Variant: 001

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TD #: TIDA-00766

## **TIDA-00766 REV E1 Bill of Materials**



Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	U1	1		CAT24C256WI-G	ON Semiconductor	256 kb I2C CMOS Serial EEPROM, SOIC-8	SOIC-8
2	C1, C2, C10,	6	0.1uF	GRM188R71C104KA01D	MuRata	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0603	0603
	C12, C14, C16						
3	C3, C4	2	0.1uF	06033C104KAT2A	AVX	CAP, CERM, 0.1 µF, 25 V, +/- 10%, X7R, 0603	0603
4	C13, C15	2	10uF	1210YD106KAT2A	AVX	CAP, CERM, 10 µF, 16 V, +/- 10%, X5R, 1210	1210
5	C8	1	100pF	06035A101FAT2A	AVX	CAP, CERM, 100 pF, 50 V, +/- 1%, C0G/NP0, 0603	0603
6	C5	1	2200pF	1812HC222KAT1A	AVX	CAP, CERM, 2200 pF, 3000 V, +/- 10%, X7R, 1812	1812
7	C9	1	3900pF	GRM188R71H392KA01D	MuRata	CAP, CERM, 3900 pF, 50 V, +/- 10%, X7R, 0603	0603
8	C7, C11	2	47uF	GRM31CR60J476KE19L	MuRata	CAP, CERM, 47 μF, 6.3 V, +/- 10%, X5R, 1206	1206
9	D11	1	30V	B230A-13-F	Diodes Inc.	Diode, Schottky, 30 V, 2 A, SMA	SMA
10	D7, D8, D9, D10	4	7V	CDSOT23-SM712	Bourns	Diode, TVS, Bi, 7 V, 400 W, SOT-23	SOT-23
11	D12	1	5.6V	BZT52C5V6T-7	Diodes Inc.	Diode, Zener, 5.6 V, 300 mW, SOD-523	SOD-523
12	H13, H14	2		1841161	Phoenix Contact	Fiber optics - MC 1,5/10-LWL 1,5-3,5 for Phoenix connectors	
13	J3, J4	2		1844265	Phoenix Contact	Header (Shrouded), 3.5 mm, 7x1, R/A, TH	TH, 7-Leads, Body
							9.2x25.9, Pitch
							3.5mm
14	J5	1		800-10-010-10-001000	Mill-Max	Header, 100mil, 10x1, TH	Header, 10x1,
							100mil, TH
15	D3, D4, D5, D6		Blue	LB Q39G-L2N2-35-1	OSRAM	LED, Blue, SMD	BLUE 0603 LED
16	D1, D2, D13	3	Green	LTST-C150KGKT	LiteOn	LED, Green, SMD	1.6x3.2mm
17	D14	1	Red	LTST-C190CKT	Lite-On	LED, Red, SMD	Red LED,
							1.6x0.8x0.8mm
18	U3	1		SN65LBC174A16DW	Texas Instruments	Quadruple RS-485 Differential Line Driver, 4 TX / 0 RX, 5V, -40 to 85	DW0016A
						degC, 16-Pin SOIC(DW), Green (RoHS & no Sb/Br)	
19	R24	1	1.0k	RC0603JR-071KL	Yageo America	RES, 1.0 k, 5%, 0.1 W, 0603	0603
20	R18	1	1.8k	RC0603JR-071K8L	Yageo America	RES, 1.8 k, 5%, 0.1 W, 0603	0603
21	R28	1	10.0k	RC0603FR-0710KL	Yageo America	RES, 10.0 k, 1%, 0.1 W, 0603	0603
22	R9, R14, R15,	8	10.0	RC0805FR-0710RL	Yageo America	RES, 10.0, 1%, 0.125 W, 0805	0805
	R16, R17, R19, R20, R22						
23	R20, R22 R27	1	10.5k	RC0603FR-0710K5L	Yageo America	RES, 10.5 k, 1%, 0.1 W, 0603	0603
23	R32	1	10.5k	CRCW0603100RJNEA	Vishay-Dale	RES, 10.5 K, 1%, 0.1 W, 0003	0603
25	R25	1	16.5k	RC0603FR-0716K5L	Yageo America	RES, 16.5 k, 1%, 0.1 W, 0603	0603
26	R6, R10, R11,	5	2.2k	RC0603JR-072K2L	Yageo America	RES, 2.2 k, 5%, 0.1 W, 0603	0603
20	R12, R13		2.21	TOOOGON OF ZINZE	Tageo / inchea	11. LO, 2.2 K, 076, 0.1 VV, 0000	0000
27	R34	1	26.7k	RC0603FR-0726K7L	Yageo America	RES, 26.7 k, 1%, 0.1 W, 0603	0603
28	R26	1	280k	RC0603FR-07280KL	Yageo America	RES, 280 k, 1%, 0.1 W, 0603	0603
29	R2	1	453	CRCW0603453RFKEA	Vishay-Dale	RES, 453, 1%, 0.1 W, 0603	0603
30	R1, R3, R4, R5,	6	5.62k	CRCW06035K62FKEA	Vishay-Dale	RES, 5.62 k, 1%, 0.1 W, 0603	0603
	R7, R8						
31	R30	1	71.5k	RC0603FR-0771K5L	Yageo America	RES, 71.5 k, 1%, 0.1 W, 0603	0603
32	S1	1		219-3MST	CTS Electrocomponents	Switch, SPST, Slide, Off-On, 3 Pos, 0.1A, 20V, SMD	6.7x9.09mm
33	T1	1	2.5uH	750311880	Wurth Elektronik	Transformer, 2.5 uH, SMT	9.78x9.14mm
34	C17	0	1000pF	06031C102KAT2A	AVX	CAP, CERM, 1000 pF, 100 V, +/- 10%, X7R, 0603	0603
35	R21, R29	0	2.2k	RC0603JR-072K2L	Yageo America	RES, 2.2 k, 5%, 0.1 W, 0603	0603
36	R31	0	200	RC0603FR-07200RL	Yageo America	RES, 200, 1%, 0.1 W, 0603	0603
37	U4	1		TPS55010RTER	Texas Instruments	2.95V To 6V Input, 2W, Isolated DC/DC Converter with Integrated FETs,	RTE0016C
						RTE0016C	
38	U2	1		ISO7140CCDBQR	Texas Instruments	4242-VPK Small-Footprint and Low-Power Quad Channels Digital	DBQ0016A
						Isolators, DBQ0016A	
39	C6	1	1000pF	202R18W102KV4E	Johanson Technology	CAP, CERM, 1000 pF, 2000 V, +/- 10%, X7R, 1206_190	1206_190
40	J1, J2	2		SSHQ-123-D-08-F-LF	Major League Electronics	Female Connector, 2.54mm, 23x2, TH	Female Connector,
	EID ( EIE -			21/2	1000		2.54mm, 23x2, TH
41	FID4, FID5	2		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
42	!PCB1	1		TIDA-00766	Any	Printed Circuit Board	Et atal
43	FID1, FID2	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial

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