Variant: 001
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TIDA-050059 REV Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	C1, C10	2	0.22uF	GRM188R71E224KA88D	MuRata	CAP, CERM, 0.22 uF, 25 V, +/- 10%, X7R, 0603	603
2	C2, C9, C11	3	0.1uF	GRM155R71E104KE14D	MuRata	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0402	402
3	C3, C4, C12, C13	4	1uF	UMK107AB7105KA-T	Taiyo Yuden	CAP, CERM, 1 uF, 50 V, +/- 10%, X7R, 0603	603
4	C5, C14	2	0.1uF	C0805C104K1RACTU	Kemet	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X7R, 0805	805
5	C6, C7, C8, C15, C16, C17	6	0.1uF	GCM188R71E104KA57D	MuRata	CAP, CERM, 0.1 µF, 25 V,+/- 10%, X7R, AEC-Q200 Grade 1, 0603	603
6	C18, C19	2	1uF	GCM188R71E105KA64D	MuRata	CAP, CERM, 1 uF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	603
7	C20	1	0.01uF	C1608X7R1H103K080AA	TDK	CAP, CERM, 0.01 uF, 50 V, +/- 10%, X7R, 0603	603
8	C21	1	1000pF	C0603C102J5RACTU	Kemet	CAP, CERM, 1000 pF, 50 V, +/- 5%, X7R, 0603	603
9	C22	1	0.22uF	CGA3E3X7R1H224K080AB	TDK	CAP, CERM, 0.22 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	603
10	D1	1		BAT54S-HF	Comchip Technology	Diode, Schottky, 30 V, 0.1 A, SOT-23	603
11	H1, H2, H3, H4, H5, H6, H7, H8	8		SJ-5017 (BLACK)	3M	Bumpon, Cylindrical, 0.75 X 0.38 inch, Black	Bumpon
12	J1, J4, J6, J8, J10	5		393570002	Molex	Terminal Block, 3.5 mm, 2x1, Tin, TH	Terminal Block, 3.5 mm, 2x1, TH
13	J2, J7	2		393570003	Molex	Terminal Block, 3.5 mm, 3x1, Tin, TH	Terminal Block, 3.5 mm, 3x1, TH
14	J3, J9	2		PBC02DAAN	Sullins Connector Solutions	Header, 2.54mm, 2x2, Gold, TH	Header, 2.54mm, 2x2, TH
15	J5, J11	2		PEC03SAAN	Sullins Connector Solutions	Header, 100mil, 3x1, Tin, TH	Header, 3 PIN, 100mil, Tin
16	Q1, Q2, Q3, Q4	4		STB30N65M2AG	STMicroelectronics	MOSFET N-CH 650V 20A	D2PAK
17	R1, R9	2	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
18	R2, R11	2	7.32k	CRCW06037K32FKEA	Vishay-Dale	RES, 7.32 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
19	R3, R12	2	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
20	R4	1	2.7k	CRCW04022K70JNED	Vishay-Dale	RES, 2.7 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	402
21	R5, R6, R13	3	10k	CRCW060310K0JNEA	Vishay-Dale	RES, 10 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
22	R7	1	78.7k	CRCW040278K7FKED	Vishay-Dale	RES, 78.7 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
23	R8	1	38.3k	CRCW040238K3FKED	Vishay-Dale	RES, 38.3 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
24	R10	1	0.06	652-CRA2512FZR060ELF	Bourns	RES , 0.06, 1%, 3 W, 2512	2512
25	R14, R17	2	560k	CRCW0603560KFKEA	Vishay-Dale	RES, 560 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
26	R15	1	100	RMCP0603JT100R	Stackpole Electronics Inc	RES, 100, 5%, 0.25 W, AEC-Q200 Grade 0, 0603	603
27	R16	1	1.0k	CRCW06031K00JNEA	Vishay-Dale	RES, 1.0 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	603
28	R18	1	1.20k	RC0603FR-071K2L	Yageo	RES, 1.20 k, 1%, 0.1 W, 0603	603
29	SH-J1, SH-J2, SH-J3, SH-J4	4	1x2	SNT-100-BK-G	Samtec	Shunt, 100mil, Gold plated, Black	Shunt
30	TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8, TP9, TP10, TP11, TP12, TP13, TP14, TP15, TP16, TP17, TP18, TP19, TP20, TP21, TP22, TP23, TP24, TP25, TP26, TP27, TP28, TP29, TP30, TP31	31		5019	Keystone	Test Point, Miniature, SMT	Test Point, Miniature, SMT
31	U1, U5	2		TPSI3050QDWZRQ1	Texas Instruments	Automotive Reinforced Isolated Switch Driver With Integrated 10-V Gate Supply	SOIC8
32	U2, U6	2		SN74HCS09PWR	Texas Instruments	AND Gate IC 4 Channel Schmitt Trigger, Open Drain 14-TSSOP	TSSOP14
33	U3	1		TMP392A2DRLR	Texas Instruments	Ultra-Small, Dual-Channel, 0.5-µA, Resistor-Programmable Temperature Switch, DRL0006A (SOT-5X3-6)	DRL0006A
34	U4	1		ISO7310FCDR	Texas Instruments	Robust EMC, Low Power Single-Channel 1/0 Digital Isolator, Fail-safe Low, D0008B (SOIC-8)	D0008B
35	U7	1		AMC23C14QDWVRQ1	Texas Instruments	Dual, Fast Response, Reinforced Isolated Window Comparator with Adjustable Threshold, SOICW8	SOICW8
36	FID1, FID2, FID3, FID4, FID5, FID6	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A

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