

TIDA-00805 REV A Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
IPC1	1		TIDA-00805	Any	Printed Circuit Board	
3V3_SW, 5V0, TP2, TP7, TP9, TP23, TP24, TP25, TP26, TP27, TP28, TP29, VBAT, VDD_DDR_SW2, VTT, VTTREF	16		2505-2-00-44-00-00-07-0	Mill-Max	PCB Pin, Swage Mount, TH	PCB Pin(2505-2)
C1, C3	2	10uF	CGA5L3X5R1H106K160AB	TDK	CAP, CERM, 10 µF, 50 V, +/- 10%, X5R, 1206_190	1206_190
C2, C4	2	0.47uF	CGA3E3X7R1H474K080AE	TDK	CAP, CERM, 0.47 µF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C5, C6	2	22uF	GCM31CR71A226KE02	MuRata	CAP, CERM, 22 µF, 10 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
C7	1	47uF	GRM32ER71A476KE15L	MuRata	CAP, CERM, 47 µF, 10 V, +/- 10%, X7R, 1210	1210
C8, C9, C10, C11, C12, C18, C19, C20, C21, C32	10	2.2uF	CGA3E1X7S1C225M080AC	TDK	CAP, CERM, 2.2 µF, 16 V, +/- 20%, X7S, AEC-Q200 Grade 1, 0603	0603
C13	1	10uF	CGA4J1X7S1C106K125AC	TDK	CAP, CERM, 10 µF, 16 V, +/- 10%, X7S, AEC-Q200 Grade 1, 0805	0805
C14, C16	2	2.2uF	GRM155R60J225ME15D	MuRata	CAP, CERM, 2.2 µF, 6.3 V, +/- 20%, X5R, 0402	0402
C15	1	0.1uF	GCM155R71C104KA55D	MuRata	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0402	0402
C17	1	0.1uF	GRM155R61C104KA88D	MuRata	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X5R, 0402	0402
C22, C23, C24, C25, C26	5	47uF	GRT31CR61A476KE13L	MuRata	CAP, CERM, 47 µF, 10 V, +/- 10%, X5R, AEC-Q200 Grade 1, 1206	1206
C27, C28, C29, C30, C31, C33	6	4.7uF	GCM31CR71C475KA37L	MuRata	CAP, CERM, 4.7 µF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206	1206
C34, C36, C38	3	1000pF	CGA1A2X7R1E102K030BA	TDK	CAP, CERM, 1000 pF, 25 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0201	0201
C35, C37, C39, C42, C43, C44	6	10uF	CGA5L1X7R1C106K160AC	TDK	CAP, CERM, 10 µF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206_190	1206_190
C40	1	0.1uF	C0402C104K4RACAUTO	Kemet	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C41	1	10pF	CGA3E2C0G1H100D080AA	TDK	CAP, CERM, 10 pF, 50 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0603	0603
C45, C46	2	1uF	GCM188R71C105KA64D	MuRata	CAP, CERM, 1 µF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
C47, C48, C51, C52	4	0.01uF	CGA1A2X7R1A103K030BA	TDK	CAP, CERM, 0.01 µF, 10 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0201	0201
C49, C50	2	220pF	CGA1A2X7R1H221K030BA	TDK	CAP, CERM, 220 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0201	0201
C53	1	4.7uF	GCM21BR71C475KA73L	MuRata	CAP, CERM, 4.7 µF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
C54, Co1	2	0.1uF	GCM188R71C104KA37J	MuRata	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	0603
Cb1	1	0.47uF	GRM188R61E474KA12D	MuRata	CAP, CERM, 0.47 µF, 25 V, +/- 10%, X5R, 0603	0603
D1, D2	2	Green	LP M67K-D2G1-25-Z	OSRAM	LED, Green, SMD	LED, 2.3x1.4x1.5mm
FID4, FID5, FID6	3		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
H1, H2, H3, H4	4		SJ-5303 (CLEAR)	3M	Bumpon, Hemisphere, 0.44 X 0.20, Clear	Transparent Bumpon
J1	1		961102-6404-AR	3M	Header, 2.54mm, 2x1, TH	Header, 2.54mm, 2x1, TH
J2	1		PEC02SAAN	Sullins Connector Solutions	Header, 100mil, 2x1, Tin, TH	Header, 2 PIN, 100mil, Tin
J3	1		TSW-112-07-G-S	Samtec	Header, 100mil, 12x1, Gold, TH	12x1 Header
L1	1	2.2uH	XAL4020-222MEB	Coilcraft	Inductor, Shielded, Composite, 2.2 µH, 5.5 A, 0.04 ohm, SMD	4x2.1x4mm
L2, L3, L4, L5, L6	5	1uH	SRP4012-1R0M	Bourns	Inductor, Flat Wire, Powdered Iron, 1 µH, 4.8 A, 0.0336 ohm, SMD	4.7x1.2x4.0mm
L7	1	2.2uH	B82462G4222M	TDK	Inductor, Shielded Drum Core, Ferrite, 2.2 µH, 2.55 A, 0.025 ohm, AEC-Q200 Grade 0, SMD	6.3x3.0x6.3mm

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
Q1	1	20V	DMG2302UK-7	Diodes Inc.	MOSFET, N-CH, 20 V, 2.8 A, AEC-Q101, SOT-23	SOT-23
Q2	1	-20V	DMG1013UW-7	Diodes Inc.	MOSFET, P-CH, -20 V, -0.82 A, SOT-323	SOT-323
R1, R2, R3	3	100k	CRCW0603100KJNEA	Vishay-Dale	RES, 100 k, 5%, 0.1 W, 0603	0603
R4, R9, R16, R17, R19, R23	6	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R5, R7	2	10.0k	MCR01MRTF1002	Rohm	RES, 10.0 k, 0.1%, 0.063 W, 0402	0402
R6, R11	2	806	CRCW0402806RFKED	Vishay-Dale	RES, 806, 1%, 0.063 W, 0402	0402
R10, R15, R21	3	0	RC0402JR-070RL	Yageo America	RES, 0, 5%, 0.063 W, 0402	0402
R12, R13	2	2.2k	CRCW04022K20JNED	Vishay-Dale	RES, 2.2 k, 5%, 0.063 W, 0402	0402
R18	1	100k	RC0603FR-07100KL	Yageo America	RES, 100 k, 1%, 0.1 W, 0603	0603
R20	1	10.0	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.1 W, 0603	0603
R22	1	3.0	CRCW06033R00JNEA	Vishay-Dale	RES, 3.0, 5%, 0.1 W, 0603	0603
TP1	1		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP8, TP15, TP16, TP17, TP18, TP19, TP20, TP21, TP22	9		5004	Keystone	Test Point, Miniature, Yellow, TH	Yellow Miniature Testpoint
U1	1		LM53635NQRNLRQ1	Texas Instruments	2.5/3.5A Synchronous Buck Regulator for Automotive Applications, RNL0022A	RNL0022A
U2	1		O917A132TRGZRQ1	Texas Instruments	Power Management Unit (PMU) for Processor, RGZ0048D	RGZ0048D
U3	1		TPS61240IDRVRQ1	Texas Instruments	Automotive Catalog 5V, 400mA, 4MHz Step-Up DC/DC Converter, DRV0006A	DRV0006A
U4	1		TPS51200QDRCRQ1	Texas Instruments	Single Output Automotive LDO, 3 A, 2.3 to 3.5 V Input, with DDR Termination, 10-pin SON (DRC), -40 to 125 degC, Green (RoHS & no Sb/Br)	DRC0010J
U5, U6	2		TPS22965TDSGRQ1	Texas Instruments	5.5-V, 4-A, 16-mΩ On-Resistance Load Switch, DSG0008A	DSG0008A
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
R8, R14	0	0	RC0402JR-070RL	Yageo America	RES, 0, 5%, 0.063 W, 0402	0402

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