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TIDA-00757

TIDA-00757 REV B Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB1	1		TIDA-00757	Any	Printed Circuit Board	
BT1, BT2	2		2462	Keystone	2x AA Battery Holder, Through-hole mount	TH, 2x AA Battery Holder
C1, C2, C9	3	10uF	EMK212BB7106MG-T	Taiyo Yuden	CAP, CERM, 10 µF, 16 V, +/- 20%, X7R, 0805	0805
C3	1	100uF	C3216X5R1A107M160AC	TDK	CAP, CERM, 100 µF, 10 V, +/- 20%, X5R, 1206_190	1206_190
C4, C5, C10, C11, C40	5	1uF	GRM155R61A105KE15D	MuRata	CAP, CERM, 1 µF, 10 V, +/- 10%, X5R, 0402	0402
C6, C7, C12, C14	4	0.47uF	C1005X5R1A474K050BB	TDK	CAP, CERM, 0.47 µF, 10 V, +/- 10%, X5R, 0402	0402
C8	1	0.01uF	C1005X7R1C103K050BA	TDK	CAP, CERM, 0.01 µF, 16 V, +/- 10%, X7R, 0402	0402
C13	1	2.2uF	C0603C225K9PACTU	Kemet	CAP, CERM, 2.2 µF, 6.3 V, +/- 10%, X5R, 0603	0603
C16, C17, C19, C21, C22	5	0.1uF	GRM155R71A104KA01D	MuRata	CAP, CERM, 0.1 µF, 10 V, +/- 10%, X7R, 0402	0402
C18, C20	2	10uF	GRM21BR71A106KE51L	MuRata	CAP, CERM, 10 µF, 10 V, +/- 10%, X7R, 0805	0805
C24	1	0.1uF	CGA2B3X7R1E104K050BB	TDK	CAP, CERM, 0.1 µF, 25 V,+/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C25, C26, C27	3	2200pF	C1005X7R1H222K	TDK	CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0402	0402
C30	1	6.8pF	GRM1555C1H6R8CA01D	MuRata	CAP, CERM, 6.8 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C31, C32, C35	3	12pF	GRM1555C1H120JA01D	MuRata	CAP, CERM, 12 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C34, C38, C41	3	1pF	GJM1555C1H1R0BB01D	MuRata	CAP, CERM, 1 pF, 50 V, +/- 10%, C0G/NP0, 0402	0402
C36	1	1.8pF	GRM1555C1H1R8CA01D	MuRata	CAP, CERM, 1.8 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C37	1	1.2pF	GRM1555C1H1R2CA01D	MuRata	CAP, CERM, 1.2 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
D1, D2, D3, D4, D5, D6	6	Rgb	ASMT-YTC2-0AA02	Avago	LED, Rgb, SMD	LED, 3x2x3.6 mm
E1	1		ANTENNA_IIFA	N/A	PCB Antenna. There is nothing to buy or mount.	PCB Antenna, 2-Leads
H1, H2, H3, H4	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
H5, H6, H7, H8	4		1902E	Keystone	Standoff, Hex, 1"L #4-40 Nylon	Standoff
J1, J2	2		61300211121	Wurth Elektronik eiSos	Header, 2.54 mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
J3	1		OSTTE020161	On-Shore Technology	Terminal Block, 2x1, 3.5mm, TH	2x1 Terminal Block
L1	1	4.7uH	CBC3225T4R7MR	Taiyo Yuden	Inductor, Wirewound, 4.7 µH, 1.01 A, 0.1 ohm, SMD	3.2x2.5x2.5mm
L2	1	10uH	CKS2125100M-T	Taiyo Yuden	Inductor, Multilayer, Ferrite, 10 µH, 0.11 A, 0.52 ohm, SMD	0805
L3	1	1500 ohm	BLM18HE152SN1D	MuRata	Ferrite Bead, 1500 ohm @ 100 MHz, 0.5 A, 0603	0603
L4, L7	2	2.4nH	LQG15HN2N4S02D	MuRata	Inductor, Multilayer, Air Core, 2.4 nH, 0.3 A, 0.16 ohm, SMD	0402 polarized
L5, L6	2	2nH	LQG15HS2N0S02D	MuRata	Inductor, Multilayer, Air Core, 2 nH, 0.3 A, 0.1 ohm, SMD	0402 polarized
LBL1	1		THT-14-423-10	Brady	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	PCB Label 0.650"H x 0.200"W
Q1	1	-20V	CSD25310Q2	Texas Instruments	MOSFET, P-CH, -20 V, -20 A, SON 2x2mm	SON 2x2mm
R1	1	38.3k	RC0603FR-0738K3L	Yageo America	RES, 38.3 k, 1%, 0.1 W, 0603	0603
R2	1	30.0k	ERJ-3EKF3002V	Panasonic	RES, 30.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R3	1	0.1	CSR1206FKR100	Stackpole Electronics Inc	RES, 0.1, 1%, 0.5 W, 1206	1206
R4	1	1.00k	ERJ-3EKF1001V	Panasonic	RES, 1.00 k, 1%, 0.1 W, 0603	0603
R5	1	100k	RMCF0402FT100K	Stackpole Electronics Inc	RES, 100 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R6, R7, R8	3	47.5k	CRCW040247K5FKED	Vishay-Dale	RES, 47.5 k, 1%, 0.063 W, 0402	0402
R9, R10	2	4.7k	ERJ-3GEYJ472V	Panasonic	RES, 4.7 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R12, R13	2	10.0k	ERJ-3EKF1002V	Panasonic	RES, 10.0 k, 1%, 0.1 W, 0603	0603
S1, S2, S3, S4	4		4-1437565-1	TE Connectivity	Switch, Tactile, SPST-NO, 0.05A, 12V, SMT	SW, SPST 6x6 mm
SH-J1, SH-J2	2	1x2	969102-0000-DA	3M	Shunt, 100mil, Gold plated, Black	Shunt
TP1, TP2	2	Red	5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
TP3, TP4, TP10	3	Black	5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
TP5, TP6	2	Yellow	5004	Keystone	Test Point, Miniature, Yellow, TH	Yellow Miniature Testpoint
TP8, TP9	2	White	5002	Keystone	Test Point, Miniature, White, TH	White Miniature Testpoint
U1	1		TPS62745DSSR	Texas Instruments	Dual-cell Ultra Low IQ Step Down Converter for Low Power Wireless Applications, DSS0012A	DSS0012A
U2, U4	2		LP55231SQX/NOPB	Texas Instruments	LP55231 Programmable 9-Output LED Driver, RTW0024A	RTW0024A
U3	1		DRV8833PWPR	Texas Instruments	Dual H-Bridge Motor Driver, PWP0016C	PWP0016C
U5, U6, U7	3		TPD1E10B06DPYR	Texas Instruments	ESD in 0402 Package with 10 pF Capacitance and 6 V Breakdown, 1 Channel, -40 to +125 degC, 2-pin X2SON (DPY), Green (RoHS & no Sb/Br)	DPY0002A
U8	1		CC2640R2FTWRGZTQ1	Texas Instruments	Automotive Qualified SimpleLink Bluetooth low energy Wireless MCU, RGZ0048N (VQFN-48)	RGZ0048N
Y1	1		TSX-3225 24.0000MF20G-AC3	Epson	Crystal, 24 MHz, 9 pF, SMD	SMD, 4-Leads, Body 2.65x3.35mm, Height 0.6mm
Y2	1		FC-12M 32.7680KA-A3	Epson	Crystal, 32.768kHz, 12.5pF, SMD	Crystal 2.05x.6x1.2mm
C15	0	10uF	C1608X5R1A106M080AC	TDK	CAP, CERM, 10 µF, 10 V, +/- 20%, X5R, 0603	0603
C23	0	0.1uF	885012205037	Wurth Elektronik	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0402	0402
C28, C29	0	12pF	GRM1555C1H120JA01D	MuRata	CAP, CERM, 12 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C33	0	1.8pF	GRM1555C1H1R8CA01D	MuRata	CAP, CERM, 1.8 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
C39	0	1.2pF	GRM1555C1H1R2CA01D	MuRata	CAP, CERM, 1.2 pF, 50 V, +/- 5%, C0G/NP0, 0402	0402
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
J4	0		GRPB052VWVN-RC	Sullins Connector Solutions	Header, 50mil, 5x2, Gold, TH	Header, 5x2, 50mil
J5	0		SMA-10V21-TGG	Hus-Tsan Group Co., Ltd.	Connector, SMA, Vertical, Gold, SMT	SMD, 4-Leads, Body 7.1x7.1mm
R11	0	2.20k	RC0603FR-072K2L	Yageo America	RES, 2.20 k, 1%, 0.1 W, 0603	0603
R14	0	0	ERJ-2GE0R00X	Panasonic	RES, 0, 5%, 0.063 W, 0402	0402

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