

TIDA-00811 REV E2 Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1, C2, C37	3	10uF	293D106X9025C2TE3	Vishay-Sprague	CAP, TA, 10 μ F, 25 V, +/- 10%, 1.5 ohm, SMD	6032-28
C3, C4, C5, C7, C8, C9, C10, C11, C12, C13, C14, C15, C17, C19, C20, C21, C22, C23, C24, C28, C31, C33, C34, C35	24	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1 μ F, 25 V, +/- 5%, X7R, 0603	0603
C6	1	0.01uF	C1608C0G1E103J080AA	TDK	CAP, CERM, 0.01 μ F, 25 V, +/- 5%, C0G/NP0, 0603	0603
C16, C27, C32	3	0.1uF	06033C104JAT2A	AVX	CAP, CERM, 0.1uF, 25V, +/-5%, X7R, 0603	0603
C18, C26	2	0.01uF	C1608C0G1E103J080AA	TDK	CAP, CERM, 0.01uF, 25V, +/-5%, C0G/NP0, 0603	0603
C25	1	2.7pF	06035A2R7CAT2A	AVX	CAP, CERM, 2.7 pF, 50 V, +/- 9%, C0G/NP0, 0603	0603
C38	1	1uF	C0603C105K4PACTU	Kemet	CAP, CERM, 1 μ F, 16 V, +/- 10%, X5R, 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
D5	1		SFH 213	OSRAM	Silicon PIN Photodiode, TH	D5.7xH9mm
H1	1		IML-0669	MuRata	Lens, Ceiling Mount, TH	D12xH8.508mm
H2, H3, H4, H5	4		SJ-5303 (CLEAR)	3M	Bumpon, Hemisphere, 0.44 X 0.20, Clear	Transparent Bumpon
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
R2, R10, R11, R28, R35, R38, R39, R40, R44, R50, R59, R65, R66, R67, R70, R71, R74, R75, R76, R77, R80, R81, R82, R87, R88, R90, R107, R109	28	0	RC0603JR-070RL	Yageo America	RES, 0, 5%, 0.1 W, 0603	0603
R3, R4, R5, R6, R7, R19, R24, R69, R98, R101, R114, R115	12	4.70k	RC0603FR-074K7L	Yageo America	RES, 4.70 k, 1%, 0.1 W, 0603	0603
R8, R9, R17, R18, R22, R23, R33, R34, R46, R47, R55, R56, R57, R58, R62, R63, R96, R97	18	10.0	CRCW060310R0FKEA	Vishay-Dale	RES, 10.0, 1%, 0.1 W, 0603	0603
R12	1	3.30k	RC0603FR-073K3L	Yageo America	RES, 3.30 k, 1%, 0.1 W, 0603	0603
R13, R14	2	100	RC0603FR-07100RL	Yageo America	RES, 100, 1%, 0.1 W, 0603	0603
R25	1	100	CRCW0603100RFKEA	Vishay-Dale	RES, 100 ohm, 1%, 0.1W, 0603	0603
R26, R105	2	10k	CRCW060310K0FKEA	Stackpole Electronics Inc	RES, 10.0k ohm, 1%, 0.1W, 0603	0603
R29	1	1.00Meg	CRCW06031M00FKEA	Vishay-Dale	RES, 1.00Meg ohm, 1%, 0.1W, 0603	0603
R36	1	2.2k	RC0603JR-072K2L	Yageo America	RES, 2.2 k, 5%, 0.1 W, 0603	0603
R41	1	53.6k	RG1608P-5362-B-T5	Susumu Co Ltd	RES, 53.6 k, 0.1%, 0.1 W, 0603	0603
R83, R84, R85, R86, R104	5	300	CRCW0603300RJNEA	Vishay-Dale	RES, 300 ohm, 5%, 0.1W, 0603	0603

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R91	1	10k	CRCW060310K0JNEA	Vishay-Dale	RES, 10 k, 5%, 0.1 W, 0603	0603
R102	1	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, 0603	0603
R106	1	13.7k	CRCW060313K7FKEA	Vishay-Dale	RES, 13.7 k, 1%, 0.1 W, 0603	0603
R111	1	280	RC0603FR-07280RL	Yageo America	RES, 280, 1%, 0.1 W, 0603	0603
TP1, TP2, TP6, TP8, TP10, TP11, TP15	7		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP5, TP7, TP9, TP12, TP13, TP14	6	Red	5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP16, TP17	2	5001	5001	Keystone	Test Point, Black, Thru Hole Color Keyed	0.100 x 0.100 inch
U1	1		LP2985-33DBVR	Texas Instruments	100-mA ULTRA-LOW DROPOUT REGULATOR WITH SHUTDOWN, DBV0005A	DBV0005A
U2	1		TPL0401A-10DCKR	Texas Instruments	128 TAPS Single Channel Digital Potentiometer with I2C Interface, DCK0006A	DCK0006A
U3	1		HDC1080DMBR	Texas Instruments	Low Power, High Accuracy Digital Humidity Sensor with Temperature Sensor, DMB0006A	DMB0006A
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	1		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	1		LMV331IDBVR	Texas Instruments	Single General Purpose Low-Voltage Comparator, DBV0005A	DBV0005A
U11	1		OPT101P-J	Texas Instruments	Monolithic Photodiode and Single-Supply Transimpedance Amplifier, DTL0008A	DTL0008A
U12	1		ADC101C021CIMK/NOPB	Texas Instruments	I2C-Compatible, 10-Bit Analog-to-Digital Converter (ADC) with Alert Pin, 6-pin Tiny SOT23, Pb-Free	MK06A
U15	1		TMP007AIYZFR	Texas Instruments	Infrared Thermopile Sensor with Integrated Math Engine, YZF0008AEAE	YZF0008AEAE
U16	1		BMP280	Bosch Solar Energy	Digital Pressure Sensor, LGA8-2X2_5MM_0_65	2x2.5mm LGA-8
U17	1		DAC101C081CIMK/NOPB	Texas Instruments	10-Bit Micro Power Digital-to-Analog Converter with an I2C-Compatible Interface, 6-pin Tiny SOT23	MK06A
U18	1		OPA320AIDBVR	Texas Instruments	Precision, 20 MHz, 0.9 pA Ib, RRIO, CMOS Operational Amplifier, 1.8 to 5.5 V, -40 to 125 degC, 5-pin SOT23 (DBV0005A), Green (RoHS & no Sb/Br)	DBV0005A
U19	1		OPT3001DNPT	Texas Instruments	Ambient Light Sensor, DNP0006A	DNP0006A
U20	1		TMP102AIDRLT	Texas Instruments	Low Power Digital Temperature Sensor With SMBus/Two-Wire Serial Interface in SOT563, DRL0006A	DRL0006A
U21	1		SN74LVC1G3157DBVR	TEXAS INSTRUMENTS	IC, SWITCH, SPDT, SOT23-6	DBV
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
C36	0	56pF	GRM1885C1H560JA01D	MuRata	CAP, CERM, 56 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
R15, R16, R20, R21, R30, R31, R42, R43, R49, R51, R52, R53, R54, R60, R61, R68, R78, R79, R94, R95, R100	0	4.70k	RC0603FR-074K7L	Yageo America	RES, 4.70 k, 1%, 0.1 W, 0603	0603
R27	0	47.0k	RC0603FR-0747KL	Yageo America	RES, 47.0 k, 1%, 0.1 W, 0603	0603
R32, R37, R45, R48, R64, R72, R73, R89, R92, R93, R108, R110, R112, R113	0	0	RC0603JR-070RL	Yageo America	RES, 0, 5%, 0.1 W, 0603	0603
R99	0	0	CRCW08050000Z0EA	Vishay-Dale	RES, 0, 5%, 0.125 W, 0805	0805
R103	0	0	ERJ-3GEY0R00V	Panasonic	RES, 0, 5%, 0.1 W, 0603	0603

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