

TIDA-01070 REV E1 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
I/PCB	1		TIDA-01070	Any	Printed Circuit Board	
C1	1	2.2uF	GRM155C80J225KE95D	MuRata	CAP, CERM, 2.2 µF, 6.3 V, +/- 10%, X6S, 0402	0402
C2	1	1uF	GRM155R60J105KE19D	MuRata	CAP, CERM, 1 µF, 6.3 V, +/- 10%, X5R, 0402	0402
C3, C4, C5, C7, C9, C12	6	0.1uF	0603YC104JAT2A	AVX	CAP, CERM, 0.1 µF, 16 V, +/- 5%, X7R, 0603	0603
C6	1	10uF	EEE-FK1E100R	Panasonic	CAP, AL, 10 µF, 25 V, +/- 20%, 1.35 ohm, AEC-Q200 Grade 2, SMD	SMT Radial B
C8	1	1000pF	GRM155R71C102KA01D	MuRata	CAP, CERM, 1000 pF, 16 V, +/- 10%, X7R, 0402	0402
C10, C14	2	22uF	GRM31CR70J226KE19L	MuRata	CAP, CERM, 22 µF, 6.3 V, +/- 10%, X7R, 1206	1206
C11, C15	2	680pF	GRM033R71C681KA01D	MuRata	CAP, CERM, 680 pF, 16 V, +/- 10%, X7R, 0201	0201
C13	1	0.1uF	GRM155R61A104KA01D	MuRata	CAP, CERM, 0.1 µF, 10 V, +/- 10%, X5R, 0402	0402
C16	1	47uF	GRM31CR61A476KE15L	MuRata	CAP, CERM, 47 µF, 10 V, +/- 10%, X5R, 1206	1206
C17	1	2.2uF	GRM32ER72A225KA35L	MuRata	CAP, CERM, 2.2 µF, 100 V, +/- 10%, X7R, 1210	1210
C18	1	6800pF	CC0805KRX7R9BB682	Yageo America	CAP, CERM, 6800 pF, 50 V, +/- 10%, X7R, 0805	0805
C19	1	9pF	GQM2195C2A9R0CB01D	MuRata	CAP, CERM, 9 pF, 100 V, +/- 5%, C0G/NP0, 0805	0805
C20	1	0.012uF	GRM033C80J123KE01D	MuRata	CAP, CERM, 0.012 µF, 6.3 V, +/- 10%, X6S, 0201	0201
C21	1	0.01uF	GRM033R60J103KA01D	MuRata	CAP, CERM, 0.01 µF, 6.3 V, +/- 10%, X5R, 0201	0201
C22	1	10uF	22201C106MAT2A	AVX	CAP, CERM, 10 µF, 100 V, +/- 20%, X7R, 2220	2220
D1	1	60V	B160-13-F	Diodes Inc.	Diode, Schottky, 60 V, 1 A, SMA	SMA
D2, D3, D4, D5, D6, D7	6	100V	1N4148W-7-F	Diodes Inc.	Diode, Ultrafast, 100 V, 0.15 A, SOD-123	SOD-123
D8	1	200V	DF02S-E3/77	Vishay-Semiconductor	Diode, Switching-Bridge, 200 V, 1 A, DF-S	DF-S
Dirty Coil LED1	1	Red	LTST-C170KRKT	Lite-On	LED, Red, SMD	Red 0805 LED
Dirty Filter LED1	1	Yellow	LTST-C170KSKT	Lite-On	LED, Yellow, SMD	0805 LED
External Sensor Terminal1, External Sensor Terminal2, Power Terminal Header1	3		OSTTE020161	On-Shore Technology	Terminal Block, 2x1, 3.5mm, TH	2x1 Terminal Block
Filter Bypass 1, Filter Bypass 3	2		SL 11 112 02G	Fischer Elektronik	Header, 2.54mm, 2x1, Gold, TH	TH, 2-Leads, Body 2.5x5.08mm, Pitch 2.54mm
Filter Bypass 2, Filter Bypass 4, Ref. VSEL1, Supply Select 1, Supply Select 2	5		SL 11 112 03G	Fischer Elektronik	Header, 2.54mm, 3x1, Gold, TH	TH, 3-Leads, Body 2.5x7.62mm, Pitch 2.54mm
Filter Output 1, Filter Output 2, J1, LMT84 V+, MSP V+, UART_RX_Jumper1, UART_TX_Jumper1	7		M22-2510205	Harwin	Header, 2mm, 2x1, Gold, Black, TH	Header, 2mm, 2x1, TH
Filter Reset, nRST Button	2		4-1437565-1	TE Connectivity	Switch, Tactile, SPST-NO, 0.05A, 12V, SMT	SW, SPST 6x6 mm
H1, H2, H3, H4	4		SJ-5303 (CLEAR)	3M	Bumpon, Hemisphere, 0.44 X 0.20, Clear	Transparent Bumpon
I/O Block1	1		ED555/8DS	On-Shore Technology	Terminal Block, 3.5mm, 8-Pos, TH	Terminal Block, 3.5mm, 8-Pos, TH

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
J2, J3	2		SSW-110-23-F-D	Samtec	Connector, Receptacle, 100mil, 10x2, Gold plated, TH	10x2 Receptacle
JTAG1	1		SBH11-PBPC-D07-ST-BK	Sullins Connector Solutions	Header (shrouded), 100 mil, 7x2, Gold, TH	7x2 Shrouded Header
L1	1	330uH	SDR0604-331KL	Bourns	Inductor, Drum Core, Ferrite, 330 uH, 0.27 A, 2.25 ohm, SMD	5.8x4.8x5.8mm
LMT1	1		LMT84LPM	Texas Instruments	1.5V, TO-92, Analog Temperature Sensor with Class-AB Output, LP0003A	LP0003A
Logic LED Driver	1		SN74LVC1G27DBVR	Texas Instruments	Single 3-Input Positive-NOR Gate, DBV0006A	DBV0006A
Low Temp LED1	1	Orange	LTST-C170KFKT	Lite-On	LED, Orange, SMD	LED_0805
MSP1	1		MSP430FR2311IPW20R	Texas Instruments	Mixed-Signal Microcontroller, PW0020A	PW0020A
Power	1	Blue	150060BS75000	Würth Elektronik	LED, Blue, SMD	LED_0603
Power Jumper1	1		5-146278-2	TE Connectivity	Header, 100mil, 2x1, Tin, TH	Header, 2x1, 100mil, TH
R1, R2, R14, R21, R30	5	10.0k	CRCW040210K0FKED	Vishay-Dale	RES, 10.0 k, 1%, 0.063 W, 0402	0402
R3, R4, R5, R7, R8	5	270	CRCW0402270RJNED	Vishay-Dale	RES, 270, 5%, 0.063 W, 0402	0402
R6	1	1.50k	CRCW04021K50FKED	Vishay-Dale	RES, 1.50 k, 1%, 0.063 W, 0402	0402
R9	1	47k	CRCW040247K0JNED	Vishay-Dale	RES, 47 k, 5%, 0.063 W, 0402	0402
R10, R11, R13, R15, R17, R18, R20, R22	8	100k	RG1005P-104-B-T5	Susumu Co Ltd	RES, 100 k, 0.1%, 0.063 W, 0402	0402
R12, R19	2	51.1k	CRCW040251K1FKED	Vishay-Dale	RES, 51.1 k, 1%, 0.063 W, 0402	0402
R16, R26	2	200Meg	CRCW0603200MJPEAHR	Vishay-Dale	RES, 200M, 5%, 0.1 W, 0603	0603
R24, R25	2	47.0k	RG2012P-473-B-T5	Susumu Co Ltd	RES, 47.0 k, 0.1%, 0.125 W, 0805	0805
R28	1	53.6k	CRCW040253K6FKED	Vishay-Dale	RES, 53.6 k, 1%, 0.063 W, 0402	0402
R29	1	105k	CRCW0402105KFKED	Vishay-Dale	RES, 105 k, 1%, 0.063 W, 0402	0402
R31	1	71.5k	CRCW040271K5FKED	Vishay-Dale	RES, 71.5 k, 1%, 0.063 W, 0402	0402
R32	1	6.49k	CRCW04026K49FKED	Vishay-Dale	RES, 6.49 k, 1%, 0.063 W, 0402	0402
R33	1	402k	CRCW0402402KFKED	Vishay-Dale	RES, 402 k, 1%, 0.063 W, 0402	0402
SH-1, SH-2, SH-3, SH-4, SH-5, SH-6, SH-7, SH-8	8	1x2	969102-0000-DA	3M	Shunt, 100mil, Gold plated, Black	Shunt
SH-9, SH-10, SH-11, SH-12, SH-13, SH-14	6	1x2	2SN-BK-G	Samtec	Shunt, 2mm, Gold plated, Black	2mm Shunt, Closed Top
System Ok LED1	1	Green	LTST-C170KKGKT	Lite-On	LED, Green, SMD	LED_0805
U1, U2, U3, U4	4		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
U5, U6	2		TLV4313IPWR	Texas Instruments	Low-Power, Rail-to-Rail In/Out, 500-uV Typical Offset, 1-MHz Operational Amplifier for Cost-Sensitive System, PW0014A	PW0014A
U7	1		TPS5401DGQR	Texas Instruments	Buck Step Down Regulator with 3.5 to 42 V Input and 0.8 to 39 V Output, -40 to 150 degC, 10-Pin MSOP-PowerPAD (DGQ), Green (RoHS & no Sb/Br)	DGQ0010D
U8	1		LP2985IM5X-3.3/NOPB	Texas Instruments	Micropower 150 mA Low-Noise Ultra Low-Dropout Regulator, 5-pin SOT-23	MF05A
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial

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