10_11 ChanDiv Polarity Select. When cleared, this bit inverts the polarity of the input to the channel divider. ROM=Y, EEPROM=N
0	OUT_10_11_DIV_EN	R/W	0x1	OUT10_11 ChanDiv Enable. Enables the channel divider. Note: SYSREF/chandiv mode must be configured separately. ROM=Y, EEPROM=Y

1.672 R1190 (Offset = 0x4A6)Return to the [Summary Table](#).**Table 1-674. R1190 Field Descriptions**

Bit	Field	Type	Reset	Description
7	OUT_10_11_MUTE_EN	R/W	0x0	Mute enable. ROM=Y, EEPROM=N
6	OUT_10_11_ZDM_EN	R/W	0x0	OUT10_11 zero delay output enable. ROM=Y, EEPROM=N
5	OUT_10_11_CLK_IN_SEL	R/W	0x1	OUT10_11 Input Clock Select. Selects the input clock which will be used to drive the output: 0 = VCO2, 1 = VCO3 ROM=Y, EEPROM=Y 0x0 = PLL2 0x1 = PLL3
4	OUT_10_11_CH_DIV_SR_MUX_CLK_SEL	R/W	0x0	OUT10_11 ChanDiv to SYSREF Clock Select. When set, the channel divider output is inverted before being fed to the SYSREF. ROM=Y, EEPROM=N
3:0	OUT_10_11_CH_MUX_SEL	R/W	0x1	OUT10_11 Input Clock Enable. Enables the selected clock to various inputs: [0] -> ChanDiv, [1] -> ChanDiv Retimer, [2] -> Div2 to OUT10, [3] -> Div2 to OUT11 ROM=Y, EEPROM=Y 0x0 = OFF 0x1 = SYSREF 0x3 = CHDIV 0x4 = DIV2->OUT10 0x5 = DIV2->OUT10, SYSREF->OUT11 0x7 = DIV2->OUT10, CHDIV->OUT11 0x8 = DIV2->OUT11 0x9 = SYSREF->OUT10, DIV2->OUT11 0xB = CHDIV->OUT10, DIV2->OUT11 0xC = DIV2->OUT10, DIV2->OUT11

1.673 R1191 (Offset = 0x4A7)Return to the [Summary Table](#).**Table 1-675. R1191 Field Descriptions**

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3:0	OUT_10_11_CH_STATIC_OFFSET_11:8	R/W	0x0	See Register 1192

1.674 R1192 (Offset = 0x4A8)Return to the [Summary Table](#).**Table 1-676. R1192 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	OUT_10_11_CH_STATIC_OFFSET	R/W	0x0	OUT_10_11_CH_DIV static digital delay value. Delays divider start by specified number of full clock cycles of divider input. This results in specified digital delay upon divider synchronization. Lower 8 bits are stored in EEPROM. ROM=Y, EEPROM=Y

1.675 R1193 (Offset = 0x4A9)Return to the [Summary Table](#).

Table 1-677. R1193 Field Descriptions

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3:0	OUT_10_11_CH_DIV_11:8	R/W	0x0	See Register 1194

1.676 R1194 (Offset = 0x4AA)

Return to the [Summary Table](#).

Table 1-678. R1194 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	OUT_10_11_CH_DIV	R/W	0x2	OUT10_11 ChanDiv Divide Value. ROM=Y, EEPROM=Y

1.677 R1195 (Offset = 0x4AB)

Return to the [Summary Table](#).

Table 1-679. R1195 Field Descriptions

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4:0	OUT_10_11_SR_ANA_DE LAY	R/W	0x0	OUT10_11 SYSREF Analog Delay. Specified here in multiples of one delay step duration. ROM=Y, EEPROM=N

1.678 R1196 (Offset = 0x4AC)

Return to the [Summary Table](#).

Table 1-680. R1196 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5	OUT_10_11_SR_ANA_DE LAY_DIV2_SEL	R/W	0x0	OUT10_11 SYSREF Analog Delay Div By 2 Select. Divides the incoming clock by 2 to double the delay step size. Useful for increasing analog delay range, given high incoming clock frequencies. ROM=Y, EEPROM=N
4	OUT_10_11_SR_ANA_DE LAY_EN	R/W	0x0	OUT10_11 SYSREF Analog Delay Enable. Enables the analog delay generator. Set to a 0 to save power if analog delay generator is not needed. ROM=Y, EEPROM=N
3	OUT_10_11_SR_ANA_DE LAY_SMALL_STEP_EN	R/W	0x1	OUT10_11 SYSREF Analog Delay Small Step Enable. If set to 1, the analog delay generator will use both rising and falling edges of the incoming clock to halve delay step size. Useful for when large pre-divider values have been used. ROM=Y, EEPROM=N

Table 1-680. R1196 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
2:0	OUT_10_11_SR_ANA_DELAY_RANGE	R/W	0x5	Analog delay range is set according to the period entering the SYSREF analog delay block. The period can be calculated as $(OUT_x_y_SR_ANA_DELAY_DIV2_SEL + 1) / (OUT_x_y_SR_ANA_DELAY_SMALL_STEP_EN + 1) / VCO$ post divider frequency. Calculated range must fall between 333 ps and 1050 ps. ROM=Y, EEPROM=N 0x0 = Reserved 0x1 = Reserved 0x2 = 333 ps to 450 ps 0x3 = > 450 ps to 600 ps 0x4 = > 600 ps to 750 ps 0x5 = > 750 ps to 1050 ps 0x6 = Reserved 0x7 = Reserved

1.679 R1197 (Offset = 0x4AD)Return to the [Summary Table](#).**Table 1-681. R1197 Field Descriptions**

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4:0	OUT_10_11_SR_DDLY	R/W	0x0	OUT10_11 SYSREF Digital Delay Value. Measured in VCO half-cycles. ROM=Y, EEPROM=N

1.680 R1198 (Offset = 0x4AE)Return to the [Summary Table](#).**Table 1-682. R1198 Field Descriptions**

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3:0	OUT_10_11_SR_DIV_19:16	R/W	0x0	See Register 1200

1.681 R1199 (Offset = 0x4AF)Return to the [Summary Table](#).**Table 1-683. R1199 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	OUT_10_11_SR_DIV_15:8	R/W	0x0	See Register 1200

1.682 R1200 (Offset = 0x4B0)Return to the [Summary Table](#).**Table 1-684. R1200 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	OUT_10_11_SR_DIV	R/W	0x40	OUT10_11 SYSREF Divide Value. ROM=Y, EEPROM=N

1.683 R1201 (Offset = 0x4B1)

Return to the [Summary Table](#).

Table 1-685. R1201 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:0	OUT_10_11_SR_DIV_ST ATIC_OFFSET_14:8	R/W	0x0	See Register 1202

1.684 R1202 (Offset = 0x4B2)

Return to the [Summary Table](#).

Table 1-686. R1202 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	OUT_10_11_SR_DIV_ST ATIC_OFFSET	R/W	0x0	OUT_10_11_SR_DIV static digital delay value. Delays divider start by specified number of full clock cycles of divider input. This results in specified digital delay upon divider synchronization ROM=Y, EEPROM=N

1.685 R1203 (Offset = 0x4B3)

Return to the [Summary Table](#).

Table 1-687. R1203 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_10_11_SR_REQ_M ODE	R/W	0x0	OUT10_11 SYSREF Mute Enable ROM=Y, EEPROM=N
5:3	OUT_10_11_PULSE_CO UNT	R/W	0x0	OUT10_11 SYSREF Pulse Count. The number of SYSREF pulses which will be generated by a SYSREF request. ROM=Y, EEPROM=N
2	OUT_10_11_SR_GPIO_E N	R/W	0x0	Enables SYSREF to digital for SYSREF request resampling, continuous SYSREF, or 1-PPS GPIO output. Only one OUT_x_y_SR_GPIO_EN should be enabled at a time. ROM=Y, EEPROM=N
1:0	OUT_10_11_SR_MODE	R/W	0x0	OUT10_11 SYSREF Mode. When these bits are set, the SYSREF operates in Continuous Mode. When cleared, the SYSREF operates in PULSE MODE. ROM=Y, EEPROM=N 0x0 = None 0x1 = Continuous 0x2 = Pulser

1.686 R1204 (Offset = 0x4B4)

Return to the [Summary Table](#).

Table 1-688. R1204 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:5	RESERVED	R	0x0	Reserved
4	OUT_10_11_SR_CH_DIV _BYPASS	R/W	0x1	OUT10_11 cascaded SYSREF bypass mux. If set, bypasses OUT10_11 channel divider for the SYSREF input clock. This is useful for minimizing the step size of the digital delay adjustments on the SYSREF clock. ROM=Y, EEPROM=N

Table 1-688. R1204 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
3:0	RESERVED	R	0x0	Reserved

1.687 R1217 (Offset = 0x4C1)Return to the [Summary Table](#).**Table 1-689. R1217 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_12_EN	R/W	0x0	OUT12 Enable. ROM=Y, EEPROM=Y
5:0	OUT_12_FMT	R/W	0x0	Remix of OUT_12_VOD and OUT_12_VOS to display datasheet specified settings available to user. ROM=Y, EEPROM=Y 0x8 = HSDS 400 mV, Vcm = 0.35 V 0x9 = HSDS 500 mV, Vcm = 0.4 V 0xA = HSDS 600 mV, Vcm = 0.45 V 0xB = HSDS 700 mV, Vcm = 0.5 V 0xC = HSDS 800 mV, Vcm = 0.55 V 0xD = HSDS 900 mV, Vcm = 0.6 V 0xE = HSDS 1000 mV, Vcm = 0.65 V 0xF = HCSL 750 mV (fast) 0x10 = HSDS 400 mV, Vcm = 0.7 V 0x20 = LVDS, Vcm = 1.25 V 0x32 = HSDS 600 mV, Vcm = 0.8 V 0x33 = HSDS 700 mV, Vcm = 0.9 V 0x34 = HSDS 800 mV, Vcm = 1 V 0x4F = HCSL 750 mV

1.688 R1218 (Offset = 0x4C2)Return to the [Summary Table](#).**Table 1-690. R1218 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_12_CAP_EN	R/W	0x1	ROM=Y, EEPROM=N
5	RESERVED	R	0x0	Reserved
4:0	OUT_12_CONFIGURATI ON	R/W	0x0	OUT12 configuration. ROM=Y, EEPROM=Y and N 0x0 = CH/2 0x8 = SYSREF+ADLY 0x9 = SYSREF 0xA = Static DC 0xC = CHDIV 0x10 = BYPASS

1.689 R1219 (Offset = 0x4C3)Return to the [Summary Table](#).**Table 1-691. R1219 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_13_EN	R/W	0x0	OUT13 Enable. ROM=Y, EEPROM=Y

Table 1-691. R1219 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
5:0	OUT_13_FMT	R/W	0x0	Remix of OUT_13_VOD and OUT_13_VOS to display datasheet specified settings available to user. ROM=Y, EEPROM=Y 0x8 = HSDS 400 mV, Vcm = 0.35 V 0x9 = HSDS 500 mV, Vcm = 0.4 V 0xA = HSDS 600 mV, Vcm = 0.45 V 0xB = HSDS 700 mV, Vcm = 0.5 V 0xC = HSDS 800 mV, Vcm = 0.55 V 0xD = HSDS 900 mV, Vcm = 0.6 V 0xE = HSDS 1000 mV, Vcm = 0.65 V 0xF = HCSL 750 mV (fast) 0x10 = HSDS 400 mV, Vcm = 0.7 V 0x20 = LVDS, Vcm = 1.25 V 0x32 = HSDS 600 mV, Vcm = 0.8 V 0x33 = HSDS 700 mV, Vcm = 0.9 V 0x34 = HSDS 800 mV, Vcm = 1 V 0x4F = HCSL 750 mV

1.690 R1220 (Offset = 0x4C4)

Return to the [Summary Table](#).

Table 1-692. R1220 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_13_CAP_EN	R/W	0x1	ROM=Y, EEPROM=N
5	RESERVED	R	0x0	Reserved
4:0	OUT_13_CONFIGURATI ON	R/W	0x0	OUT13 configuration. ROM=Y, EEPROM=Y and N 0x0 = CH/2 0x8 = SYSREF+ADLY 0x9 = SYSREF 0xA = Static DC 0xC = CHDIV 0x10 = BYPASS

1.691 R1221 (Offset = 0x4C5)

Return to the [Summary Table](#).

Table 1-693. R1221 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5	OUT_12_13_DIV_SYNC_ EN	R/W	0x1	OUT12_13 Divider Sync Enable. Enables synchronization of chandiv dividers for OUT12_13. ROM=Y, EEPROM=N
4	OUT_12_13_SR_DIV_SY NC_EN	R/W	0x1	OUT12_13 SYSREF Divider Sync Enable. Enables synchronization of SYSREF dividers for OUT12_13. ROM=Y, EEPROM=N
3:2	RESERVED	R	0x0	Reserved
1	OUT_12_13_CHAN_POL _SEL	R/W	0x0	OUT12_13 ChanDiv Polarity Select. When cleared, this bit inverts the polarity of the input to the channel divider. ROM=Y, EEPROM=N
0	OUT_12_13_DIV_EN	R/W	0x1	OUT12_13 ChanDiv Enable. Enables the channel divider. Note: SYSREF/chandiv mode must be configured separately. ROM=Y, EEPROM=Y

1.692 R1222 (Offset = 0x4C6)Return to the [Summary Table](#).**Table 1-694. R1222 Field Descriptions**

Bit	Field	Type	Reset	Description
7	OUT_12_13_MUTE_EN	R/W	0x0	Mute enable. ROM=Y, EEPROM=N
6	RESERVED	R	0x0	Reserved
5	OUT_12_13_CLK_IN_SELECT	R/W	0x1	OUT12_13 Input Clock Select. Selects the input clock which will be used to drive the output. For crosslark performance OUT8 to OUT13 should select the same VCO source: 0 = VCO2, 1 = VCO3. ROM=Y, EEPROM=Y 0x0 = PLL2 0x1 = PLL3
4	OUT_12_13_CH_DIV_SR_MUX_CLK_SEL	R/W	0x0	OUT12_13 ChanDiv to SYSREF Clock Select. When set, the channel divider output is inverted before being fed to the SYSREF. ROM=Y, EEPROM=N
3:0	OUT_12_13_CH_MUX_SELECT	R/W	0x3	OUT12_13 Input Clock Enable. Enables the selected clock to various inputs: [0] -> ChanDiv, [1] -> ChanDiv Retimer, [2] -> Div2 to OUT12, [3] -> Div2 to OUT13 ROM=Y, EEPROM=Y 0x0 = OFF 0x1 = SYSREF 0x3 = CHDIV 0x4 = DIV2->OUT12 0x5 = DIV2->OUT12, SYSREF->OUT13 0x7 = DIV2->OUT12, CHDIV->OUT13 0x8 = DIV2->OUT13 0x9 = SYSREF->OUT12, DIV2->OUT13 0xB = CHDIV->OUT12, DIV2->OUT13 0xC = DIV2->OUT12, DIV2->OUT13

1.693 R1223 (Offset = 0x4C7)Return to the [Summary Table](#).**Table 1-695. R1223 Field Descriptions**

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3:0	OUT_12_13_CH_STATIC_OFFSET_11:8	R/W	0x0	See Register 1224

1.694 R1224 (Offset = 0x4C8)Return to the [Summary Table](#).**Table 1-696. R1224 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	OUT_12_13_CH_STATIC_OFFSET	R/W	0x0	OUT_12_13_CH_DIV static digital delay value. Delays divider start by specified number of full clock cycles of divider input. This results in specified digital delay upon divider synchronization. Lower 8 bits are stored in EEPROM. ROM=Y, EEPROM=Y

1.695 R1225 (Offset = 0x4C9)Return to the [Summary Table](#).

Table 1-697. R1225 Field Descriptions

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3:0	OUT_12_13_CH_DIV_11:8	R/W	0x0	See Register 1226

1.696 R1226 (Offset = 0x4CA)

Return to the [Summary Table](#).

Table 1-698. R1226 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	OUT_12_13_CH_DIV	R/W	0x4	OUT12_13 ChanDiv Divide Value. ROM=Y, EEPROM=Y

1.697 R1227 (Offset = 0x4CB)

Return to the [Summary Table](#).

Table 1-699. R1227 Field Descriptions

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4:0	OUT_12_13_SR_ANA_D ELAY	R/W	0x0	OUT12_13 SYSREF Analog Delay. Specified here in multiples of one delay step duration. ROM=Y, EEPROM=N

1.698 R1228 (Offset = 0x4CC)

Return to the [Summary Table](#).

Table 1-700. R1228 Field Descriptions

Bit	Field	Type	Reset	Description
7:6	RESERVED	R	0x0	Reserved
5	OUT_12_13_SR_ANA_D ELAY_DIV2_SEL	R/W	0x0	OUT12_13 SYSREF Analog Delay Div By 2 Select. Divides the incoming clock by 2 to double the delay step size. Useful for increasing analog delay range, given high incoming clock frequencies. ROM=Y, EEPROM=N
4	OUT_12_13_SR_ANA_D ELAY_EN	R/W	0x0	OUT12_13 SYSREF Analog Delay Enable. Enables the analog delay generator. Set to a 0 to save power if analog delay generator is not needed. ROM=Y, EEPROM=N
3	OUT_12_13_SR_ANA_D ELAY_SMALL_STEP_EN	R/W	0x1	OUT12_13 SYSREF Analog Delay Small Step Enable. If set to 1, the analog delay generator will use both rising and falling edges of the incoming clock to halve delay step size. Useful for when large pre-divider values have been used. ROM=Y, EEPROM=N

Table 1-700. R1228 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
2:0	OUT_12_13_SR_ANA_DELAY_RANGE	R/W	0x5	Analog delay range is set according to the period entering the SYSREF analog delay block. The period can be calculated as $(OUT_x_y_SR_ANA_DELAY_DIV2_SEL + 1) / (OUT_x_y_SR_ANA_DELAY_SMALL_STEP_EN + 1) / VCO$ post divider frequency. Calculated range must fall between 333 ps and 1050 ps. ROM=Y, EEPROM=N 0x0 = Reserved 0x1 = Reserved 0x2 = 333 ps to 450 ps 0x3 = > 450 ps to 600 ps 0x4 = > 600 ps to 750 ps 0x5 = > 750 ps to 1050 ps 0x6 = Reserved 0x7 = Reserved

1.699 R1229 (Offset = 0x4CD)Return to the [Summary Table](#).**Table 1-701. R1229 Field Descriptions**

Bit	Field	Type	Reset	Description
7:5	RESERVED	R	0x0	Reserved
4:0	OUT_12_13_SR_DDLY	R/W	0x0	OUT12_13 SYSREF Digital Delay Value. Measured in VCO half-cycles. ROM=Y, EEPROM=N

1.700 R1230 (Offset = 0x4CE)Return to the [Summary Table](#).**Table 1-702. R1230 Field Descriptions**

Bit	Field	Type	Reset	Description
7:4	RESERVED	R	0x0	Reserved
3:0	OUT_12_13_SR_DIV_19:16	R/W	0x0	See Register 1232

1.701 R1231 (Offset = 0x4CF)Return to the [Summary Table](#).**Table 1-703. R1231 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	OUT_12_13_SR_DIV_15:8	R/W	0x0	See Register 1232

1.702 R1232 (Offset = 0x4D0)Return to the [Summary Table](#).**Table 1-704. R1232 Field Descriptions**

Bit	Field	Type	Reset	Description
7:0	OUT_12_13_SR_DIV	R/W	0x18	OUT12_13 SYSREF Divide Value. ROM=Y, EEPROM=N

1.703 R1233 (Offset = 0x4D1)

Return to the [Summary Table](#).

Table 1-705. R1233 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:0	OUT_12_13_SR_DIV_ST ATIC_OFFSET_14:8	R/W	0x0	See Register 1234

1.704 R1234 (Offset = 0x4D2)

Return to the [Summary Table](#).

Table 1-706. R1234 Field Descriptions

Bit	Field	Type	Reset	Description
7:0	OUT_12_13_SR_DIV_ST ATIC_OFFSET	R/W	0x0	OUT_12_13_SR_DIV static digital delay value. Delays divider start by specified number of full clock cycles of divider input. This results in specified digital delay upon divider synchronization ROM=Y, EEPROM=N

1.705 R1235 (Offset = 0x4D3)

Return to the [Summary Table](#).

Table 1-707. R1235 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	OUT_12_13_SR_REQ_M ODE	R/W	0x0	OUT12_13 SYSREF Mute Enable ROM=Y, EEPROM=N
5:3	OUT_12_13_PULSE_CO UNT	R/W	0x0	OUT12_13 SYSREF Pulse Count. The number of SYSREF pulses which will be generated by a SYSREF request. ROM=Y, EEPROM=N
2	OUT_12_13_SR_GPIO_E N	R/W	0x1	Enables SYSREF to digital for SYSREF request resampling, continuous SYSREF, or 1-PPS GPIO output. Only one OUT_x_y_SR_GPIO_EN should be enabled at a time. ROM=Y, EEPROM=N
1:0	OUT_12_13_SR_MODE	R/W	0x0	OUT12_13 SYSREF Mode. When these bits are set, the SYSREF operates in Continuous Mode. When cleared, the SYSREF operates in PULSE MODE. ROM=Y, EEPROM=N 0x0 = None 0x1 = Continuous 0x2 = Pulser

1.706 R1236 (Offset = 0x4D4)

Return to the [Summary Table](#).

Table 1-708. R1236 Field Descriptions

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6:5	RESERVED	R	0x0	Reserved
4	OUT_12_13_SR_CH_DIV _BYPASS	R/W	0x1	OUT12_13 cascaded SYSREF bypass mux. If set, bypasses OUT12_13 channel divider for the SYSREF input clock. This is useful for minimizing the step size of the digital delay adjustments on the SYSREF clock. ROM=Y, EEPROM=N

Table 1-708. R1236 Field Descriptions (continued)

Bit	Field	Type	Reset	Description
3:0	RESERVED	R	0x0	Reserved

1.707 R1248 (Offset = 0x4E0)Return to the [Summary Table](#).**Table 1-709. R1248 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	RESERVED	R	0x0	Reserved
5:0	OUT_14_FMT	R/W	0x0	Remix of OUT_14_VOD and OUT_14_VOS to display datasheet specified settings available to user. ROM=Y, EEPROM=Y 0x8 = HSDS 400 mV, Vcm = 0.35 V 0x9 = HSDS 500 mV, Vcm = 0.4 V 0xA = HSDS 600 mV, Vcm = 0.45 V 0xB = HSDS 700 mV, Vcm = 0.5 V 0xC = HSDS 800 mV, Vcm = 0.55 V 0xD = HSDS 900 mV, Vcm = 0.6 V 0xE = HSDS 1000 mV, Vcm = 0.65 V 0xF = HCSL 750 mV (fast) 0x10 = HSDS 400 mV, Vcm = 0.7 V 0x20 = LVDS, Vcm = 1.25 V 0x32 = HSDS 600 mV, Vcm = 0.8 V 0x33 = HSDS 700 mV, Vcm = 0.9 V 0x34 = HSDS 800 mV, Vcm = 1 V 0x4F = HCSL 750 mV

1.708 R1280 (Offset = 0x500)Return to the [Summary Table](#).**Table 1-710. R1280 Field Descriptions**

Bit	Field	Type	Reset	Description
7	RESERVED	R	0x0	Reserved
6	RESERVED	R	0x0	Reserved
5:0	OUT_15_FMT	R/W	0x0	Remix of OUT_15_VOD and OUT_15_VOS to display datasheet specified settings available to user. ROM=Y, EEPROM=Y 0x8 = HSDS 400 mV, Vcm = 0.35 V 0x9 = HSDS 500 mV, Vcm = 0.4 V 0xA = HSDS 600 mV, Vcm = 0.45 V 0xB = HSDS 700 mV, Vcm = 0.5 V 0xC = HSDS 800 mV, Vcm = 0.55 V 0xD = HSDS 900 mV, Vcm = 0.6 V 0xE = HSDS 1000 mV, Vcm = 0.65 V 0xF = HCSL 750 mV (fast) 0x10 = HSDS 400 mV, Vcm = 0.7 V 0x20 = LVDS, Vcm = 1.25 V 0x32 = HSDS 600 mV, Vcm = 0.8 V 0x33 = HSDS 700 mV, Vcm = 0.9 V 0x34 = HSDS 800 mV, Vcm = 1 V 0x4F = HCSL 750 mV

2 Revision History

NOTE: Page numbers for previous revisions may differ from page numbers in the current version.

DATE	REVISION	NOTES
March 2025	*	Initial Release

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