

Bill of Materials

TI DESIGNS

TIDA-00215

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
IPC B1	1		Printed Circuit Board		ISE4008	Any	-	-
C1	1	1000pF	CAP, CERM, 1000pF, 2000V, +/-10%, X7R, 1210	1210	C1210C102KGRCTU	Kemet		
C2, C16, C21	3	0.01uF	CAP, CERM, 0.01uF, 50V, +/-10%, C0G/NP0, 0402	0402	GCM155R71H103KA55D	MuRata		
C3	1	0.056uF	CAP, CERM, 0.056uF, 16V, +/-10%, X7R, 0402	0402	GRM155R71C563KA88D	MuRata		
C4, C6, C11, C12, C13	5	0.1uF	CAP, CERM, 0.1uF, 16V, +/-10%, X7R, 0402	0402	GRM155R71C104KA88D	MuRata		
C5, C7	2	1uF	CAP, CERM, 1uF, 16V, +/-10%, X7R, 0603	0603	C1608X7R1C105K	TDK		
C8	1	100pF	CAP, CERM, 100pF, 50V, +/-5%, C0G/NP0, 0805	0805	08055A101JAT2A	AVX		
C9, C26	2	1000pF	CAP, CERM, 1000pF, 16V, +/-10%, X7R, 0402	0402	GRM155R71C102KA01D	MuRata		
C10, C18, C23	3	10uF	CAP, CERM, 10uF, 10V, +/-10%, X7R, 0805	0805	GRM21BR71A106KE51L	MuRata		
C14	1	22pF	CAP, CERM, 22pF, 50V, +/-5%, C0G/NP0, 0402	0402	GRM1555C1H220JA01D	MuRata		
C15	1	0.47uF	CAP, CERM, 0.47uF, 16V, +/-10%, X7R, 0603	0603	C0603C474K4RACTU	Kemet		
C17, C22	2	10uF	CAP, CERM, 10uF, 50V, +/-10%, X7R, 1210	1210	GRM32ER71H106KA12L	MuRata		
C19	1	0.01uF	CAP, CERM, 0.01uF, 16V, +/-10%, X7R, 0402	0402	GRM155R71C103KA01D	MuRata		
C20	1	0.01uF	CAP, CERM, 0.01uF, 10V, +/-10%, X7R, 0201	0201	GRM033R71A103KA01D	MuRata		
C24, C25	2	18pF	CAP, CERM, 18pF, 100V, +/-5%, C0G/NP0, 0603	0603	GRM1885C2A180JA01D	MuRata		

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
D1	1	40V	Diode, Schottky, 40V, 0.25A, SOD-523	SOD-523	NSR0240V2T1G	ON Semiconductor		
D2	1	36V	Diode, TVS, Bi, 36V, 400W, SMA	SMA	SMAJ36CA	Littelfuse		
D3	1	Orange	LED, Orange, SMD	Orange LED	SML-P12DIT86	Rohm		
H1, H2, H3, H4, H9, H10	6		Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw	NY PMS 440 0025 PH	B&F Fastener Supply	-	-
H6, H8	2		Standoff, Hex, 0.5"L #4-40 Nylon	Standoff	1902C	Keystone	-	-
J1	1	2x1	Conn Term Block,	2POS Terminal Block	1715721	Phoenix Contact		
J2	1		Power Jack, SMT	14.8x11x12.6mm	PJ-002AH-SMT-TR	CUI Inc.		
J3	1		Header (shrouded),	7x2 Shrouded Header	SBH11-PBPC-D07-ST-BK	Sullins Connector Solutions		
J4, J5	2		Header, TH, 100mil,	10x1 Header	TSW-110-07-G-S	Samtec		
J6, J7	2		Header, TH, 100mil,	2x1 Header	TSW-102-07-G-S	Samtec		
L1	1		Inductor, Wirewound,	2.0x1.2x1.2mm	SRF2012-361YA	Bourns		
LBL1	1		Thermal Transfer	PCB Label 0.650"H x 0.200"W	THT-14-423-10	Brady	-	-
R1, R2, R11, R13, R14, R15	6	47.5k	RES, 47.5k ohm, 1%,	0402	CRCW040247K5FKED	Vishay-Dale		
R3	1	0	RES, 0 ohm, 5%,	0402	ERJ-2GE0R00X	Panasonic		
R4	1	107k	RES, 107k ohm, 1%,	0402	CRCW0402107KFKED	Vishay-Dale		
R5	1	59.0k	RES, 59.0k ohm, 1%,	0402	CRCW040259K0FKED	Vishay-Dale		
R6, R7	2	2.21k	RES, 2.21k ohm, 1%,	0402	CRCW04022K21FKED	Vishay-Dale		
R8	1	10.0k	RES, 10.0k ohm, 1%,	0402	CRCW040210K0FKED	Vishay-Dale		
R9	1	137k	RES, 137k ohm, 1%,	0402	CRCW0402137KFKED	Vishay-Dale		
R10	1	42.2k	RES, 42.2k ohm, 1%,	0402	CRCW040242K2FKED	Vishay-Dale		
R12	1	487	RES, 487 ohm, 1%,	0402	CRCW0402487RFKED	Vishay-Dale		
S1, S2	2		Switch, Tactile, SPST-	SW, SPST 6x6 mm	4-1437565-1	TE Connectivity		
SH-J1, SH-J2	2	1x2	Shunt, 2mm, Gold	2mm Shunt, Closed Top	2SN-BK-G	Samtec		
TP1, TP8, TP12	3	Red	Test Point, Miniature,	Red Miniature Testpoint	5000	Keystone		
TP2, TP3, TP4, TP5, TP14, TP15, TP16	7	Orange	Test Point, Miniature,	Orange Miniature Testpoint	5003	Keystone		
TP9, TP13	2	Black	Test Point, Miniature,	Black Miniature Testpoint	5001	Keystone		
TP10, TP11	2	Yellow	Test Point, Miniature,	Yellow Miniature Testpoint	5004	Keystone		
U1	1		Mixed Signal	RGZ0048A	MSP430F5232IRGZ	Texas Instruments		None
U2	1		8-bit Rp, 24-bit L	NHR0016B	LDC1041NHR	Texas Instruments		None
U3, U7	2		50-V Input Voltage, 50-	DGN0008B	TPS7A4101DGN	Texas Instruments		None
U4	1		Low-Power, Digital	YFF0004AAAA	TMP103AYFF	Texas Instruments		None
U5, U6, U8, U9, U10, U11	6		ESD in 0402 Package	DPY0002A	TPD1E10B06DPYR	Texas Instruments	Equivalent	None
Y1	1		Crystal, 24.000MHz,	3.2x0.8x2.5mm	ABM8-24.000MHZ-B2-T	Abrakon Corporation		
FID1, FID2, FID3, FID4, FID5, FID6	0		Fiducial mark. There	Fiducial	N/A	N/A		

Notes:

Unless otherwise noted in the Alternate PartNumber and/or Alternate Manufacturer columns, all parts may be substituted with equivalents.

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