TIDA-01373 REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
3v3, 3v3-ISO, 5v, 5v-ISO, 5v-Other-Reg, 5v-USB-Reg, 5v_pre, Back, Contrast, D0.1, D0.2, D1.1, D1.2, D2.1, D2.2, D3.1, D3.2, D4.1, D4.2, D5.1, D5.2, D6.1, D6.2, D7.1, D7.2, Done, E.1, E.2, GND1, Next, Program, R/W.1, R/W.2, Read, Reset, RS.1, RS.2, SCL, SCL0-ISO, SCL1-ISO, SCL2-ISO, SCL3-ISO, SCL4-ISO, SCL5-ISO, SCL6-ISO, SCL7-ISO, SCL-ISO, SDA, SDA0-ISO, SDA1-ISO, SDA2-ISO, SDA3-ISO, SDA4-ISO, SDA5-ISO, SDA6-ISO, SDA7-ISO, SDA-ISO, Test, USB_Vin, Vin	60		5016	Keystone	Test Point, Compact, SMT	Testpoint_Keystone_Compact
Back_button, Done_button, Next_button, Program_button, Read_button, Reset_button	6		430182070816	Wurth Elektronik	Switch, SPST-NO, Off-Mom, 1 Pos, 0.05A, 12 VDC, SMT	6.2x6.2mm
C0, C5, C6, C8, C9, C10, C27	7	0.1uF	C0603C104K8RACTU	Kemet	CAP, CERM, 0.1 µF, 10 V, +/- 10%, X7R, 0603	0603
C1	1	22uF	GRM32ER61E226KE15L	MuRata	CAP, CERM, 22 µF, 25 V, +/- 10%, X5R, 1210	1210
C2	1	0.1uF	GRM155R61C104KA88D	MuRata	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X5R, 0402	0402
C3	1	10uF	GRM188R61C106MAALD	MuRata	CAP, CERM, 10 µF, 16 V, +/- 20%, X5R, 0603	0603
C4	1	47uF	GRM31CR61A476KE15L	MuRata	CAP, CERM, 47 µF, 10 V, +/- 10%, X5R, 1206	1206
C11, C14, C16, C18, C21	5	4.7uF	GRM219R60J475KE19D	MuRata	CAP, CERM, 4.7 µF, 6.3 V, +/- 10%, X5R, 0805	0805
C12, C13, C15, C17, C20	5	0.1uF	GRM155R71A104KA01D	MuRata	CAP, CERM, 0.1 µF, 10 V, +/- 10%, X7R, 0402	0402
C22, C23	2	12pF	C0402C120J3GACAUTO	Kemet	CAP, CERM, 12 pF, 25 V, +/- 5%, C0G/NP0, AEC-Q200 Grade 1, 0402	0402
C24	1	4.7uF	GRM219C80J475KE19D	MuRata	CAP, CERM, 4.7 µF, 6.3 V, +/- 10%, X6S, 0805	0805

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C25	1	0.1uF	C0805C104K4RACTU	Kemet	CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0805	0805
C26	1	22uF	C5750X7R1E226M250KA	TDK	CAP, CERM, 22 µF, 25 V, +/- 20%, X7R, 2220	2220
F1, F2, F3	3		0263001.WRT1L	Littelfuse	Fuse, 1 A, 250VAC/VDC, TH	Fuse, 7.11x3.94mm
FID1, FID2, FID3	3		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
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		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
IC1	1		MSP430G2553IRHB32R	Texas Instruments	16 MHz Mixed Signal Microcontroller with 16 KB Flash, 512 B SRAM and 24 GPIOs, -40 to 85 degC, 32-pin QFN (RHB), Green (RoHS & no Sb/Br)	RHB0032E
J3	1		30320-6002HB	3M	Straight Low Profile Header, 10x2 Position, 2.54 mm Pitch, TH	Male Header, 10x2 Position, 2.54 mm Pitch, Straight, TH
J4, JTAG	2		SBH11-PBPC-D07-ST-BK	Sullins Connector Solutions	Header (shrouded), 100 mil, 7x2, Gold, TH	7x2 Shrouded Header
J5	1		1734035-2	TE Connectivity	Connector, Receptacle, Mini-USB Type B, R/A, Top Mount SMT	USB Mini Type B
J6	1		1715721	Phoenix Contact	Terminal Block, 5.08 mm, 2x1, TH	2POS Terminal Block
J7	1		PJ-002BH-SMT-TR	CUI Inc.	Power Jack, 2.5x5.5mm, R/A, SMT	Power Jack, 4-Leads, Body 14.8x9mm, R/A, SMT
J8, J9, J10, J11	4		D3082-05	Harwin	1mm Uninsulated Shorting Plug, 10.16mm spacing, TH	Shorting Plug, 10.16mm spacing, TH
L1	1	1.5uH	XFL4020-152MEB	Coilcraft	Inductor, Shielded, Composite, 1.5 µH, 4.6 A, 0.01 ohm, SMD	4x2x4mm
L2	1	1000 ohm	BK2125HS102-T	Taiyo Yuden	Ferrite Bead, 1000 ohm @ 100MHz, 0.3A, 0805	0805
PWRLED	1	Green	QTLP630C4TR	Everlight	LED, Green, SMD	2x1.25mm
R1	1	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, 0402	0402
R3	1	47.5k	ERJ-3EKF4752V	Panasonic	RES, 47.5 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R4, R5, R7, R8, R9	5	47.0k	RT0603BRD0747KL	Yageo America	RES, 47.0 k, 0.1%, 0.1 W, 0603	0603
R10, R11	2	4.70k	RG1608P-472-B-T5	Susumu Co Ltd	RES, 4.70 k, 0.1%, 0.1 W, 0603	0603
R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R32	19	4.70k	RC1206FR-074K7L	Yageo America	RES, 4.70 k, 1%, 0.25 W, 1206	1206
R30, R31	2	10.0	ERJ-8ENF10R0V	Panasonic	RES, 10.0, 1%, 0.25 W, 1206	1206
R33	1	270	RG1608P-271-B-T5	Susumu Co Ltd	RES, 270, 0.1%, 0.1 W, 0603	0603
R35	1	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
R36	1	25k ohm	296XD253B1N	CTS Electrocomponents	Trimmer, 25k ohm, 0.15W, TH	6.3x12.5mm
S1on/off	1		B12AP	NKK Switches	SWITCH TOGGLE SPDT 0.4VA 28V	6.8x23.1x8.8mm
S2_usb/other	1		25139NAH	APEM	Switch, SPDT, On-Off-On, 1 A, 30 VDC, TH	14.1x7.5mm
TVS1	1	10V	SMAJ10A	Littelfuse	Diode, TVS, Uni, 10 V, SMA	SMA
U1	1		TPS630701RNMR	Texas Instruments	2-V to 16-V Buck-Boost Converter With 3.6-A Switch Current, RNM0015A (VQFN-HR-15)	RNM0015A
U2, U5	2		LP5907MFX-3.3/NOPB	Texas Instruments	ULTRA LOW-NOISE, 250-mA LINEAR REGULATOR FOR RF AND ANALOG CIRCUITS REQUIRES NO BYPASS CAPACITOR, DBV0005A	DBV0005A
U3, U7, U8	3		TPD8E003DQDR	Texas Instruments	ESD Array For Portable Space-Saving Applications, 8 Channels, -40 to +85 degC, 8-pin WSON (DQD), Green (RoHS & no Sb/Br)	DQD0008A
U4	1		DCP010505BP-U	Texas Instruments	Miniature, 1 W Isolated Unregulated DC-DC Converter, -40 to 100 degC, 7-pin SOP (DUA7), Pb-Free (RoHS)	DUA0007A

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U6	1		ISO1541DR	Texas Instruments	Low-Power Bidirectional I2C Isolators, D0008A	D0008A
U9	1		TCA9548APW	Texas Instruments	LOW VOLTAGE 8-CHANNEL I2C SWITCH WITH RESET, PW0024A	PW0024A
U10	1		TPD3S014DBVR	Texas Instruments	Integrated USB Protection with VBUS Current Limit, DBV0006A	DBV0006A
U11	1		EA DIPS082-HNLED	Electronic Assembly	LCD-Modul with Led Backlight Yellow/Green, 2X8, TH	LCD Module, 40x20mm
U12, U13, U14	3		SN74LV4T125PWR	Texas Instruments	Single Power Supply Quadruple Buffer Translator GATE With 3-State Output CMOS Logic Level Shifter, PW0014A	PW0014A
Y1	1		FC-135 32.7680KA-A3	Epson	Crystal, 32.768 KHz, 12.5 pF, SMD	SMD, 2-Leads, Body 3.2x1.5mm

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