

Bill of Materials

TI DESIGNS

Filename: BOM-SAT0007_ Sub Board_REV2.1.xlsx
 Variant: Final Build
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Designator	Quantity	Description	PartNumber	Manufacturer
C1, C7, C42, C43, C44, C45, C46, C47	8	CAP, CERM, 10uF, 6.3V, +/-20%, X5R, 0603	GRM188R60J106ME84	MuRata
C2, C5, C82, C83, C85, C88, C89, C93	8	CAP, CERM, 0.1uF, 50V, +/-10%, C0G/NP0, 0402	C1005X7R1H104K	TDK
C3	1	CAP, CERM, 1uF, 25V, +/-10%, X5R, 0603	GRM188R61E105KA12D	MuRata
C4	1	CAP, CERM, 4.7uF, 16V, +/-10%, X5R, 0603	GRM188R61C475KAAJ	MuRata
C6, C8, C9, C10, C11, C48, C54, C60, C63, C65, C72, C73, C74, C75, C77, C123, C129, C130, C133, C134	20	CAP, CERM, 0.1uF, 16V, +/-10%, X5R, 0402	GRM155R61C104KA88D	MuRata
C13, C23, C28, C36, C39, C40, C120, C125	8	CAP, CERM, 0.1uF, 16V, +/-10%, X7R, 0402	GRM155R71C104KA88D	MuRata
C14, C17, C24, C33, C38, C49, C55	7	CAP, CERM, 10uF, 6.3V, +/-20%, X5R, 0603	C0603C106M9PACTU	Kemet
C15, C18	2	CAP, CERM, 0.01uF, 16V, +/-10%, X5R, 0402	GRM155R61C103KA01D	MuRata
C16, C19, C22	3	CAP, CERM, 22uF, 6.3V, +/-10%, X5R, 0805	JMK212BJ226KG-T	Taiyo Yuden
C21, C27, C35	3	CAP, CERM, 1uF, 6.3V, +/-20%, X5R, 0402	C1005X5R0J105M	TDK
C37	1	CAP, CERM, 2.2uF, 10V, +/-10%, X5R, 0603	C0603C225K8PACTU	Kemet
C41	1	CAP, CERM, 100pF, 50V, +/-5%, C0G/NP0, 0402	GRM1555C1H101JA01D	MuRata
C56, C57	2	CAP, CERM, 16pF, 50V, +/-5%, C0G/NP0, 0402	GRM1555C1H160JA01D	MuRata
C58, C64, C76	3	CAP, CERM, 1uF, 10V, +/-10%, X5R, 0402	GRM155R61A105KE15D	MuRata
C91	1	CAP, CERM, 1000pF, 1000V, +/-10%, X7R, 1206	VJ1206Y102KXGAT5Z	Vishay-Vitramon
C92, C94, C95, C96	4	CAP, CERM, 0.01uF, 100V, +/-5%, X7R, 0603	06031C103JAT2A	AVX
C111	1	CAP, CERM, 1000pF, 100V, +/-5%, X7R, 0603	06031C102JAT2A	AVX
C122	1	CAP, CERM, 22uF, 10V, +/-20%, X5R, 0805	LMK212BJ226MG-T	Taiyo Yuden
C126, C127	2	CAP, CERM, 0.1uF, 100V, +/-5%, X7R, 1206	12061C104JAT2A	AVX
C128, C131	2	CAP, CERM, 10uF, 6.3V, +/-20%, X5R, 0603	C1608X5R0J106M	TDK
C135	1	CAP, CERM, 0.1uF, 25V, +/-10%, X5R, 0603	GRM188R61E104KA01D	MuRata
CMC1	1	CHOKE COMM MODE 90 OHM .4A SMD	ACM2012-900-2P	TDK
CMC2, CMC3, CMC4, CMC5	4	CHOKE COMM MOD 90 OHM 6GHZ SMD	ACM2012H-900-2P	TDK Corporation
D2, D7	2	0.8A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER	HD01-T	Diodes Inc
FB1, FB2	2	FERRITE CHIP BEAD 15 OHM SMD	MMZ2012R150A	TDK Corporation
J1	1	USB Connector, 5P, Mini-AB USB Compatible I/O	DX3R005HN2E700	JAE Electronics Inc
J2	1	Connector, HDMI Receptical, 19Pos, No Flange, Pitch 0.5mm, SMT	HDMR-19-01-S-SM	Samtec Inc
J4, J9	2	Female Connector, 8 Pos, 1mm Pitch, Singel Row, SMT	BM08B-SRSS-TB(LF)(SN)	JST Sales America Inc
J5	1	Connector, Socket, Dual Row, 50 Pos, 1.27mm Pitch, SMT	CLP-125-02-L-D-A	Samtec Inc
J6	1	Connector, RJ45, Ethernet, 8 Pos, Right Angle, CAT5, TH	6116075-4	TE Connectivity
J7, J8	2	Board to Board & Mezzanine Connector, 0.8mm Pitch, Dual Row, 7 x 2, SMT	52465-1471	Molex
JP1	1	Connector, SD Card, Female, 9 Pos (11+2), SMT	693063020911	Wurth Electronics Inc
JSUB1, JSUB2	2	Connector, Board-to-Board, Male Pin, 72 Pos, Pitch 1.27mm, Dual Row, SMT	FW-36-03-L-D-215-140	Samtec Inc
L1	1	INDUCTOR 2.2UH 160MA 20% 0603		TDK Corporation
L2, L3, L4, L5, L15	5	FERRITE CHIP BEAD 600 OHM SMD	MPZ1608S601A	TDK Corporation
L6, L7, L10	3	INDUCTOR 22UH 50MA 20% 0603	GLFR1608T220M-LR	TDK Corporation
L14	1	FERRITE CHIP 220 OHM 2A 0603	MPZ1608S221A	TDK
L16, L17, L19	3	FERRITE CHIP 220 OHM 2A 0603	MPZ1608S221A	TDK
L18	1	4.7uH, 80 Ohm, 900mA Inductor	CDRH3D16-4R7M	ASATECH
Q1	1	SMD P-CH FET-130mA-50V	AO3403	Alpha and Omega
Q2, Q5	2	TRANS NPN 50V 100MA SOT-416	DTC123JETL	Rohm Semiconductor
R2	1	RES, 2.2k ohm, 5%, 0.063W, 0402	CRCW04022K20JNED	Vishay-Dale
R3	1	RES, 1.0k ohm, 5%, 0.063W, 0402	CRCW04021K00JNED	Vishay-Dale
R4	1	RES, 47k ohm, 5%, 0.063W, 0402	CRCW040247K0JNED	Vishay-Dale
R5, R90	2	RES, 100k ohm, 1%, 0.063W, 0402	CRCW0402100KFKED	Vishay-Dale
R6, R7, R8, R9, R10, R12, R13, R18, R61, R66, R74, R76, R81, R83, R85, R86	16	RES, 10k ohm, 5%, 0.063W, 0402	CRCW040210K0JNED	Vishay-Dale

Designator	Quantity	Description	PartNumber	Manufacturer
R17, R53	2	RES, 0 ohm, 5%, 0.063W, 0402	RC0402JR-070RL	Yageo America
R20, R22, R24, R25, R29, R30, R31	7	RES, 33.2 ohm, 1%, 0.063W, 0402	CRCW040233R2FKED	Vishay-Dale
R26, R139	2	RES, 0 ohm, 5%, 0.063W, 0402	CRCW04020000Z0ED	Vishay-Dale
R42, R43	2	RES, 20.0k ohm, 1%, 0.063W, 0402	CRCW040220K0FKED	Vishay-Dale
R44, R57, R124, R140	4	RES, 1.00k ohm, 1%, 0.063W, 0402	CRCW04021K00FKED	Vishay-Dale
R45	1	RES, 4.75k ohm, 1%, 0.063W, 0402	CRCW04024K75FKED	Vishay-Dale
R46	1	RES, 82.5k ohm, 1%, 0.063W, 0402	CRCW040282K5FKED	Vishay-Dale
R47	1	RES, 12.1k ohm, 1%, 0.063W, 0402	CRCW040212K1FKED	Vishay-Dale
R56	1	RES, 1.50k ohm, 1%, 0.063W, 0402	CRCW04021K50FKED	Vishay-Dale
R68	1	RES, 22.1k ohm, 1%, 0.063W, 0402	CRCW040222K1FKED	Vishay-Dale
R79	1	RES, 22.1 ohm, 1%, 0.063W, 0402	CRCW040222R1FKED	Vishay-Dale
R87, R88, R138	3	RES, 4.7k ohm, 5%, 0.063W, 0402	CRCW04024K70JNED	Vishay-Dale
R89	1	RES, 2.37k ohm, 1%, 0.063W, 0402	CRCW04022K37FKED	Vishay-Dale
R93, R96	2	RES, 220 ohm, 5%, 0.063W, 0402	CRCW0402220RJNED	Vishay-Dale
R98, R100, R101, R102	4	RES, 75.0 ohm, 1%, 0.063W, 0402	CRCW040275R0FKED	Vishay-Dale
R128, R129, R130, R131, R132, R133	6	RES, 22 ohm, 5%, 0.063W, 0402	CRCW040222R0JNED	Vishay-Dale
T1	1	Tranformer, Data and Pulse, 1000BASE-T, 1.00mm Pitch, SMT	H5084NL	Pulse Electronics Corporation
U1	1	IC ESD SOLUTION 2CH SOT23-6	TPD2S017DBV	Texas Instruments
U2	1	IC HDMI ESD PROT 24TSSOP	TPD12S016PWR	Texas Instruments
U3	1	IC 8CH ESD PROT 8WSON	TPD8E003DQDR	Texas Instruments
U4	1	IC AUDIO CODEC 24BIT SER 32VQFN	TLV320AIC3104IRHBR	Texas Instruments
U6	1	IC PWM MOTOR DVR H-BRIDGE 10MSOP	DRV8832DGQR	Texas Instruments
U7	1	SINGLE PORT, 10/100/1000 MBPS ETHERNET PHY	AR8031-AL1A	QUALCOMM
U10, U12	2	IC 4CH ESD SOLUTION DIFF SC70-6	TPD4S009DCK	Texas Instruments
U17	1	IC ESD-PROT ARRAY 4CH SOT563	TPD4E001DRLR	Texas Instruments
U18	1	IC VOLT-LEVEL TRANSLATOR 8-US8	TXS0102DCUR	Texas Instruments
Y1	1	Crystal, 3.2x2.5x0.8, 25MHz, 8pF, +/-20ppm, SMT	CX3225GB25000D0HPQZ1	AVX / Kyocera
Y2	1	Crystal Resonator, 32.768KHz, HCMOS, 3.3V, SMT	ASVK-32.768KHZ-LJT	Abracon Corporation
R1	0	RES, 1.5k ohm, 5%, 0.063W, 0402	CRCW04021K50JNED	Vishay-Dale
R11, R50, R52	0	RES, 0 ohm, 5%, 0.063W, 0402	RC0402JR-070RL	Yageo America
R23	0	RES, 1.00k ohm, 1%, 0.063W, 0402	CRCW04021K00FKED	Vishay-Dale
R27, R28, R58	0	RES, 0 ohm, 5%, 0.063W, 0402	CRCW04020000Z0ED	Vishay-Dale
R55, R60, R62, R72, R75, R80, R82, R84, R134	0	RES, 10k ohm, 5%, 0.063W, 0402	CRCW040210K0JNED	Vishay-Dale
R126, R127	0	RES, 220 ohm, 5%, 0.063W, 0402	CRCW0402220RJNED	Vishay-Dale

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