

TIDA-00794 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	IPC81	1		TIDA-00794	Any	Printed Circuit Board	
2	C1	1	10uF	EEE-FK1E100R	Panasonic	CAP, AL, 10 uF, 25 V, +/- 20%, 1.35 ohm, SMD	SMT Radial B
3	C2, C8, C10, C11, C13, C15, C17, C20, C21, C22, C24, C33, C34, C35, C37, C39, C40	17	0.1uF	GCM21BR71H104KA37K	MuRata	CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
4	C3, C5, C6, C9, C12, C47	6	10uF	GRM32ER71H106KA12L	MuRata	CAP, CERM, 10 uF, 50 V, +/- 10%, X7R, 1210	1210
5	C4	1	0.01uF	08055C103JA72A	AVX	CAP, CERM, 0.01 uF, 50 V, +/- 5%, X7R, 0805	0805
6	C7, C19, C46	3	1uF	GRM21BR71H105KA12L	MuRata	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0805	0805
7	C14	1	1uF	GRM31MR71H105KA88L	MuRata	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 1206	1206
8	C16, C23	2	10uF	GCM31CR71C106KA64L	MuRata	CAP, CERM, 10 uF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206_190	1206_190
9	C25, C26	2	4.7uF	C3216X7R1E475K	TDK	CAP, CERM, 4.7 uF, 25 V, +/- 10%, X7R, 1206	1206
10	C27	1	47uF	C3216X5R1E476M160AC	TDK	CAP, CERM, 47 uF, 25 V, +/- 20%, X5R, 1206_190	1206_190
11	C28	1	0.022uF	C1608X7R1H223K	TDK	CAP, CERM, 0.022 uF, 50 V, +/- 10%, X7R, 0603	0603
12	C29	1	39pF	GRM1885C1H390JA01D	MuRata	CAP, CERM, 39 pF, 50 V, +/- 5%, COG/NP0, 0603	0603
13	C30	1	1200pF	GRM1885C1H122JA01D	MuRata	CAP, CERM, 1200 pF, 50 V, +/- 5%, COG/NP0, 0603	0603
14	C31	1	1500pF	GRM188R71H152KA01D	MuRata	CAP, CERM, 1500 pF, 50 V, +/- 10%, X7R, 0603	0603
15	C32, C36, C42, C43, C44, C45	6	10uF	EEE-FK1H100P	Panasonic	CAP, AL, 10 uF, 50 V, +/- 20%, 0.88 ohm, SMD	SMT Radial D
16	C38, C41, C48, C49	4	100pF	C1608COG2A101J	TDK	CAP, CERM, 100 pF, 100 V, +/- 5%, COG/NP0, 0603	0603
17	D1, D2	2	20V	MBR0520LT1G	ON Semiconductor	Diode, Schottky, 20 V, 0.5 A, SOD-123	SOD-123
18	D3	1	Red	LTST-C170KRKT	Lite-On	LED, Red, SMD	LED_0805
19	D4	1	40V	MBRS2040LT3G	ON Semiconductor	Diode, Schottky, 40 V, 2 A, SMB	SMB
20	D5	1	60V	RB050L-60TE25	Rohm	Diode, Schottky, 60 V, 3 A, SMA	SMA
21	D6	1	Green	LTST-C170KGKT	Lite-On	LED, Green, SMD	LED_0805
22	D7, D8	2	6V	SMAJ6.0A	Littelfuse	Diode, TVS, Uni, 6 V, 400 W, SMA	SMA
23	J1, J11, J12	3		691213710002	Würth Elektronik	Terminal Block, 2x1, Brass, TH	Terminal Block, 2-Leads, Body 10x8.3mm, Pitch 5mm
24	J3, J4, J9, J13, J14, J15, J17, J18, J19	9		HTSW-102-07-G-S	Samtec	Header, 100mil, 2x1, Gold, TH	Header, 100mil, 2x1, TH
25	J5, J6	2		PPTC021LFBN-RC	Sullins Connector Solutions	Receptacle, 100mil, 2x1, Tin, TH	Receptacle, 2x1, 100mil, Tin
26	J7, J8	2		TSW-110-07-G-D	Samtec	Header, 100mil, 10x2, Gold, TH	10x2 Header
27	J10	1		694106301002	Würth Elektronik	WR-DC DC Power Jack, R/A, TH	WR-DC DC Power Jack, R/A, TH
28	J16, J20	2		TSW-104-07-G-D	Samtec	Header, 100mil, 4x2, Gold, TH	4x2 Header
29	L1	1	1.5uH	IHLP2525CZER1R5M01	Vishay-Dale	Inductor, Shielded Drum Core, Powdered Iron, 1.5 uH, 9 A, 0.014 ohm, SMD	IHLP-2525CZ
30	L2	1	10uH	IHLP3232DZER100M01	Vishay-Dale	Inductor, Shielded, Powdered Iron, 10 uH, 5.2 A, 0.0599 ohm, SMD	322x158x322mil
31	L3	1	220 ohm	BLM21PG221SN1D	MuRata	Ferrite Bead, 220 ohm @ 100 MHz, 2 A, 0805	0805
32	Q1	1	45 V	BC857C-7-F	Diodes Inc.	Transistor, PNP, 45 V, 0.1 A, SOT-23	SOT-23
33	R1, R2, R3, R4, R5, R6, R7, R17, R20, R21	10	10.0k	CRCW080510K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.125 W, 0805	0805
34	R8, R12	2	9.09k	CRCW08059K09FKEA	Vishay-Dale	RES, 9.09 k, 1%, 0.125 W, 0805	0805
35	R9	1	1.65k	CRCW08051K65FKEA	Vishay-Dale	RES, 1.65 k, 1%, 0.125 W, 0805	0805
36	R10, R11	2	49.9	ERJ-6ENF49R9V	Panasonic	RES, 49.9, 1%, 0.125 W, 0805	0805
37	R13	1	150	CRCW0805150RJNEA	Vishay-Dale	RES, 150, 5%, 0.125 W, 0805	0805
38	R14	1	10.0k	CRCW120610K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.25 W, 1206	1206
39	R18	1	20.0k	ERJ-3EKF2002V	Panasonic	RES, 20.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
40	R22	1	348k	CRCW0805348KFKEA	Vishay-Dale	RES, 348 k, 1%, 0.125 W, 0805	0805
41	R23	1	1.87k	CRCW08051K87FKEA	Vishay-Dale	RES, 1.87 k, 1%, 0.125 W, 0805	0805
42	R24	1	78.7k	CRCW080578K7FKEA	Vishay-Dale	RES, 78.7 k, 1%, 0.125 W, 0805	0805
43	R25	1	107k	CRCW0805107KFKEA	Vishay-Dale	RES, 107 k, 1%, 0.125 W, 0805	0805
44	R26	1	20.5k	CRCW080520K5FKEA	Vishay-Dale	RES, 20.5 k, 1%, 0.125 W, 0805	0805
45	R27	1	10.0	CRCW080510R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.125 W, 0805	0805
46	R28, R29, R30, R34, R35	5	10.0	RNCP0805FTD10R0	Stackpole Electronics Inc	RES, 10.0, 1%, 0.25 W, 0805	0805
47	R31, R32, R33	3	10.0k	ERJ-3EKF1002V	Panasonic	RES, 10.0 k, 1%, 0.1 W, 0603	0603
48	T1	1	475uH	760390014	Würth Elektronik	Transformer, 475uH, SMT	10.05x4.19x6.73 mm
49	TP1, TP8, TP10, TP14, TP15, TP16, TP18, TP20, TP23	9	Red	5005	Keystone	Test Point, Compact, Red, TH	Red Compact Testpoint
50	TP2, TP17, TP19	3	Black	5006	Keystone	Test Point, Compact, Black, TH	Black Compact Testpoint
51	TP3, TP4, TP6, TP7, TP9, TP12, TP13, TP21, TP22	9	Blue	5122	Keystone	Test Point, Compact, Blue, TH	Blue Compact Testpoint
52	U1	1		TPS76350QDBV/RG4Q1	Texas Instruments	Single Output Automotive LDO, 150 mA, Fixed 5 V Output, 2.7 to 10 V Input, 5-pin SOT-23 (DBV), -40 to 125 degC, Green (RoHS & no Sb/Br)	DBV0005A
53	U2	1		SN6501QDBV/RQ1	Texas Instruments	Transformer Driver for Isolated Power Supplies, DBV0005A	DBV0005A
54	U3	1		ISO1541DR	Texas Instruments	Low-Power Bidirectional I2C Isolators, D0008A	D0008A
55	U4	1		ADS1015QDGSRQ1	Texas Instruments	Ultra-Small, Low-Power, 12-Bit Analog-to-Digital Converter with Internal Reference, DGS0010A	DGS0010A
56	U6	1		ISO7220AQRQ1	Texas Instruments	1 Mbps Automotive Catalog Dual Channels, 2 / 0, Digital Isolator, 3.3 V / 5 V, -40 to +125 degC, 8-pin SOIC (D), Green (RoHS & no Sb/Br)	D0008A
57	U7	1		TPS57140QDQGRQ1	Texas Instruments	1.5-A 42-V STEP-DOWN SWIFT DC-DC CONVERTER WITH Eco-mode CONTROL, DGQ0010D	DGQ0010D
58	U8	1		SN74LVC125AQPWRQ1	Texas Instruments	QUADRUPLE BUS BUFFER GATE WITH 3-STATE OUTPUTS, PW0014A	PW0014A
59	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
60	R36, R37	0	0	RC6432J000CS	Samsung	RES, 0, 5%, 1 W, 2512	2512

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