Bill of Materials

Source Data From: SD3GDAIII_Rev4_02-27-2013.PrjPcb

Project: SD3GDAIII_Rev4_02-27-2013.PrjPcb

Variant: None

Creation Date: 6/2/2014 10:39:07 AM

Print Date: 41792 41792.58115

Footprint	Comment	LibRef	Designator	Description	Quantity
0603	06035A470JAT2A	06035A470JAT2A	C1, C4	CAP, CERM, 47pF, 50V, +/- 5%, C0G/NP0, 0603	2
0402	4.7uF	C_SMD_0402	C2, C3, C5, C6, C7, C8, C9, C11, C12, C13, C14, C15, C18, C19, C20, C21, C22, C23, C24, C25	Capacitor, 4.7uF, 6.3V, X5R, 0402	20
0402	C1005X7R1E223K	C1005X7R1E223K	C10	CAP, CERM, 0.022uF, 25V, +/-10%, X7R, 0402	1
0402	GRM1555C1E390JA01D	GRM1555C1E390JA01D	C16, C17	CAP, CERM, 39pF, 25V, +/- 5%, C0G/NP0, 0402	2
0603	GRM188R71H104KA93D	GRM188R71H104KA93D	C27, C34, C35, C38, C39, C52, C54	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	7
1206	C3216X7R1C475K	C3216X7R1C475K	C29, C40, C53, C55	CAP, CERM, 4.7uF, 16V, +/-10%, X7R, 1206	4
C603	GRM1885C2A300JA01D	GRM1885C2A300JA01D	C30, C31	CAP, CERM, 30pF, 100V, +/-5%, C0G/NP0, 0603	2
0603	GRM188R71C223KA01D	GRM188R71C223KA01D	C32	CAP, CERM, 0.022uF, 16V, +/-10%, X7R, 0603	1
2220	C5750X7R1H106M	C5750X7R1H106M	C36, C42, C43	CAP, CERM, 10uF, 50V, +/- 20%, X7R, 2220	3
1206	C3216X7R1H105K	C3216X7R1H105K	C37, C44	CAP, CERM, 1uF, 50V, +/- 10%, X7R, 1206	2
1206	GRM31CR60J107ME39L	GRM31CR60J107ME39L	C41	CAP, CERM, 100uF, 6.3V, +/-20%, X5R, 1206	1
0603	GRM188R71C474KA88D	GRM188R71C474KA88D	C63, C64, C69, C70, C74, C75, C76, C77, C90, C91	CAP, CERM, 0.47uF, 16V, +/-10%, X7R, 0603	10
C603	0603YC104JAT2A	0603YC104JAT2A	C65	CAP, CERM, 0.1uF, 16V, +/- 5%, X7R, 0603	1

C603	06035A221FAT2A	06035A221FAT2A	C66	CAP, CERM, 220pF, 50V, +/-	1
				1%, C0G/NP0, 0603	
0805_HV	08051C223JAT2A	08051C223JAT2A	Cff1, Css1	CAP, CERM, 0.022uF, 100V, +/-5%, X7R, 0805	2
LED	LED	LED	D1, D2, D3, D4, D5, D6, D7, D8, D9, D10	LED, Green, 0603	10
MB_HSEC8	Mate to HSEC8	MHDR2X20	F1, F2	card edge connector 20-Pin, Dual row	2
sma-edge-tab	SMA_R_EDGE	SMA_R_EDGE	J1, J2, J4, J5, MBJ1, MBJ2, MBJ3, MBJ4	SMA Edge Launch	8
BNC_edge	BNC_EDGE	BNC_EDGE	J3, J6, J7, J8, J9	BNC, Trompeter, 75-ohm, edge launch	5
CONN_USB-MINI_S	SN CONN_USB_1734328	CONN_USB_1734328	J10	Connector, Recpt, USB-B, Mini, 5-pins, SMT	1
SIP2	HDR_2	HDR_2	JP1, JP2, JP3, JP4, JP5, JP6	Header, 2x1, 0.1"	6
hdr-4x1-via	HDR_4	HDR_4	JP16	PIN HEADER, 4x1, 0.1" PITCH	1
0402	5.6nH	INDUCTOR1	L1, L2, L3, L4, L5	5.6nH, 0402, Inductor	5
0805	10uH	LQM31PN1R0M00	L7, L8	INDUCTOR 10UH 100MA 0805	2
0603	CRCW06030000Z0EA	CRCW06030000Z0EA	OPT1, OPT2, OPT4, OPT5, OPT6, OPT9, OPT10, OPT11, OPT12, OPT13, OPT14, OPT15, OPT16, OPT17, OPT18, OPT19, OPT20, OPT21, OPT22, OPT23, OPT24, OPT26, OPT27, OPT28, OPT29, OPT30, OPT31, OPT32, OPT33, OPT34, OPT35, OPT36, OPT37, OPT38, OPT39, R12, R13, R67	RES, 0 ohm, 5%, 0.1W, 0603	38
0402	ERJ-2GE0R00X	ERJ-2GE0R00X	OPT3, OPT7, R2	RES, 0 ohm, 5%, 0.063W, 0402	3
0603	CRCW060310K0JNEA	CRCW060310K0JNEA	OPT8, OPT25, R5, R8, R10, R11, R14, R15, R17	RES, 10k ohm, 5%, 0.1W, 0603	9
SIP2	SD01 Disable	HDR_2	P1	Header, 2x1, 0.1"	1
SIP2	Bypass	HDR_2	P2	Header, 2x1, 0.1"	1

MHDR1X3	MHDR1X3	MHDR1X3	P3	Header, 3-Pin	1
HDR2X8	Header 8X2	Header 8X2	P4, P5	CONN HEADER 16POS .100 STR TIN	2
MHDR2X20	HSEC8	MHDR2X20	P6	Header, 20-Pin, Dual row	1
POWER_POST	SDO1 Disable	PWR_SP	PST1, PST2	Power Supply Terminal	2
0402	75	R_SMT_0402	R1, R3, R4, R6, R7, R9, R16, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R32	75 Ohm Resistor, 0402	21
0402	CRCW0402750RFKED	CRCW0402750RFKED	R31	RES, 750 ohm, 1%, 0.063W, 0402	1
0402	CRCW040233R0JNED	CRCW040233R0JNED	R33, R34	RES, 33 ohm, 5%, 0.063W, 0402	2
0603	RC0603FR-071RL	RC0603FR-071RL	R36, R52	RES, 1.00 ohm, 1%, 0.1W, 0603	2
0402	CRCW04021K50JNED	CRCW04021K50JNED	R37	RES, 1.5k ohm, 5%, 0.063W, 0402	1
0603	CRCW060368K1FKEA	CRCW060368K1FKEA	R38	RES, 68.1k ohm, 1%, 0.1W, 0603	1
0603	CRCW060361K9FKEA	CRCW060361K9FKEA	R39	RES, 61.9k ohm, 1%, 0.1W, 0603	1
0603	CRCW06033K32FKEA	CRCW06033K32FKEA	R40	RES, 3.32k ohm, 1%, 0.1W, 0603	1
0603	CRCW060311K8FKEA	CRCW060311K8FKEA	R41	RES, 11.8k ohm, 1%, 0.1W, 0603	1
0603	CRCW06031K07FKEA	CRCW06031K07FKEA	R42	RES, 1.07k ohm, 1%, 0.1W, 0603	1
0603	CRCW060310R0FKEA	CRCW060310R0FKEA	R56, R61, R64, R70	RES, 10.0 ohm, 1%, 0.1W, 0603	4
0603	RG1608P-102-B-T5	RG1608P-102-B-T5	R57, R59	RES, 1.00k ohm, 0.1%, 0.1W, 0603	2
0603	RG1608P-103-B-T5	RG1608P-103-B-T5	R58, R60, R62, R63, R65, R66	RES, 10.0k ohm, 0.1%, 0.1W, 0603	6
0402	CRCW040233K0JNED	CRCW040233K0JNED	R68	RES, 33k ohm, 5%, 0.063W, 0402	1
R603	CRCW06031M20JNEA	CRCW06031M20JNEA	R69	RES, 1.2Meg ohm, 5%, 0.1W, 0603	1
DIP-4	SW DIP-2	SW DIP-2	S1	DIP Switch, 2 Position, SPST	1
LLP_24	LMH0395	LMH0395	U1	SDI Equalizer	1

SOT-23_5_lead	SN74AHC1G04	SN74AHC1G04	U2, U5	IC INVERTER	2
SOT-23_5_lead	SN74LVC1G125	NC7SZ125M	U3	IC BUFFER	1
LLP_48	LMH0376	LMH0376	U4	SDI Reclocker	1
LLP-16	LMH0309	LMH0309	U6	LMH0309 Cable Driver	1
DRY	TPD4E004DRY	TPD4E004DRY	U7	IC, 4-Chan ESD-Protection Array	1
	MSP430F5529	MSP430F5529	U8	Microcontroller	1
SDB06A	LP5900SD-2.5	LP5900SD-2.5	U14, U16, U19, U20, U22	Ultra Low Noise, 150mA Linear Regulator for RF/Analog Circuits Requires No Bypass Capacitor	5
TZA07A	LMZ14203TZ	LMZ14203TZ	U17	Simple Switcher Power Module	1
D014_N	SN74HC00D	SN74HC00D	U21	Quadruple 2-Input Positive- NAND Gate	1
CRYSTAL	27MHz_CRYSTAL	27MHz_CRYSTAL	X1	27 MHz VCXO	1
CRYSTAL_ATS-SM	CRYSTAL_ATS- SM_SERIES	CRYSTAL_ATS-SM_SERIES	Y1	Crystal, SMT Quart Crystal	1
					221
Approved		Notes			

IMPORTANT NOTICE FOR TI REFERENCE DESIGNS

Texas Instruments Incorporated ("TI") reference designs are solely intended to assist designers ("Buyers") who are developing systems that incorporate TI semiconductor products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, evaluation and judgment in designing Buyer's systems and products.

TI reference designs have been created using standard laboratory conditions and engineering practices. TI has not conducted any testing other than that specifically described in the published documentation for a particular reference design. TI may make corrections, enhancements, improvements and other changes to its reference designs.

Buyers are authorized to use TI reference designs with the TI component(s) identified in each particular reference design and to modify the reference design in the development of their end products. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER TI INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN, including but not limited to any patent right, copyright, mask work right, or other intellectual property right relating to any combination, machine, or process in which TI components or services are used. Information published by TI regarding third-party products or services does not constitute a license to use such products or services, or a warranty or endorsement thereof. Use of such information may require a license from a third party, or a license from TI under the patents or other intellectual property of TI.

TI REFERENCE DESIGNS ARE PROVIDED "AS IS". TI MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE REFERENCE DESIGNS OR USE OF THE REFERENCE DESIGNS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. TI DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO TI REFERENCE DESIGNS OR USE THEREOF. TI SHALL NOT BE LIABLE FOR AND SHALL NOT DEFEND OR INDEMNIFY BUYERS AGAINST ANY THIRD PARTY INFRINGEMENT CLAIM THAT RELATES TO OR IS BASED ON A COMBINATION OF COMPONENTS PROVIDED IN A TI REFERENCE DESIGN. IN NO EVENT SHALL TI BE LIABLE FOR ANY ACTUAL, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR INDIRECT DAMAGES, HOWEVER CAUSED, ON ANY THEORY OF LIABILITY AND WHETHER OR NOT TI HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, ARISING IN ANY WAY OUT OF TI REFERENCE DESIGNS OR BUYER'S USE OF TI REFERENCE DESIGNS.

TI reserves the right to make corrections, enhancements, improvements and other changes to its semiconductor products and services per JESD46, latest issue, and to discontinue any product or service per JESD48, latest issue. Buyers should obtain the latest relevant information before placing orders and should verify that such information is current and complete. All semiconductor products are sold subject to TI's terms and conditions of sale supplied at the time of order acknowledgment.

TI warrants performance of its components to the specifications applicable at the time of sale, in accordance with the warranty in TI's terms and conditions of sale of semiconductor products. Testing and other quality control techniques for TI components are used to the extent TI deems necessary to support this warranty. Except where mandated by applicable law, testing of all parameters of each component is not necessarily performed.

TI assumes no liability for applications assistance or the design of Buyers' products. Buyers are responsible for their products and applications using TI components. To minimize the risks associated with Buyers' products and applications, Buyers should provide adequate design and operating safeguards.

Reproduction of significant portions of TI information in TI data books, data sheets or reference designs is permissible only if reproduction is without alteration and is accompanied by all associated warranties, conditions, limitations, and notices. TI is not responsible or liable for such altered documentation. Information of third parties may be subject to additional restrictions.

Buyer acknowledges and agrees that it is solely responsible for compliance with all legal, regulatory and safety-related requirements concerning its products, and any use of TI components in its applications, notwithstanding any applications-related information or support that may be provided by TI. Buyer represents and agrees that it has all the necessary expertise to create and implement safeguards that anticipate dangerous failures, monitor failures and their consequences, lessen the likelihood of dangerous failures and take appropriate remedial actions. Buyer will fully indemnify TI and its representatives against any damages arising out of the use of any TI components in Buyer's safety-critical applications.

In some cases, TI components may be promoted specifically to facilitate safety-related applications. With such components, TI's goal is to help enable customers to design and create their own end-product solutions that meet applicable functional safety standards and requirements. Nonetheless, such components are subject to these terms.

No TI components are authorized for use in FDA Class III (or similar life-critical medical equipment) unless authorized officers of the parties have executed an agreement specifically governing such use.

Only those TI components that TI has specifically designated as military grade or "enhanced plastic" are designed and intended for use in military/aerospace applications or environments. Buyer acknowledges and agrees that any military or aerospace use of TI components that have *not* been so designated is solely at Buyer's risk, and Buyer is solely responsible for compliance with all legal and regulatory requirements in connection with such use.

TI has specifically designated certain components as meeting ISO/TS16949 requirements, mainly for automotive use. In any case of use of non-designated products, TI will not be responsible for any failure to meet ISO/TS16949.