TEXAS INSTRUMENTS

Bill of Materials

TI DESIGNS

Automotive 1.3M Camera Module Reference Design with OV10640, DS90UB913A and power over Coax
TIDA-00421

Item	Qty	Reference	Part Description	Manufacturer	Manufacturer Part Number
1	1	!PCB1	Printed Circuit Board	Any	TIDA-00421
2	1	C1	CAP, CERM, 4.7uF, 25V, +/-20%, X7R, 0805	TDK Corporation	CGA4J1X7R1E475M125AC
3	5	C2, C12, C15, C17, C20	CAP, CERM, 0.1uF, 25V, +/-10%, X7R, 0402	TDK Corporation	C1005X7R1E104K050BB
4	1	C3	CAP, CERM, 10 µF, 16 V, +/- 10%, X7R, 0805_140	Samsung Electro-Mechanics	CL21B106KOQNNNE
5	2	C4, C29	CAP, CERM, 22uF, 10V, +/-10%, X7R, 1206	MuRata	GRM31CR71A226KE15L
6	8	C5, C6, C7, C8, C9, C10, C13, C16	CAP CER 1UF 6.3V 10% X7R 0402	Samsung Electro-Mechanics	CL05B105KQ5NQNC
7	5	C11, C14, C19, C21, C25	CAP CER 4.7UF 6.3V 10% X7R 0603	Samsung Electro-Mechanics	CL10B475KQ8NQNC
8	1	C18	CAP, CERM, 0.47 µF, 6.3 V, +/- 10%, X5R, 0402	MuRata	GRM155R60J474KE19D
9	6	C22, C26, C30, C32, C34, C35	CAP, CERM, 0.1uF, 16V, +/-10%, X7R, 0402	MuRata	GRM155R71C104KA88D
10	5	C23, C27, C31, C33, C36	CAP, CERM, 0.01uF, 16V, +/-10%, X7R, 0402	MuRata	GRM155R71C103KA01D
11	2	C24, C28	CAP, CERM, 0.1uF, 50V, +/-10%, C0G/NP0, 0402	TDK	C1005X7R1H104K
12	2	L1, L2	Ferrite Bead, 1000 ohm @ 100 MHz, 0.4 A, 0603	MuRata	BLM18AG102SN1D
13	1	L3	Inductor, Shielded, Composite, 6.8 µH, 0.73 A, 0.42 ohm, SMD	Coilcraft	XPL2010-682MLB
14	1	L4	Inductor, Wirewound, 100 µH, 0.27 A, 1.4 ohm, SMD	Taiyo Yuden	CBC3225T101MR
15	3	L5, L6, L7	Ferrite Bead, 1000 ohm @ 100 MHz, 0.35 A, 0402	MuRata	BLM15AX102SN1D
16	2	L8, L9	1.3A Ferrite Bead, 600 ohm @ 100MHz, SMD	MuRata	BLM18KG601SN1D
17	1	L10	Inductor, Wirewound, 4.7 µH, 1.01 A, 0.1 ohm, SMD	Taiyo Yuden	CBC3225T4R7MR
18	1	LH1	Sunex Lens Holder	Sunex Inc.	CMT821
19	1	P1	Straight Plug PCB	Rosenberger	59S10H-40ML5-Y
20	2	R1, R2	RES, 1.0k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06031K00JNEA
21	3	R3, R9, R17	RES, 0 ohm, 5%, 0.063W, 0402	Vishay-Dale	CRCW04020000Z0ED
22	1	R4	RES, 316 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW0402316KFKED
23	1	R5	RES, 100k ohm, 1%, 0.063W, 0402	Vishay-Dale	CRCW0402100KFKED
24	11	R6, R7, R10, R11, R14, R15, R16, R21, R22, R23, R99	RES, 10k ohm, 5%, 0.063W, 0402	Vishay-Dale	CRCW040210K0JNED
25	1	R12	RES, 49.9 ohm, 1%, 0.063W, 0402	Vishay-Dale	CRCW040249R9FKED
26	1	R13	RES, 33 ohm, 5%, 0.063W, 0402	Vishay-Dale	CRCW040233R0JNED
27	1	R18	RES, 4.75k ohm, 1%, 0.063W, 0402	Vishay-Dale	CRCW04024K75FKED
28	2	R19, R20	RES, 3.3k ohm, 5%, 0.1W, 0603	Vishay-Dale	CRCW06033K30JNEA
29	1	U1	300-mA, Low-IQ, Low-Dropout Regulator, DBV0005A	Texas Instruments	TLV70215PDBVR
30	1	U2	Single Output LDO, 300 mA, Fixed 1.8 V Output, 2 to 5.5 V Input, with Low IQ, 5-pin SOT-23 (DBV), -40 to 125 degC, Green (RoHS	Texas Instruments	TLV70218DBVR
31	1	U3	Buck Step Down Regulator with 3 to 17 V Input and 0.9 to 6 V Output, -40 to 85 degC, 8-Pin WSON (DSG), Green (RoHS & no Sb/	Texas Instruments	TPS62170DSGR
32	1	U4	1/2.56" color CMOS 1.3 megapixel HDR HD image sensor, BGA78	OmniVision Technologies	OV10640-N79Y-1C-Z
33	1	U5	DS90UB913A-Q1/DS90UB914A-Q1 25 to 100 MHz 10/20-Bit FPD-Link III Serializer and Deserializer, RTV0032A	Texas Instruments	DS90UB913ATRTVTQ1
34	1	Y1	XO, 48.000MHz, 1.8V, SMD	ECS Inc.	ECS-2018-480-BN
35	0	FID1, FID2, FID3, FID4, FID5, FID6	Fiducial mark. There is nothing to buy or mount.	N/A	N/A
36	0	R8	RES, 10k ohm, 5%, 0.063W, 0402	Vishay-Dale	CRCW040210K0JNED
37	0	R24	RES, 0 ohm, 5%, 0.063W, 0402	Vishay-Dale	c

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