

Variant: 001  
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 TID #: TIDA-01586 Board 1



**TIDA-01586 REV E1 Bill of Materials**

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	PCB	1		TIDA-01586	Any	Printed Circuit Board	
2	C1	1	0.1uF	GRM155R71A104KA01D	MuRata	CAP, CERM, 0.1 uF, 10 V, +/- 10%, X7R, 0402	0402
3	D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D23, D24, D25, D26, D27, D28	28	Infrared	TSHG6400	Vishay-Semiconductor	LED, Infrared, TH	D5.8mm
4	J1	1		GRPB052VWVN-RC	Sullins Connector Solutions	Header, 50mil, 5x2, Gold, TH	Header, 5x2, 50mil
5	Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8	8	40 V	MMBT2222ATT1G	ON Semiconductor	Transistor, NPN, 40 V, 0.6 A, AEC-Q101, SOT-416	SOT-416
6	R1	1	10.0k	RC0402FR-0710KL	Yageo America	RES, 10.0 k, 1%, 0.063 W, 0402	0402
7	R2	1	56	CRCW040256R0JNED	Vishay-Dale	RES, 56, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
8	R3	1	48.7	CRCW040248R7FKED	Vishay-Dale	RES, 48.7, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
9	R4	1	750	CRCW0402750RJNED	Vishay-Dale	RES, 750, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
10	R5, R6, R7, R8, R9, R10	6	7.87	CRCW04027R87FKED	Vishay-Dale	RES, 7.87, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	0402
11	U1	1		OPT3001DNPR	Texas Instruments	Digital Ambient Light Sensor (ALS) with High Precision Human Eye Response, DNP0006A (USON-6)	DNP0006A
12	U2, U3, U4	3		TPD1E10B0DPYR	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
13	FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
14	FID4, FID5, FID6	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	Fiducial

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