

## TIDA-00811\_Temperature REV E2 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1, C2	2	10uF	293D106X9025C2TE3	Vishay-Sprague	CAP, TA, 10 $\mu$ F, 25 V, +/- 10%, 1.5 ohm, SMD	6032-28
C3, C4, C5, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C23, C31, C33, C34	22	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1 $\mu$ F, 25 V, +/- 5%, X7R, 0603	0603
C6	1	0.01uF	C1608C0G1E103J080AA	TDK	CAP, CERM, 0.01 $\mu$ F, 25 V, +/- 5%, C0G/NP0, 0603	0603
C22, C24, C25, C26, C27, C28	6	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1uF, 25V, +/-5%, X7R, 0603	0603
D1	1	3.6V	MMSZ5227B-7-F	Diodes Inc.	Diode, Zener, 3.6 V, 500 mW, SOD-123	SOD-123
D2	1	Green	LG L29K-G2J1-24-Z	OSRAM	LED, Green, SMD	1.7x0.65x0.8mm
D3, D4	2	Green	LG L29K-G2J1-24-Z	OSRAM	LED SmartLED Green 570NM	0603
J1, J2	2		61300621121	Mill-Max	Header, 2.54 mm, 3x2, Gold, TH	Header, 2.54 mm, 3x2, TH
J4, J5	2		61300411121	Mill-Max	Header, 2.54mm, 4x1, Gold, TH	TH, 5-Leads, Body 400x100mil, Pitch 100mil
Q1, Q2	2	30V	CSD17571Q2	TEXAS INSTRUMENTS	MOSFET, N-CH, 30V, 22A, SON 2X2 MM	DQK
R1	1	1.00k	RC0603FR-071KL	Yageo America	RES, 1.00 k, 1%, 0.1 W, 0603	0603
R3, R4, R5, R6, R7, R21, R22, R23, R27, R29, R30, R55, R56, R59, R69, R98	16	4.70k	RC0603FR-074K7L	Yageo America	RES, 4.70 k, 1%, 0.1 W, 0603	0603
R8, R9, R17, R18, R24, R25, R57, R58, R96, R97	10	10.0	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.1 W, 0603	0603
R10, R11, R20, R26, R38, R39, R44, R65, R70, R77, R80, R81, R87, R88, R89, R90, R92, R107, R109	19	0	RC0603JR-070RL	Yageo America	RES, 0, 5%, 0.1 W, 0603	0603
R12, R43	2	3.30k	RC0603FR-073K3L	Yageo America	RES, 3.30 k, 1%, 0.1 W, 0603	0603
R13, R14, R45, R46	4	100	RC0603FR-07100RL	Yageo America	RES, 100, 1%, 0.1 W, 0603	0603
R36	1	2.2k	RC0603JR-072K2L	Yageo America	RES, 2.2 k, 5%, 0.1 W, 0603	0603
R47, R48, R52	3	1.50k	CRCW06031K50FKEA	Vishay-Dale	RES, 1.50 k, 1%, 0.1 W, 0603	0603
R83, R84, R85, R86	4	300	CRCW0603300RJNEA	Vishay-Dale	RES, 300 ohm, 5%, 0.1W, 0603	0603
R91	1	10k	CRCW060310K0JNEA	Vishay-Dale	RES, 10 k, 5%, 0.1 W, 0603	0603
TP1, TP2, TP6, TP8, TP10, TP11, TP13, TP14, TP15, TP16	10		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP3, TP4	2	5001	5001	Keystone	Test Point, Black, Thru Hole Color Keyed	0.100 x 0.100 inch
TP5, TP7, TP9, TP12	4	Red	5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
U1	1		LP2985-33DBVR	Texas Instruments	100-mA ULTRA-LOW DROPOUT REGULATOR WITH SHUTDOWN, DBV0005A	DBV0005A
U2	1		OPT3006YMF	Texas Instruments	Ambient Light Sensor, YMF0006A (PICOSTAR-6)	YMF0006A
U3	1		HDC1080DMBR	Texas Instruments	Low Power, High Accuracy Digital Humidity Sensor with Temperature Sensor, DMB0006A	DMB0006A

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
U4	1		PCA9515ADR	Texas Instruments	Dual Bidirectional I2C Bus and SMBus Repeater, 2 Channel Width, 2.3 to 3.6 V, -40 to 85 degC, 8-pin SOIC (D), Green (RoHS & no Sb/Br)	D0008A
U5, U6	2		TMP107BIDR	Texas Instruments	TMP107B, D0008A	D0008A
U7, U16	2		SN74LVC1G125DCKR	Texas Instruments	Single Bus Buffer Gate With 3-State Output, DCK0005A	DCK0005A
U8, U13	2		SN74LVC2G32DCTR	Texas Instruments	Dual 2-Input Positive-OR Gate, DCT0008A	DCT0008A
U9, U14	2		SN74LVC1G14DCKR	Texas Instruments	SINGLE SCHMITT-TRIGGER INVERTER, DCK0005A	DCK0005A
U10, U11	2		TS5A3157DCKR	Texas Instruments	10-OHM SPDT ANALOG SWITCH, DCK0006A (SOT-SC70-6)	DCK0006A
U12	1		TMP75BIDR	Texas Instruments	1.4V-Capable Temperature Sensor with I2C/SMBus Interface in LM75 Form Factor & Pinout, D0008A (SOIC-8)	D0008A
U15	1		TMP007AIYZFR	Texas Instruments	Infrared Thermopile Sensor with Integrated Math Engine, YZF0008AEAE	YZF0008AEAE
U17	1		LMT87LP	TEXAS INSTRUMENTS	IC, TEMP SENSOR PREC ANLG, TO-92, TH	TO-92
U18	1		LM35DM/NOPB	Texas Instruments	Precision Centigrade Temperature Sensor, 8-pin Narrow SOIC, Pb-Free	M08A
U19	1		TMP302BDRLR	Texas Instruments	Pin-Selectable Trip Point 1.4V-Capable Family of Temperature Switches, DRL0006A (SOT-OTHER-6)	DRL0006A
U20	1		TMP102AIDRL	Texas Instruments	Low Power Digital Temperature Sensor With SMBus/Two-Wire Serial Interface in SOT563, DRL0006A	DRL0006A
U22, U23	2		SN74LVC1G17DCKR	Texas Instruments	SINGLE SCHMITT-TRIGGER BUFFER, DCK0005A (SOT-5)	DCK0005A
C29, C30	0	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1uF, 25V, +/-5%, X7R, 0603	0603
FID1, FID2, FID3, FID4, FID5, FID6	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial
R2, R19, R28, R34, R35, R37, R42, R72, R73, R93, R108, R110	0	0	RC0603JR-070RL	Yageo America	RES, 0, 5%, 0.1 W, 0603	0603
R15, R16, R31, R32, R33, R49, R50, R51, R53, R54, R68, R78, R79, R94, R95	0	4.70k	RC0603FR-074K7L	Yageo America	RES, 4.70 k, 1%, 0.1 W, 0603	0603
R40, R41	0	10.0	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.1 W, 0603	0603
R99	0	0	CRCW08050000Z0EA	Vishay-Dale	RES, 0, 5%, 0.125 W, 0805	0805