🐺 Texas Instruments

Bill of Materials

TIDA-00609

ltem	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer	Alternate Part	PCB Footprint	Note
1		111			TEXAS INSTRUMENTS	Part Number		•	
1		U1		PROCESSOR SUPERVISORY CIRCUITS 2.93V 200ms		TPS3825-33DBVR			
2	1	U2		USB STREAMING CONTROLLER TOFP48-PFB ROHS	TEXAS INSTRUMENTS	TAS1020BPFB			
2				192kHz DIG AUDIO TRANSCEIVER W/STEREO ADC					
3	1	U3		AND ROUTING LQFP48-PT ROHS	TEXAS INSTRUMENTS	PCM9211PTR			
				24 BIT 96/192kHz 6-IN 8-OUT CODEC DIFF IN/OUT					
4		U4			TI/BURR-BROWN	PCM3168APAP			
5	1	U5		CODEC WCSP81-YZF ROHS	TEXAS INSTRUMENTS	TLV320AIC3262IYZFR			
6	1	U6		HTSSOP56-DCA ROHS	TEXAS INSTRUMENTS	TAS5548DCA			
7	1	U7		ROHS	TEXAS INSTRUMENTS	MSP430F5510IRGZR			
8	1	U8		QFN32-RGJ ROHS	TEXAS INSTRUMENTS	TCA6424ARGJR			
9	2	U9, EP1		SERIAL EEPROM I2C 512K 400kHz TSSOP8-ST ROHS	MICROCHIP	24LC512-I/ST			
				LO VOLT 8 BIT I2C EXPANDER INTERRUPT RESET					
10	1	U11		UQFN16-RSV,ROHS	TEXAS INSTRUMENTS	TCA6408ARSVR			
11	6	U12, U13, U14, U15, U16, U18		SOT553-DRL5 ROHS	TEXAS INSTRUMENTS	SN74LVC1G125DRLR			
12	1	U17		QFN12-RUE ROHS	TEXAS INSTRUMENTS	TCA6507RUER			
				DATAFLASH MEMORY 4MB SPI CONTROL UDFN8					
13	1	U19		ROHS	ADESTO TECHNOLOGIES	AT45DB041E-MHN2B-T			
14	2	A, PROF-A		LED BLUE SMD0603 2.85V 5mA ROHS	OSRAM OPTO	LB Q39G-L2N2-35-1		SMD0603	
15	2	B, PROF-B		LED RED SMD0603 2.1V 10mA ROHS	LITE-ON INC.	LTST-C190EKT		SMD0603	
16	5	BUF1, BUF2, BUF3, BUF4, BUF5		DUAL BUFFER GATE SOT553-DRL6 ROHS	TEXAS INSTRUMENTS	SN74LVC2G34DRLR			
17	2	D1, D2		SUPER FAST RECITIFIER DIODE 50V 2A SMA ROHS	DIODES INC	ES2AA-13-F			
18	2	D3, D5		SCHOTTKY BARRIER RECITIFIER 60V 3A SMA ROHS	DIODES INC	B360A-13-F			
19	1	D4		SCHOTTKY DIODE 30V 3A SOD-128_M-FLAT ROHS	ТОЅНІВА	CMS01(TE12L,Q,M)			
20	2	ET, OVF		LED YELLOW SMD0402 2.1V 10mA ROHS	ROHM SEMICONDUCTOR	SML-P12YTT86		SMD0402	
20	2	INV1, INV2		SINGLE INVERTER GATE SCHMITT-TRIGGER SOT553-	TEXAS INSTRUMENTS	SN74LVC1G14DRLR		510100402	
21	7	MUX1, MUX3, MUX4, MUX5, MUX6, MUX7, MUX8		MUX/DATA SELECTOR 2 TO 1 VSSOP8-DCU ROHS	TEXAS INSTRUMENTS	SN74LVC2G157DCUR			
23	2	MUX2A, MUX2B		DUAL SPDT ANALOG SWITCH 0.5 OHM LO-VOLT	TEXAS INSTRUMENTS	LMS4684LD/NOPB			
24	2	OA1, OA2		SOUNDPASS HI-PERF QUAD AUDIO OP AMP SOP14-D		OPA4134UA			
25		OPTO-IN		-	EVERLIGHT ELECTRONICS	PLR135/T10			
26		OPTO-OUT			EVERLIGHT ELECTRONICS	PLT133/T10W			
					CTS FREQUENCY				
27	1	OSC1		OSCILLATOR SMT 6.0MHz 3.3V OUT-ENABLE ROHS	CONTROLS	625L3I006M00000			
28		Q1		TRANSISTOR NPN GENERAL PURPOSE 40V 1A SOT23 DBV3 ROHS	DIODES INC.	MMBT2222A-7-F			
29		Q2, Q3		TRANSISTOR-NPN PREBIASED 10K SOT23-DBV3 ROHS		DDTC114TCA-7-F			
30	3	SW1, SW2, SW3		IC LVL-TRANSL I2C BUS REP, US8-DCU, ROHS	TEXAS INSTRUMENTS	TCA9406DCUR			

11 5 DAR, AMAGO, SITECA DH, WHITE, 297 SADBURDS ADDR DMM SMCCONDUCTOR SMUTPRICTING SMUTPRIC	Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
33 1 VPL	31	3	USB, ANALOG, OPTICAL		LED, WHITE 2.9V SMD0805 ROHS	PANASONIC	LNJ037X8ARA		SMD0805	
31 2 VPL Ref as VidBal LOC 2P HFF MMS 5077- DOL RO IS TOJS INSTRUMENTS TOJS INSTRUMENTS 2 VR2 DOL RO IS DOL RO IS TOJS INSTRUMENTS TOJS INSTRUMENTS 3 1 VR2 DOL RO IS DOL RO IS TOJS INSTRUMENTS TOJS INSTRUMENTS 3 1 VR2 DOL RO IS VID TREE LO 07 JA VIN-27 JW VSDIN- TOJS INSTRUMENTS TOJS INSTRUMENTS TOJS INSTRUMENTS 36 1 VR4 WD TREE LO 07 JA VIN-27 JW VSDIN- TOJS INSTRUMENTS TOJS INSTRUMENTS TOJS INSTRUMENTS 37 5 VR6 WD TREE LO 07 JA VIN-27 JW VSDIN- TOJS INSTRUMENTS TOJS INSTRUMENT										
3 1 Nrt Desy Sorks Procession (Procession) Processio	32	3	VALID, USB-LOCK, SPDIF-LOCK			ROHM SEMICONDUCTOR	SMLP12BC71186		SMD0402	
44 1 00 00 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 0000 000 000	22	1	VR1			TEXAS INSTRUMENTS				
34 1 VR2 DDA AONIS TEXAS INSTRUMENTS TESAS INSTR	55	-					11-37-30330001			
35 1 VR3 VV3 VV1	34	1	VR2			TEXAS INSTRUMENTS	TPS54332DDA			
36 1 VH4 VN14 VN14<										
36 1 VR4 NGCOODGA ROHS TEXAS INSTRUMENTS IPERBORD 5.0/MOPB 37 1 VR5 VOLT REG LID 3.3' 14 VINE-7.10V SORP 0.0015 TEXAS INSTRUMENTS TEST08330.0 </td <td>35</td> <td>1</td> <td>VR3</td> <td></td> <td>SOT23-DBV5 ROHS</td> <td>TEXAS INSTRUMENTS</td> <td>LMR62421XMFE/NOPB</td> <td></td> <td></td> <td></td>	35	1	VR3		SOT23-DBV5 ROHS	TEXAS INSTRUMENTS	LMR62421XMFE/NOPB			
37 1 VIS VOLT REG LDD 3.3V JA VIN-2.7.0V SORE-D ROHS TEXAS INSTRUMENTS TPS/8830D - 38 1 VIS VOLT REG JAW 400MA LDD CA/ FREE MNOS SOT23 TEXAS INSTRUMENTS TPS/3630DUT - 39 1 VIS DEVS RIPOL TEXAS INSTRUMENTS TPS/3630DUT - 39 1 CONSTAL SUM CAMUE CA/ FREE MNOS SOT23 TEXAS INSTRUMENTS TPS/3630DUT - 39 1 CONSTAL SUM CAMUE CA/ FREE MNOS SOT24 TEXAS INSTRUMENTS TPS/3630DUT - 40 1 Y2 CONSTAL SUM CAMUE STRUE SL2 288MH 30pm ABRACCM D2VT - 11 1 Y3 CONSTAL SUM CAMUE STRUE SL2 288MH 20pm D2VT - - 12 1 Y3 CONSTAL SUMORRD TEXAS INSTRUMENTS REMA SCIENCE SMO0402 - - 14 1 C CAPS MODRO2 2.1V IOM ROHS ROHM SEVICENDUTCR SML+22MTB6 SMO0402 14 1 C CAP SMODRO2 2.1V IOM ROHS ROHM SEVICENDUTCR SML+22MTB6 SMO0402 <td></td> <td></td> <td></td> <td></td> <td>VOLT REG LDO 5V 1A VIN=2.7-10V WSON6-</td> <td></td> <td></td> <td></td> <td></td> <td></td>					VOLT REG LDO 5V 1A VIN=2.7-10V WSON6-					
38 1 W65 W017 RC 1.3% 400AL LOC CAF FEEL NMOS 50723 DBVS BOHS TEXA INSTRUMENTS TPS736150BWT Image: Comparison of the comp	36	1	VR4		NGG0006A ROHS	TEXAS INSTRUMENTS	LP38690SD-5.0/NOPB			
38 1 W16 W017 RG 1.3X 4000AL LOC CAP FREE MNOS 50723 DBVS ROHS TEXA INSTRUMENTS TPS73615DBVT Image: Comparison of C										
38 1 VR6 DevS R0HS TEXA INSTRUMENTS TES730.08VT A A 39 1 VL CRYSTAL SAT-ABRUD 24 S70MH/2 AP IN 10PT IO ABRUD 24 S70MH/2 AP A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A A	37	1	VR5			TEXAS INSTRUMENTS	TPS76833QD			
39 1 CRYSTAL SMT AMM10 24 376MH2 4 PN 10PD ABM10 24 376MH2 420: PUNDAMPTAI BMP5 ABM10 24 376MH2 420: PUNDAMPTAI BMP5 40 1 Y2 CRYSTAL SMT AMM05 SERIES 12 288MH2 30ppm 18FPD BMP5 ABMACOM T 41 1 Y3 CRYSTAL SMT AMM06 SERIES 12 288MH2 30ppm 18FPD BMP5 ABMACOM D2Y-T 42 3 33.9, 5.0V, ZERO LED GREEN SMD0402 2.1V 10m A R0H5 ROHM SEMICONDUCTOR SML P12MTT86 SMD0402 43 1 C1 CAP SMD0402 2.1V 10m A R0H5 ROHM SEMICONDUCTOR SML P12MTT86 SMD0402 44 1 C2 CAP SMD0402 CERM 3200FPD 10% ZSV X7R R0H5 REMET C0603227056ACTU SMD0402 45 1 C3 CA P SMD0402 CERM 320PFD 50% 3K NR ON DH5 REMET C0603227056ACTU SMD0603 46 2 C4, C106 CAP SMD0402 CERM 000045 SK 3W 200 K X7R R0H5 TDK CORP C105K7R1H104M6508B SMD0402 47 1 C5 CAP SMD0402 CERM 00045 SK 3W 200 K X7R R0H5 TDK CORP C105K7R1H104M6508B SMD0402 48 1 C6 C4, C10, C11	20	1	VRC							
39 1. Y1 (mundametrikat konds Anakcon T (mundametrikat konds 40 1. V2 (mundametrikat konds (mundametrik	30	1	VRO							
40 1 Y2 CRYSTAL SMD-AUM06 SERIES 12.288MHz 30ppm ABRACOM D2Y-T 41 1 Y3 IBPP DOHS CRYSTAL SMD-0005 TF20 SERIES 32.768KHz 20ppm Tr202P32X76800 SMD0805 42 3 3.3V, 5.0V, ZERO LED GREEN SMD0402 2.1V 10mA ROHS ROHM SEMICONDUCTOR SML-P12MTTB6 SMD0402 43 1 C1 CAP SMD0402 2.1V 10mA ROHS ROHM SEMICONDUCTOR SML-P12MTTB6 SMD0402 44 1 C2 CAP SMD0402 C.1V 10m X ROHS ROHM SEMICONDUCTOR SML-P12MTTB6 SMD0402 45 1 C3 CAP SMD0402 CERM 420PP1 10% 25V X7R ROHS MURATA GRM155S711822A01D SMD0402 46 2 C4, C106 CAP SMD0402 CERM 420PD 10% 55V COR BOHS MURATA GRM155SC11102JA01D SMD0402 47 1 C5 CAP SMD0402 CERM 014 GOV X97K ROHS TKC COP C1005X7R111104M05086 SMD0402 49 40 C32, C14, C108, C110, C123, C127, C129, C230, C24, C24, C242, C246, C134, C237, C235, C239, C246, C241, C242, C246, C247, C251, C256, C279, C231, C237, C245, C247, C231, C232, C236, C237, C244, C242, C246, C247, C252, C256, C256, C274, C231, C232, C23	39	1	Y1			ABRACON	T			
40 1 V2 18PTD-ROHS ARRACOM D2V-T Composition 41 1 Y3 1 V3 12PFD ROHS TS T202P32K7680 SMD0805		-					ABM8G-12.288MHZ-18-			
41 1 Y3 12PD ROHS CTS T202P32K7680 SM00805 42 3 3.3V, 5.0V, ZERO LED GREEN SM00402 2.1V 10m ROHS ROHM SEMICONDUCTOR SML-P12M1T86 SM00402 43 1 C1 CAP SM01210 CERM 4.7VEP 50V 10K X7R ROHS KENET C1200X75X58ACTU SM00402 44 1 C2 CAP SM00402 CERM 200P1 10K 25X V7R ROHS KENET C02005GACTU SM00402 45 1 C3 CAP SM00402 CERM 200P1 10K 25X V7R ROHS KENET C0603C005GACTU SM00402 46 2 C4, C106 CAP SM00402 CERM 1000pH 5K 50V COG ROHS MURATA GRM155SC1H102JA01D SM00402 47 1 C5 CAP SM00402 CERM 1000pH 5K 50V COG ROHS MURATA GRM155SC1H102JA01D SM00402 48 1 C6 C4, S1M00402 CERM 101d 50V 20% X7R ROHS TDK C0105X7R1H104M0508B SM00402 49 40 C32, C33, C33, C40, C41, C42, C42, C42, C42, C42, C42, C42, C42	40	1	Y2			ABRACOM				
42 3 3.3V, 5.0V, ZERO LED GREEN SMD0402 2.1V 10m RDHS ROHM SEMICONDUCTOR SML-P12MTB6 SMD0402 43 1 C1 CAP SMD0402 2.ERM 4.7UFD 50V 10% X7R ROHS NEMET C1210X475KSRACTU SMD01210 44 1 C2 CAP SMD0402 CERM 8200FPD 10% 25V X7R ROHS NURATA GRM155871E822KA01D SMD0402 45 1 C3 CAP SMD0402 CERM 1000FPD 10% 55 V0 X5 N PO ROHS NURATA GRM155871E822KA01D SMD0402 46 1 C5 CAP SMD0402 CERM 1000FPD 10% 55 V0 X5 N PO ROHS NURATA GRM1555C1H102J01D SMD0402 47 1 C5 CAP SMD0402 CERM 0.104 59V 20% X7R ROHS TDK CORP C1005X781H104M0508B SMD0402 48 1 C6 CAP SMD0402 CERM 0.104 59V 20% X7R ROHS TDK C2012X5R0/226M SMD0402 49 40 C242, C242, C242, C242, C242, C242, C242, C242, C232, C254, C255, C259, C24, C243, C243, C243, C243, C244,					CRYSTAL SMD0805 TF20 SERIES 32.768KHz 20ppm					
43 1 C1 CAP SMD1210 KEMET C1210X475KSRACTU SMD1210 44 1 C2 CAP SMD0402 CERM 8200PFD 10% 25V X7R ROHS MURATA GRM155R71E822KA01D SMD0402 45 1 C3 CAP SMD0603 CERM 27PFD 50V 55% NPO COR ROHS KKMET C00032720/5GACTU SMD0603 46 2 C4, C106 CAP SMD0402 CERM 0.1u/d 50V 20% X7R ROHS MURATA GRM155SC11102JA01D SMD0402 47 1 C5 CAP SMD0402 CERM 0.1u/d 50V 20% X7R ROHS TDK CORP C1005X7R1H104M050BB SMD0402 47 1 C5 CAP SMD0402 CERM 0.1u/d 50V 20% X7R ROHS TDK C2012X5R01226M SMD0402 47 1 C5 CAP SMD0402 CERM 0.1u/d 50V 20% X7R ROHS TDK C2012X5R01226M SMD0402 48 1 C5 CAP SMD0403 CERM 10.1u/d 10V 10% X5R ROHS TDK C2012X5R01226M SMD0402 49 40 G132, C131, C132, C123, C232, C256, C239, C234,	41	1	Y3		12PFD ROHS	СТЅ	TF202P32K7680		SMD0805	
43 1 C1 CAP SMD1210 CERM 4.7UFD 50V 10% X7R ROHS KEMET C1210X475KSRACTU SMD1210 44 1 C2 CAP SMD0402 CERM 8200PFD 10% 25V X7R ROHS MURATA GRM155S71E822KA01D SMD0402 45 1 C3 CAP SMD0603 CERM 27PFD 50V 55K MPO ROHS KEMET C0003227015GACTU SMD0603 46 2 C4, C106 CAP SMD0402 CERM 0.1076 550V 058 MPO ROHS MURATA GRM155SC1102JA01D SMD0402 47 1 C5 CAP SMD0402 CERM 0.1076 550V 058 KNPO ROHS MURATA GRM155SC11102JA01D SMD0402 47 1 C5 CAP SMD0402 CERM 0.1076 550V 078 ROHS TDK CORP C1005X7R1H104M050BB SMD0402 47 1 C5 CAP SMD0402 CERM 0.1076 53 20% X7R ROHS TDK C2012X50026M SMD0402 48 1 C6 C1005X7R1H104M050BB SMD0402 SMD0403 CERM 10.0176 10V 10% X5R ROHS TDK C2012X50026M SMD0402 49 40 G32, C331, C337, C405, C411, C415 CAP SMD0403 CERM 10.0176 10V 10% X5R ROHS TDK CORP C1608X5R1A106K SMD04										
44 1 C2 CAP SMD0402 CERM 8200PFD 10% 25V X7R ROHS MURATA GRM155R71E822KA01D SMD0402 45 1 C3 CAP SMD0402 CERM 8200PFD 10% 25V X7R ROHS KEMET C0603C27019GACTU SMD0603 46 2 C4, C106 CAP SMD0402 CERM 1000pld 5% 50V COG ROHS MURATA GRM155SC1H102JA01D SMD0402 47 1 C5 CAP SMD0402 CERM 0.1uld 50V 20% X7R ROHS TDK CORP C1005X7R1H104M050BB SMD0402 48 1 C6 CAP SMD0402 CERM 0.1uld 50V 20% X7R ROHS TDK CORP C1005X7R1H104M050BB SMD0402 49 40 C32, C331, C337, C129, C23, C23, C23, C239, C240, C241, C242, C246, C247, C251, C259, C256, C27, C256, C268, C271, C362, C249, C249, C250, C254, C252, C259, C249, C249, C249, C240, C241, C241, C241, C242, C242, C252, C256, C254, C253, C259, C264, C271, C364, C241, C241, C244, C245, C249, C250, C254, C255, C259, C254, C253, C37, C363, C344, C245, C249, C240, C241, C24, C24, C247, C251, C252, C259, C264, C271, C254, C249, C240, C241, C242, C240, C241, C242, C24, C241, C243, C244, C245, C249, C250, C254, C253, C259, C264, C271, C254, C249, C244, C245, C249, C240, C241, C24, C244, C		-								
45 1 C3 CAP SMD0603 CERM 27PFD 50V 5% NPO ROHS KEMET C0603C270JSGACTU SMD0603 46 2 C4, C106 CAP SMD0402 CERM 1000pfd 5% 50V COG ROHS MURATA GRM1555C1H102A01D SMD0402 47 1 C5 CAP SMD0402 CERM 1000pfd 5% 50V COG ROHS TDK CORP C1005X7R1H104M0508B SMD0402 48 1 C6 CAP SMD0402 CERM 0.1ufd 50V 20% X7R ROHS TDK C2012X5R01226M SMD0402 48 1 C6 CAP SMD0402 CERM 0.1ufd 50V 20% X7R ROHS TDK C2012X5R01226M SMD0402 48 1 C6 CAP SMD0402 CERM 22UFD 6.3V 20% X5R ROHS TDK C2012X5R01226M SMD0402 49 40 C322, C331, C337, C466, C411, C415 CAP SMD0603 CERM 10ufd 10V 10% X5R ROHS TDK CORP C1608X5R1A106K SMD0603 50 10 C260 C37, C261, C24, C249, C240, C247, C255, C259, C250, C254, C255, C259, C26, C26, C270, C264, C249, C264, C249, C260, C270, C264, C237, C264, C249, C260, C270, C264, C27, C264, C274, C275, C264, C276, C264, C270, C276, C274, C275, C274, C277, C274, C274, C277, C274, C2	43	1	C1		CAP SMD1210 CERM 4.7UFD 50V 10% X7R ROHS	КЕМЕТ	C1210X475K5RACTU		SMD1210	
45 1 C3 CAP SMD0603 CERM 27PFD 50V 5% NPO ROHS KEMET C0603C270JSGACTU SMD0603 46 2 C4, C106 CAP SMD0402 CERM 1000pfd 5% 50V COG ROHS MURATA GRM1555C1H102A01D SMD0402 47 1 C5 CAP SMD0402 CERM 1000pfd 5% 50V COG ROHS TDK CORP C1005X7R1H104M0508B SMD0402 48 1 C6 CAP SMD0402 CERM 0.1ufd 50V 20% X7R ROHS TDK C2012X5R01226M SMD0402 48 1 C6 CAP SMD0402 CERM 0.1ufd 50V 20% X7R ROHS TDK C2012X5R01226M SMD0402 48 1 C6 CAP SMD0402 CERM 22UFD 6.3V 20% X5R ROHS TDK C2012X5R01226M SMD0402 49 40 C322, C331, C337, C466, C411, C415 CAP SMD0603 CERM 10ufd 10V 10% X5R ROHS TDK CORP C1608X5R1A106K SMD0603 50 10 C260 C37, C261, C24, C249, C240, C247, C255, C259, C250, C254, C255, C259, C26, C26, C270, C264, C249, C264, C249, C260, C270, C264, C237, C264, C249, C260, C270, C264, C27, C264, C274, C275, C264, C276, C264, C270, C276, C274, C275, C274, C277, C274, C274, C277, C274, C2	4.4	1				NALIDATA			SMD0402	
46 2 C4, C106 CAP SMD0402 CERM 1000pf 5% 50V COG ROHS MURATA GRM1555C1H102JA01D SMD0402 47 1 C5 CAP SMD0402 CERM 0.1ufd 50V 20% X7R ROHS TDK CORP C1005X7R1H104M0508B SMD0402 48 1 C6 CAP SMD0402 CERM 0.1ufd 50V 20% X7R ROHS TDK C2012X5R0J226M SMD0805 48 1 C6 CAP SMD0805 CERM 22UFD 6.3V 20% X5R ROHS TDK C2012X5R0J226M SMD0805 49 40 G322 (231, C337, C36, C232, C256, C255, C256, C257, C256, C265, C264, C271, C314, C315, C318, C320, C44, C245, C249, C250, C254, C255, C259, C266, C257, C254, C250, C254, C255, C259, CAP SMD0603 CERM 10ufd 10V 10% X5R ROHS TDK CORP C1608X5R1A106K SMD0603 50 10 C260 CAP SMD0402 CERM 680PFD 5% 50V NPO ROHS MURATA GRM1555C1H681JA01D SMD0402 51 4 C10, C111, C335, C336 CAP SMD0402 CERM 1.0UFD 10V 10% X5R ROHS TDK CORP C1005X5R1A105K SMD0402 51 4 C10, C111, C335, C137, C138, C130, C107, C103, C124,		-								
47 1 CS CAP SMD0402 CERM 0.1ufd 50V 20% X7R ROHS TDK CORP C1005X7R1H104M050BB SMD0402 48 1 C6 CAP SMD0402 CERM 0.1ufd 50V 20% X7R ROHS TDK C2012X5R01226M SMD0805 200 C27, C34, C121, C108, C110, C123, C127, C129, C200, C20, C214, C221, C225, C234, C234, C232, C234, C243, C34, C41, C415, C143, C316, C318, C320, CAP SMD0603 CERM 10ufd 10V 10% X5R ROHS TDK CORP C1608X5R1A106K SMD0603 50 10 C260 CAP SMD0603 CERM 10ufd 10V 10% X5R ROHS TDK CORP C1608X5R1A106K SMD0402 51 4 C10, C111, C35, C36 CAP SMD0402 CERM 680PFD 5% 50V NPO ROHS MURATA GRM1555C1H681JA01D SMD0402 51 4 C10, C111, C35, C18, C19, C20, C21, C22, C33, C107, C19, C10, C11, C114, C15, C16, C19, C20, C21, C22, C33, C107, C139, C13, C134, C135, C136, C137, C138, C139, C100, C114, C114, C115, C116, C114, C1		_								
48 1 C6 CAP SMD0805 CERM 22UFD 6.3V 20% X5R ROHS TDK C2012X5R0J226M SMD0805 48 1 C6 CAP SMD0805 CERM 22UFD 6.3V 20% X5R ROHS TDK C2012X5R0J226M SMD0805 48 1 C6 CAP SMD0805 CERM 22UFD 6.3V 20% X5R ROHS TDK C2012X5R0J226M SMD0805 49 40 C322, C341, C323, C236, C271, C314, C316, C318, C320, C327, C265, C268, C271, C314, C315, C316, C318, C320, C4P SMD0603 CERM 10ufd 10V 10% X5R ROHS TDK CORP C1608X5R1A106K SMD0603 50 10 C260 CAP SMD0402 CERM 680PFD 5% 50V NPO ROHS MURATA GRM1555C1H681IA01D SMD0402 51 4 C10, C111, C335, C336 CAP SMD0402 CERM 1.0UFD 10V 10% X5R ROHS TDK CORP C1005X5R1A105K SMD0402 51 4 C10, C111, C335, C336, C107, C12, C12, C23, C24, C37, C30, C31, C313, C134, C145, C146, C48, C49, C50, C51, C55, C55, C57, C58, C103, C107, C13, C134, C135, C136, C139, C134, C139, C134, C133, C134, C139, C134, C13										
C7, C9, C12, C14, C108, C110, C123, C127, C129, C200, C207, C214, C221, C229, C231, C237, C238, C239, C240, C241, C242, C246, C247, C251, C252, C256, C257, C265, C268, C271, C314, C316, C318, C320, 49 CAP SMD0603 CERM 10ufd 10V 10% X5R ROHS TDk CORP C1608X5R1A106K SMD0603 6 B, C38, C244, C242, C246, C247, C251, C252, C259, C257, C265, C268, C271, C314, C316, C318, C320, 10 CAP SMD0603 CERM 10ufd 10V 10% X5R ROHS TDk CORP C1608X5R1A106K SMD0603 50 10 C260 CAP SMD0402 CERM 680PFD 5% 50V NPO ROHS MURATA GRM1555C1H681JA01D SMD0402 51 4 C10, C111, C335, C336 CAP SMD0402 CERM 1.0UFD 10V 10% X5R ROHS TDk CORP C1005X5R1A105K SMD0402 51 4 C10, C111, C335, C336 CAP SMD0402 CERM 1.0UFD 10V 10% X5R ROHS TDk CORP C1005X5R1A105K SMD0402 51 4 C10, C111, C13, C15, C18, C19, C20, C21, C22, C23, C24, C37, C39, C40, C41, C42, C43, C44, C45, C46, C48, C49, C50, C51, C52, C53, C54, C57, C55, C56, C56, C56, C56, C56, C56, C56	47	1	C5		CAP SMD0402 CERM 0.1ufd 50V 20% X7R ROHS	TDK CORP	C1005X7R1H104M050BB		SMD0402	
49 40 C207, C214, C221, C229, C231, C237, C238, C239, C250, C257, C256, C257, C251, C252, C256, C257, C256, C268, C271, C314, C316, C318, C320, CAP SMD0603 CERM 10ufd 10V 10% XSR ROHS TDK CORP C1608XSR1A106K SMD0603 49 40 C322, C331, C337, C406, C411, C415 CAP SMD0603 CERM 10ufd 10V 10% XSR ROHS TDK CORP C1608XSR1A106K SMD0603 50 10 C260 CAP SMD0402 CERM 680PFD 5% 50V NPO ROHS MURATA GRM1555C1H681JA01D SMD0402 51 4 C10, C111, C335, C336 CAP SMD0402 CERM 1.0UFD 10V 10% XSR ROHS TDK CORP C1005XSR1A105K SMD0402 51 4 C10, C111, C335, C336, C324, C45, C46, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C103, C107, C139, C130, C131, C132, C133, C134, C145, C146, C143, C43, C44, C45, C46, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C103, C107, C199, C112, C113, C114, C115, C116, C117, C118, C119, C120, C124, C128, C130, C131, C132, C133, C134, C135, C136, C137, C138, C139, C144, C147, C230, C232, C266, C267, C269, C270, C271, C271, C273, C274, C273, C39, C300, C301, C304, C302, C306, C313, C133, C134, C135, C134, C135, C134, C	48	1	C6		CAP SMD0805 CERM 22UFD 6.3V 20% X5R ROHS	ТDК	C2012X5R0J226M		SMD0805	
50 10 C260 CAP SMD0402 CERM 680PFD 5% 50V NPO ROHS MURATA GRM1555C1H681JA01D SMD0402 51 4 C10, C111, C335, C336 CAP SMD0402 CERM 1.0UFD 10V 10% X5R ROHS TDK CORP C1005X5R1A105K SMD0402 51 4 C11, C13, C15, C18, C19, C20, C21, C22, C23, C24, C37, C39, C40, C41, C42, C43, C44, C45, C46, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C103, C107, C109, C112, C113, C114, C115, C116, C117, C118, C119, C120, C124, C132, C133, C130, C131, C132, C133, C136, C137, C138, C139, C140, C141, C142, C143, C145, C146, C147, C230, C232, C266, C26, C270, C272, C273, C274, C275, C300, C301, C304, C305, C306, C313, C315, C317, C319, C321, C323, C324, C332, C338, C407, C410, C412, MURATA GRM1555C1H681JA01D SMD0402 51 4 C11, C13, C15, C18, C19, C20, C21, C22, C23, C24, C37, C37 C39, C40, C41, C42, C43, C44, C45, C46, C48, C49, C50, C50, C51, C52, C53, C54, C55, C56, C57, C58, C103, C107, C109, C112, C113, C114, C115, C116, C117, C118, C114, C114, C115, C116, C117, C118, C114, C1	49		C207, C214, C221, C229, C231, C237, C238, C239, C240, C241, C242, C246, C247, C251, C252, C256, C257, C265, C268, C271, C314, C316, C318, C320,		CAP SMD0603 CERM 10ufd 10V 10% X5R ROHS	TDK CORP	C1608X5R1A106K		SMD0603	
51 4 C10, C111, C335, C336 CAP SMD0402 CERM 1.0UFD 10V 10% X5R ROHS TDK CORP C1005XSR1A105K SMD0402 C11, C13, C15, C18, C19, C20, C21, C22, C23, C24, C37, C39, C40, C41, C42, C43, C44, C45, C46, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C103, C107, C109, C112, C113, C114, C115, C116, C117, C118, C119, C120, C124, C128, C130, C131, C132, C133, C134, C135, C136, C137, C138, C139, C140, C141, C142, C143, C145, C146, C147, C230, C232, C266, C267, C269, C270, C272, C273, C274, C275, C300, C301, C304, C305, C306, C313, C315, C317, C319, C321, C323, C324, C332, C338, C407, C410, C412, CAP SMD0402 CERM 1.0UFD 10V 10% X5R ROHS TDK CORP C1005XSR1A105K SMD0402										
C11, C13, C15, C18, C19, C20, C21, C22, C23, C24, C37, C39, C40, C41, C42, C43, C44, C45, C46, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C103, C107, C109, C112, C113, C114, C115, C116, C117, C118, C119, C120, C124, C128, C130, C131, C132, C133, C134, C135, C136, C137, C138, C139, C140, C141, C142, C143, C145, C146, C147, C230, C232, C266, C267, C269, C270, C272, C273, C274, C275, C300, C301, C304, C305, C306, C313, C315, C317, C319, C321, C323, C324, C332, C338, C407, C410, C412,		-								
C39, C40, C41, C42, C43, C44, C45, C46, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C103, C107, C109, C112, C113, C114, C115, C116, C117, C118, C119, C120, C124, C128, C130, C131, C132, C133, C134, C135, C136, C137, C138, C139, C140, C141, C142, C143, C145, C146, C147, C230, C232, C266, C267, C269, C270, C272, C273, C274, C275, C300, C301, C304, C305, C306, C313, C315, C317, C319, C321, C323, C324, C332, C338, C407, C410, C412,	51	4	C10, C111, C335, C336		CAP SMD0402 CERM 1.0UFD 10V 10% X5R ROHS	TDK CORP	C1005X5R1A105K		SMD0402	
	52		C39, C40, C41, C42, C43, C44, C45, C46, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C103, C107, C109, C112, C113, C114, C115, C116, C117, C118, C119, C120, C124, C128, C130, C131, C132, C133, C134, C135, C136, C137, C138, C139, C140, C141, C142, C143, C145, C146, C147, C230, C232, C266, C267, C269, C270, C272, C273, C274, C275, C300, C301, C304, C305, C306, C313, C315, C317, C319, C321, C323, C324, C332, C338, C407, C410, C412,		ር ልዎ SMD0402 CERM 0 111ED 16V ¥78 10% ጽብዙና	Μυβάτα	GRM155871C104KA881		SMD0402	
53 1 C16 CAP SMD0402 CERM 0.01ufd 16V 10% X7R ROHS AVX 0402YC103KAT2A SMD0402										

ltem	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
54	3	C17, C333, C334		CAP SMD0402 CERM 2.2UFD 10V 10% X5R ROHS	TDK CORP	C1005X5R1A225K		SMD0402	
55	4	C25, C28, C31, C34		CAP SMD0402 CERM 2200PFD 50V 10% X7R ROHS	TDK CORP.	C1005X7R1H222K		SMD0402	
56	8	C26, C27, C29, C30, C32, C33, C35, C36		CAP SMD0402 CERM 0.022UFD 16V X7R 10% ROHS	MURATA	GRM155R71C223KA01D		SMD0402	
57	2	C101, C102		CAP SMD0402 CERM 0.0220FD 16V X/R 10% ROHS	JOHANSON	500R07N470JV4T		SMD0402	
58	1	C105		CAP SMD0402 CERM 100pfd 50V 5% COG ROHS	YAGEO	CC0402JRNPO9BN101		SMD0402	
59	2	C121, C122		CAP SMD0402 CERM 27PFD 5% 50V COG ROHS	MURATA	GRM1555C1H270JA01D		SMD0402	
55								511120102	
60	1	C125		CAP SMD0402 CERM 0.068ufd 50V 10% X7R ROHS	TDK CORP	CGA2B3X7R1H683K		SMD0402	
61	3	C126, C402, C404		CAP SMD0402 CERM 4700pfd 25V 10% X7R ROHS	YAGEO	CC0402KRX7R8BB472		SMD0402	
62	2	C201, C202		CAP SMD0402 CERM 12PFD 50V NPO 5% ROHS	MURATA	GRM1555C1H120JZ01D		SMD0402	
63	1	C203		CAP SMD0402 CERM 0.22UFD 6.3V 10% X5R ROHS	TDK CORP	C1005X5R0J224		SMD0402	
64	4	C243, C248, C253, C258		CAP SMD0402 CERM 3300PFD 10% 50V X7R ROHS	MURATA	GRM155R71H332KA01D		SMD0402	
65	6	C307, C308, C309, C310, C311, C312		CAP SMD0402 CERM 0.47UFD 25V 10% X5R ROHS	TDK CORP	C1005X5R1E474K		SMD0402	
66	2	C403, C405		CAP SMD0402 CERM 0.047UFD 16V 10% X7R ROHS	TAIYO YUDEN	ЕМК105В7473КV-F		SMD0402	
67	2	C408, C409		CAP SMD0402 CERM 33pF 5% 50V COG ROHS	MURATA	GRM1555C1H330JA01D		SMD0402	
				RESISTOR SMD0402 THICK FILM 3.09K OHM 1%					
68	5	R1, R4, R7, R13, R105		1/16W ROHS	YAGEO	RC0402FR-073K09L		SMD0402	
69	8	R2, R5, R11, R14, R102, R221, R222, R223		RESISTOR SMD0402 1.50K OHMS 1% 1/16W ROHS	STACKPOLE ELECTRONICS	RMCF0402FT1K50		SMD0402	
70	38	R3, R6, R12, R15, R116, R117, R118, R120, R153, R154, R155, R156, R157, R158, R159, R160, R252, R259, R266, R273, R279, R306, R309, R310, R409, R410, R411, R412, R413, R414, R415, R416, R417, R418, R419, R420, R421, R426		RESISTOR SMD0402 THICK FILM 47.0 OHMS 1% 1/16W ROHS	YAGEO	RC0402FR-0747RL		SMD0402	
				RESISTOR SMD0402 THICK FILM 511 OHMS 1%					
71	1	R8		1/16W ROHS	YAGEO	RC0402FR-07511RL		SMD0402	
72	15	R9, R107, R144, R249, R250, R256, R257, R263, R264, R270, R271, R280, R281, R401, R427		RESISTOR SMD0402 360 1/16W 1% ROHS	VISHAY	CRCW0402360RFKED		SMD0402	
73	3	R114, R115, R128		RESISTOR SMD0402 THICK FILM 4.70K OHMS 1% 1/16W ROHS	YAGEO	RC0402FR-074K7L		SMD0402	
74	8	R16, R17, R18, R19, R22, R23, R24, R25		RESISTOR SMD0402 THICK FILM 200K OHMS 1% 1/16W ROHS	YAGEO	RC0402FR-07200KL		SMD0402	
75	5	R20, R21, R274, R275, R404		RESISTOR SMD0603 ZERO OHMS 1/10W ROHS	STACKPOLE ELECTRONICS	RMCF0603ZT0R00		SMD0603	
76	10	R26, R27, R28, R36, R38, R39, R40, R41, R42, R43		RESISTOR SMD0402 47.0K OHMS 1% 1/16W ROHS	STACKPOLE ELECTRONICS	RMCF0402FT47K0		SMD0402	
77	7	R29, R35, R49, R50, R278, R407, R422		RESISTOR SMD0402 10.0K OHMS 1% 1/16W ROHS	VISHAY	CRCW040210K0FKED		SMD0402	
78	2	R30, R406		RESISTOR SMD0402 1.0M OHMS 1% 1/16W ROHS	STACKPOLE ELECTRONICS	RMCF0402FT1M00		SMD0402	
				RESISTOR SMD0402 THICK FILM 2.21K OHMS 1%					
79	-	R31, R32, R324, R325		1/16W ROHS	YAGEO	RC0402FR-072K21L		SMD0402	
80	1	R44		RESISTOR SMD0402 169K OHMS 1% 1/16W ROHS	VISHAY	CRCW0402169KFKED		SMD0402	
81	-	R45		RESISTOR SMD0402 73.2K OHMS 1% 1/16W ROHS	VISHAY	CRCW040273K2FKED		SMD0402	
82	1	R46		RESISTOR SMT 0402 1% 1/16W 26.7K ROHS	VISHAY	CRCW040226K7FKED		SMD0402	

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
83	1	R47		RESISTOR SMD0402 10.2K OHMS 1% 1/16W ROHS	VISHAY	CRCW040210K2FKED		SMD0402	
84		R48		RESISTOR SMD0402 2.43K 1/16W 1% ROHS	VISHAY	CRCW04022K43FKED		SMD0402	
85	1	R51		RESISTOR SMT 0402 34.0K OHMS 1% 1/16W ROHS	VISHAY	CRCW040234K0FKED		SMD0402	
				RESISTOR SMD0402 THICK FILM 249K OHMS 1/10W					
86	1	R52		1% ROHS	PANASONIC	RC0402FR-07249KL		SMD0402	
				RESISTOR SMD0402 THICK FILM 15.0K OHM 1%					
87	2	R101, R405		1/16W ROHS	YAGEO	RC0402FR-0715KL		SMD0402	
		R103, R104, R301, R302, R303, R304, R305, R315,		RESISTOR SMD0402 THICK FILM 27.4 OHMS 1/10W					
88	10	R322, R323		1% ROHS	PANASONIC	ERJ-2RKF27R4X		SMD0402	
				RESISTOR SMD0402 THICK FILM 100K OHMS 1/16W					
89		R106		1% ROHS	PANASONIC	ERJ-2RKF1003X		SMD0402	
90	5	R110, R139, R147, R148, R311		RESISTOR SMD0402 4.99K 1%,1/16W ROHS	PANASONIC	ERJ-2RKF4991X		SMD0402	
				RESISTOR SMD0603 10.0K 1% THICK FILM 1/10W					
91		R140		ROHS	PANASONIC	ERJ-3EKF1002V		SMD0603	
92	1	R141		RESISTOR SMD0603 75 OHMS 1% 1/10W ROHS	VISHAY	CRCW060375R0FKEA		SMD0603	
				RESISTOR SMD0603 1.0 OHMS 1% THICK FILM 1/10W					
93	1	R142		ROHS	PANASONIC	ERJ-3GEYJ1R0V		SMD0603	
				RESISTOR SMD0402 THICK FILM 680 OHMS 1%					
94	1	R143		1/16W ROHS	YAGEO	RC0402FR-07680RL		SMD0402	
				ZERO OHM JUMPER SMT 0402 0 OHM 1/16W,5%					
95		R200, R201, R242, R243, R244, R277, R312, R326, R710		ROHS	VISHAY	CRCW04020000Z0ED		SMD0402	
96	2	R202, R219		RESISTOR SMD0402 1.00K 1%,1/16W ROHS	PANASONIC	ERJ-2RKF1001X		SMD0402	
07	-			RESISTOR SMD0402 THICK FILM 200 OHMS 1%	V4.050				
97	2	R203, R220		1/16W ROHS	YAGEO	RC0402FR-07200RL		SMD0402	
00	0	D246 D247 D252 D254 D260 D264 D267 D260		RESISTOR SMD0402 THICK FILM 7.50K OHM 1%	VACEO			CN 4 D 0 4 0 D	
98 99		R246, R247, R253, R254, R260, R261, R267, R268			YAGEO PANASONIC	RC0402FR-077K5L		SMD0402	
99		R248, R251, R255, R258, R262, R265, R269, R272		RESISTOR SMD0402 5.60K 1/16W 1% ROHS	PANASONIC	ERJ-2RKF5601X		SMD0402	
100		R307, R308, R313, R314, R316, R317, R318, R319, R320, R321, R329, R330		RESISTOR SMD0402 THICK FILM 33.0 OHMS 1/10W 1% ROHS	PANASONIC	ERJ-2RKF33R0X		SMD0402	
100		R332		RESISTOR SMD0603 221 OHMS 1% 1/10W ROHS	VISHAY	CRCW0603221RFKEA		SMD0402	
101	1	1552		RESISTOR SMD0003 221 Official 1/10W Rofis	VISHAT			310100003	
102	2	R402, R403		1% ROHS	PANASONIC	ERJ-2RKF4700X		SMD0402	
102		L1		SHIELDED POWER INDUCTOR 6.8uH 3.6A ROHS	COIL CRAFT	XAL4030-682MEB		511120402	
100	-							† †	
104	1	L2		POWER INDUCTOR SMT 2.2uH 2.6A 47mOHMS ROHS	BOURNS	SDR0403-2R2ML			
				FERRITE CHIP, 220 OHMS 2A 100MHZ SMD 0603					
105	5	FB1, FB2, FB3, FB4, FB5		ROHS	ток	MPZ1608S221A		SMD0603	
				JACK AUDIO-STEREO MINI(3.5MM ,3-COND SMT-RA					
106	4	AIN1, AIN2, HP-OUT, MIC-IN		ROHS	CUI STACK	SJ-3523-SMT			
107		AIN3, AIN4, AOUT1, AOUT2		HEADER 2 PIN, PCB 2.0MM ROHS	NORCOMP	26630201RP2			
108		COAX		JACK, RCA 3-PIN PCB-RA BLACK ROHS	SWITCHCRAFT	PJRAN1X1U01X			
				CONNECTOR SMT/THU 100 POS+GND QSS SERIES				1	
109	1	J1		ROHS	SAMTEC	QSS-050-01-F-D-A			
110	1	J2		JACK USB FEMALE TYPEB MICRO SMT-RA 5PIN ROHS	MOLEX	47346-0001			
				HEADER THRU MALE 2X2 PIN 100LS 120 TAIL GOLD					
111	1	13		ROHS	SULLINS	PBC02DAAN			
				HEADER THRU MALE 2X5 PIN 100LS 120 TAIL GOLD					
112	1	J4		ROHS	SULLINS	PBC05DAAN			

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
113	1	J5		SOCKET HEADER 1x4 FEMALE-RA 50LS ROHS	MILL-MAX	851-43-004-20-001000			
				CONNECTOR MICROSD-SMD PUSH-PUSH SERIES					
114	1	J6		2900 ROHS	3M	2908-05WB-MG			
115	3	GND, GND1, GND2		PC TESTPOINT, BLACK, ROHS	KEYSTONE ELECTRONICS	5001			
116	7	DIN, SCL, SDA, BCLK, DOUT, LRCK, MCLK		PC TESTPOINT, ORANGE, ROHS	KEYSTONE ELECTRONICS	5003			
117	3	4V, +5V, +5V-USB		PC TESTPOINT, RED, ROHS	KEYSTONE ELECTRONICS	5000			
118	6	MODE, VOL+, VOL-, INPUT, RESET, PROFILE		SWITCH, MOM, 160G SMT 4X3MM ROHS	E-SWITCH	TL1015AF160QG			
			I	TEMS 119-120 ARE STANDOFFS AT THE CORNERS AND	UNDER THE BOARD				
119	4	STANDOFFS (NO SUBSTITUTES ALLOWED)		STANDOFF M3x25mm 5mm DIA HEX ALUM F-F ROHS	KEYSTONE ELECTRONICS	24438			
120	4	STANDOFF HARDWARE		PHILIPS PANHEAD STAINLESS STEEL ROHS	APM-HEXSEAL	RM3X8MM 2701			
			-	ITEMS 121-122 ARE MOUNTED ABOVE THE BOARD O	N EACH SIDE OF J1				
				STANDOFF M3x0.5mm HEX 5mm LENGTH					
121	2	J1 STANDOFFS (NO SUBSTITUTES ALLOWED)		ALUMINUM M-M ROHS	SAMTEC	SO-0515-02-02			
122	2	J1 HARDWARE		THUMBNUT M3x0.5x6mm BRASS ROHS	MCMASTER-CARR	96115A420			
	-		-	ITEMS 123-124 ARE MOUNTED BELOW TH	BOARD		-		
				WASHER FLAT #4 0.219" OD 0.032" THICK STEEL					
123	2	J1 HARDWARE		ROHS	TE CONNECTIVITY	5205820-3			
124	2	J1 HARDWARE		NUT HEX M3 2.4mm THICK STEEL ROHS	DURATOOL	M3-HFST-Z100-			
	-		-	DO NOT POPULATE			-		
	46					C417, C418, C419, C420, C421, C422, C423, C424, C425, C426, C427, C428, C703, C705, C706, C707, C708, C709, C710, HPL+, HPR+, LRCKO, MCLKO, P1+, P1-, P2+, P2-, P3+, P3-, P4+, P4-, P5+, P6+, P7+, P7-, P8+, P8-, R10, R33, R34, R276, R327, R328, SCKO, SDOUT- 5548, VLD			

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