

Variant: 001
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TIDA-050051 REV E1 Bill of Materials

Item #	Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
1	C1	1	4.7uF	C2012X7R1E475K125AB	TDK	CAP, CERM, 4.7 uF, 25 V, +/- 10%, X7R, 0805	805
2	C2, C4, C6	3	0.1uF	CGA2B3X7R1H104M050BB	TDK	CAP, CERM, 0.1 uF, 50 V, +/- 20%, X7R, AEC-Q200 Grade 1, 0402	402
3	C3	1	10uF	C3216X7R1E106M160AE	TDK	CAP, CERM, 10 uF, 25 V, +/- 20%, X7R, 1206_190	1206_190
4	C5	1	10uF	C1206C106J3RACAUTO	Kemet	CAP, CERM, 10 uF, 25 V, +/- 5%, X7R, AEC-Q200 Grade 1, 1206	1206
5	C7, C8	2		GRM188Z71A106KA73D	Murata	Chip Multilayer Ceramic Capacitors for General Purpose	603
6	C9, C13	2	1uF	LMK107B7105KAHT	Taiyo Yuden	CAP, CERM, 1 uF, 10 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	603
7	C10, C14	2	2.2uF	GCM188R70J225KE22D	MuRata	CAP, CERM, 2.2 uF, 6.3 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603	603
8	C11	1		CGA4J3X7S1A106K125AE	TDK	10uF ±10% 10V Ceramic Capacitor X7S 0805 (2012 Metric)	805
9	C12, C15	2	10uF	JMJ212CB7106KGHT	Taiyo Yuden	CAP, CERM, 10 uF, 6.3 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	805
10	C16, C18, C20, C35, C42, C45, C53	7			Murata	1uF ±10% 6.3V Ceramic Capacitor X7R 0402 (1005 Metric)	402
11	C17, C19, C22, C26, C29, C33	6	0.01uF	GRM155R71C103KA01D	MuRata	CAP, CERM, 0.01 uF, 16 V, +/- 10%, X7R, 0402	402
12	C21	1	0.033uF	CGA2B3X7R1H333K050BB	TDK	CAP, CERM, 0.033 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	402
13	C23	1	0.015uF	CGA2B3X7R1H153K050BB	TDK	CAP, CERM, 0.015 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	402
14	C24, C27, C31, C34	4	0.1uF	0402YC104KAT2A	AVX	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, 0402	402
15	C25, C28, C32	3	10uF	GRM188Z71A106MA73D	MuRata	CAP, CERM, 10 uF, 10 V, +/- 20%, X7R, 0603	603
16	C30	1	0.022uF	GRM155R70J223KA01D	MuRata	CAP, CERM, 0.022 uF, 6.3 V, +/- 10%, X7R, 0402	402
17	C36, C40, C46, C49, C51, C55	6	10uF	GCJ21BR71A106KE01L	MuRata	CAP, CERM, 10 uF, 10 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805	805
18	C37, C38, C39, C41, C43, C44, C47, C48, C50, C52, C54	11	0.1uF	GRM155R71E104KE14D	MuRata	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0402	402
19	C56	1	0.1uF	GCM155R71C104KA55D	MuRata	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, 0402	402
20	L1, L2, L3	3	1500 ohm	BLM18HE152SN1D	MuRata	Ferrite Bead, 1500 ohm @ 100 MHz, 0.5 A, 0603	603
21	L4	1	10uH	LQH3NPZ100MJRL	MuRata	Inductor, Wirewound, Ferrite, 10 uH, 0.81 A, 0.288 ohm, AEC-Q200 Grade 1, SMD	3x3mm
22	L5	1	1000 ohm	BLM18AG102SN1D	MuRata	Ferrite Bead, 1000 ohm @ 100 MHz, 0.4 A, 0603	603
23	L6	1	1.5uH	TFM201610ALMA1R5MTAA	TDK	Inductor, Shielded, Metal Composite, 1.5 uH, 2.3 A, 0.11 ohm, AEC-Q200 Grade 0, SMD	806
24	L7, L8	2	1uH	TFM201610ALMA1R0MTAA	TDK	Inductor, Shielded, Metal Composite, 1 uH, 3.1 A, 0.06 ohm, AEC-Q200 Grade 0, SMD	806
25	L9, L10, L11	3	1000 ohm	BLM15AX102SN1D	MuRata	Ferrite Bead, 1000 ohm @ 100 MHz, 0.35 A, 0402	402
26	L12, L13	2	600 ohm	BLM15HD601SN1D	MuRata	Ferrite Bead, 600 ohm @ 100 MHz, 0.3 A, 0402	402
27	L14	1	220 ohm	BLM15AG221SN1D	MuRata	Ferrite Bead, 220 ohm @ 100 MHz, 0.45 A, 0402	402
28	LH1	1		CMT821	Sunex Inc.	Sunex Lens Holder	
29	R1	1	4.02k	CRCW06034K02FKEA	Vishay-Dale	RES, 4.02 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	603
30	R2, R3, R4, R5	4	0	RC0402JR-070RL	Yageo America	RES, 0, 5%, 0.063 W, 0402	402
31	R6, R7	2	1.5k	CRCW04021K50JNED	Vishay-Dale	RES, 1.5 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	402
32	R8	1	49.9	CRCW040249R9FKED	Vishay-Dale	RES, 49.9, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
33	R9, R20, R21, R22	4	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	402
34	R14	1	10k	CRCW040210K0JNED	Vishay-Dale	RES, 10 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	402
35	R15	1	40.2k	CRCW040240K2FKED	Vishay-Dale	RES, 40.2 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
36	R16	1	402	CRCW0402402RFKED	Vishay-Dale	RES, 402, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	402
37	R24	1	22	ERJ-2GEJ220X	Panasonic	RES, 22, 5%, 0.1 W, AEC-Q200 Grade 0, 0402	402
38	U1	1		TPS65033000RGERQ1	Texas Instruments	Highly integrated power management IC for automotive camera modules	VQFN
39	U2	1		DS90UB953TRHBRQ1	Texas Instruments	2MP MIPI CSI-2 FPD-Link III Serializer for 2MP/60fps Cameras and RADAR, RHB0032P (VQFN-32)	RHB0032P
40	U3	1		AR0820AT1B18XMEA0-DPBR-E	On Semiconductor	CMOS Image Sensor, Digital, 8.3 MP, 1/2-inch, High-Resolution	iBGA95
41	Y1	1		DSC6101MI2A-024.0000T	Microchip	MEMS OSC XO 24.0000MHZ CMOS SMD	VFLGA4
42	FID1, FID2, FID3	0		N/A		Fiducial mark. There is nothing to buy or mount.	N/A
43	J1	0		59S13X-40MT5	Rosenberger	FAKRA-HF STRAIGHT PLUG for PCB	FAKRA_HF_STR_PLUG
44	R10, R11, R12, R13, R17, R18, R19, R23	0	0	CRCW04020000Z0ED	Vishay-Dale	RES, 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	402
45	R25	0	0	ERJ-2GE0R00X	Panasonic	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0402	402

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