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TIDA-01516

TIDA-01516 REV E2 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1	1	0.1uF	06035C104KAT2A	AVX	CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603	0603
C2	1	4.7uF	C2012X7R1V475K125AC	TDK	CAP, CERM, 4.7 µF, 35 V,+/- 10%, X7R, 0805	0805
C3, C5	2	1uF	C1608X7R1C105K	TDK	CAP, CERM, 1 µF, 16 V, +/- 10%, X7R, 0603	0603
C4	1	0.047uF	C1608X5R1H473K080AA	TDK	CAP, CERM, 0.047 µF, 50 V,+/- 10%, X5R, 0603	0603
C6, C7	2	470uF	35ZLG470MEFC10X20	Rubycon	470µF 35V CAP ALUM CAN 4000 Hrs @ 105°C	10x20
C8, C9, C10	3	1000pF	885012205061	Wurth Elektronik	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, 0402	0402
C11	1	0.1uF	C3216X7R2A104K160AA	TDK	CAP, CERM, 0.1 µF, 100 V, +/- 10%, X7R, 1206	1206
C12, C13, C43, C47, C52, C53	6	0.1uF	885012105016	Wurth Elektronik	CAP, CERM, 0.1 µF, 16 V, +/- 20%, X5R, 0402	0402
C14	1	2.2uF	GRM32ER72A225KA35L	MuRata	CAP, CERM, 2.2uF, 100V, +/-10%, X7R, 1210	1210
C15	1	22uF	C1210C226K9RACTU	Kemet	CAP, CERM, 22 µF, 6.3 V,+/- 10%, X7R, 1210	1210
C17	1	3300pF	CGA2B2X7R1H332K050BA	TDK	CAP, CERM, 3300 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	0402
C18, C19, C20, C22, C23, C38	6	0.1uF	GRM155R70J104KA01D	MuRata	CAP, CERM, 0.1 µF, 6.3 V,+/- 10%, X7R, 0402	0402
C21, C24	2	10uF	GRM188R60J106ME47D	MuRata	CAP, CERM, 10 µF, 6.3 V,+/- 20%, X5R, 0603	0603
C26	1	6.8pF	GRM1555C1H6R8CA01D	MuRata	CAP, CERM, 6.8 pF, 50 V,+/- 5%, C0G/NP0, 0402	0402
C28, C30, C32	3	12pF	GRM1555C1H120JA01D	MuRata	CAP, CERM, 12 pF, 50 V,+/- 5%, C0G/NP0, 0402	0402
C29	1	1pF	GRM1555C1H1R0BA01D	MuRata	CAP, CERM, 1 pF, 50 V,+/- 10%, C0G/NP0, 0402	0402
C31	1	1.8pF	GRM1555C1H1R8CA01D	MuRata	CAP, CERM, 1.8 pF, 50 V,+/- 5%, C0G/NP0, 0402	0402
C33	1	1uF	CL05A105KP5NNNC	Samsung Electro-Mechanics	CAP CER 1UF 10V X5R 0402	0402
C36, C37	2	1pF	GRM1555C1H1R0CA01D	MuRata	CAP, CERM, 1 pF, 50 V,+/- 5%, C0G/NP0, 0402	0402
C39, C40, C41	3	2.2uF	GRM32ER72A225KA35L	MuRata	CAP, CERM, 2.2 µF, 100 V, +/- 10%, X7R, 1210	1210
C55	1	1000pF	C0402C102J3RACTU	Kemet	CAP, CERM, 1000 pF, 25 V,+/- 5%, X7R, 0402	0402
D1	1	60V	PMEG6010CEJ,115	NXP Semiconductor	Diode, Schottky, 60 V, 1 A, SOD-323F	SOD-323F
D2	1	30V	SMAJ30CA-13-F	Diodes Incorporated	TVS DIODE 30VWM 48.4VC SMA	SMA
D4	1	RED	150060RS75000	Wurth Elektronics Inc	LED RED CLEAR 0603 SMD	LED_0603
D5, D9	2	YELLOW	150060YS75000	Wurth Elektronics Inc	LED YELLOW CLEAR 0603 SMD	LED_0603
D6	1	GREEN	150060GS75000	Wurth Elektronics Inc	LED, Green, SMD	LED_0603
J1	1		MM5829-2700RJ4	MuRata	Connector, RF, 50 Ohm, SMT	Connector, RF, SMT
J2	1		61300311121	Wurth Elektronik	Header, 2.54 mm, 3x1, Gold, TH	Header, 2.54mm, 3x1, TH
J3	1		61300211121	Wurth Elektronik	Header, 2.54 mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
J4	1		61300611121	Wurth Elektronik	Header, 2.54 mm, 6x1, Gold, TH	Header, 2.54mm, 6x1, TH
J5	1		61300511121	Wurth Electronics Inc.	Header, 100mil, 5x1, TH	Header, 5x1, 100mil, TH
J6	1		61300411121	Wurth Elektronik	Header, 2.54 mm, 4x1, Gold, TH	Header, 2.54mm, 4x1, TH
J7	1		61300111121	Wurth Elektronik	Header, 2.54 mm, 1x1, Gold, TH	Header, 2.54 mm, 1x1, TH
L2	1	1500 ohm	BLM18HE152SN1D	MuRata	Ferrite Bead, 1500 ohm @ 100 MHz, 0.5 A, 0603	0603
L3	1	10uH	CKS2125100M-T	Taiyo Yuden	Inductor, Multilayer, Ferrite, 10 µH, 0.11 A, 0.52 ohm, SMD	0805
L4, L8	2	2.4nH	LQG15HS2N4S02D	MuRata	Inductor, Multilayer, Air Core, 2.4 nH, 0.3 A, 0.15 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
R1, R2, R4, R6, R7, R13, R28, R49, R62, R63	10	100	ERJ-2RKF1000X	Panasonic	RES, 100, 1%, 0.1 W, 0402	0402
R3	1	2M	RC0603FR-072ML	Yageo	RES SMD 2M OHM 1% 1/10W 0603	0603
R5	1	300k	RC0402FR-07300KL	Yageo	RES SMD 300K OHM 1% 1/16W 0402	0402
R8, R11, R29, R59	4	10.0k	RMCF0402FT10K0	Stackpole Electronics Inc	RES, 10.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R12, R15, R30	3	0	RC0402JR-070RL	Yageo America	RES, 0, 5%, 0.063 W, 0402	0402
R16	1	100k	RMCF0402FT100K	Stackpole Electronics Inc	RES, 100 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R23, R24	2	0.001	CSS2H-2512R-1L00F	Bourns Inc.	RES SMD 0.001 OHM 1% 5W 2512	2512
R25, R26	2	10.0	RMCF0402JT10R0	Stackpole Electronics Inc	RES, 10.0, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402

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R27, R36, R37, R61	4	1.00k	RT0603DRE071KL	Yageo America	RES, 1.00 k, 0.5%, 0.1 W, 0603	0603
R32, R46	2	47.5k	RC0402FR-0747K5L	Yageo	RES SMD 47.5K OHM 1% 1/16W 0402	0402
R33, R45	2	1.00Meg	RMCF0402FT1M00	Stackpole Electronics Inc	RES, 1.00 M, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
R53, R54, R55	3	3.30k	ERJ-2RKF3301X	Panasonic	RES, 3.30 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0402	0402
S1	1		434121025816	Wurth Elektronik	Switch, Tactile, SPST, 12 V, SMD	SMD, 6x3.9mm
U1	1		DRV8323SRTAR	Texas Instruments	60-V Three-Phase Smart Gate Driver, RHA0040B (VQFN-40)	RHA0040B
U2	1		TPS70933DRVR	Texas Instruments	150-mA, 30-V, Ultra-Low IQ, Wide Input Low-Dropout Regulator with Reverse Current Protection, DRV0006A (WSON-6)	DRV0006A
U3	1		CC2640R2FRGZR	Texas Instruments	SimpleLink(TM) Bluetooth(R) low energy Wireless MCU, RGZ0048A (VQFN-48)	RGZ0048A
U4, U5, U6	3		CSD88584Q5DC	Texas Instruments	40 V Half-Bridge NexFE Power Block, DMM0022A	DMM0022A
U7, U10, U11, U12, U13, U14	6		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
U9	1		LMT87QDCKRQ1	Texas Instruments	SC70 Analog Temperature Sensor with Class-AB Output, DCK0005A	DCK0005A
Y1	1		TSX-3225 24.0000MF15X-AC6	Epson	CRYSTAL 24.00 MHZ 9.0PF SMD	SMD, 4-Leads, Body 2.65x3.35mm, Height 0.6mm
Y2	1		FC-135 32.768KA-AG0	Epson	CRYSTAL 32.7680KHZ 7PF SMD	SMD, 2-Leads, Body
C27	0	1pF	GRM1555C1H1R0BA01D	MuRata	CAP, CERM, 1 pF, 50 V,+/- 10%, C0G/NP0, 0402	0402
C34, C35	0	1pF	GRM1555C1H1R0CA01D	MuRata	CAP, CERM, 1 pF, 50 V,+/- 5%, C0G/NP0, 0402	0402
R31	0	0	RC0402JR-070RL	Yageo America	RES, 0, 5%, 0.063 W, 0402	0402

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