

Multi Camera FPD-Link III Extender Board

Designator	Quantity	Value	Description	PackageReference	PartNumber	Manufacturer	Alternate PartNumber	Alternate Manufacturer
IPC	1		Printed Circuit Board		SAT0089	Any	-	-
C1, C12, C13, C14, C15	5	10uF	CAP, CERM, 10uF, 10V, +/-10%, X7R, 0805	0805	GRM21BR71A106KE51L	MuRata		
C2, C3, C4, C5, C6, C16, C18, C23, C24, C25, C27, C28, C30, C31, C32, C33, C35, C36, C37, C41, C44, C45, C48, C50, C55, C56, C57, C59, C60, C62, C63, C64, C65, C67, C68, C69, C73, C77, C79, C80, C82, C87, C88, C89, C91, C92, C94, C95, C96, C97, C99, C100, C101, C105, C109, C111, C112, C115	113	0.1uF	CAP, CERM, 0.1uF, 16V, +/-10%, X7R, 0402	0402	GRM155R71C104KA88D	MuRata		
C7, C8	2	10uF	CAP, CERM, 10uF, 25V, +/-10%, X7R, 1206	1206	GRM31CR71E106KA12L	MuRata		
C9	1	0.1uF	CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603	0603	GCM188R71H104KA57B	MuRata		
C10	1	0.01uF	CAP, CERM, 0.01uF, 50V, +/-10%, X7R, 0603	0603	GRM188R71H103KA01D	MuRata		
C11	1	82uF	CAP, AL, 82uF, 10V, +/-20%, 0.023 ohm, SMD	F60	APXC100ARA820MF60G	Nippon Chemi-Con		
C17, C19, C29, C34, C38, C39, C40, C42, C43, C46, C49, C51, C61, C66, C70, C71, C72, C74, C76, C78, C81, C83, C93, C98, C102, C103, C104, C106, C108, C110, C113, C114, C124, C125, C128, C135, C137, C138, C140, C143, C145, C147, C157, C162	60	4.7uF	CAP CER 4.7UF 25V 10% X5R 0603	0603 (1608 Metric)	GRM188R61E475KE11D	Murata Electronics North Ame		
C20, C21, C52, C53, C84, C85, C116, C117, C148, C149, C180, C181	12	0.1uF	CAP CER 0.1UF 100V 10% X7R 0603	0603 (1608 Metric)	GRM188R72A104KA35D	Murata Electronics North Ame		
C22, C54, C86, C118, C150, C182	6	10uF	CAP, CERM, 10uF, 16V, +/-10%, X5R, 0805	0805	GRM21BR61C106KE15L	MuRata		
C26, C58, C90, C122, C154, C207	6	0.047uF	CAP, CERM, 0.047uF, 16V, +/-10%, X7R, 0402	0402	GRM155R71C473KA01D	MuRata		
C47, C75, C107, C139, C171, C202	6	22uF	CAP, CERM, 22uF, 6.3V, +/-10%, X5R, 0805	0805	JMK212BJ226KG-T	Taiyo Yuden		
CN1	1		Samtec 50 MIL Pitch Thermal Array Assembly		ASP-127797-01	Samtec	-	-
CN2, CN3, CN4	3		3X6 Header 100 MIL PITCH		STD	STD		
CN5, CN7, CN9, CN11, CN13, CN15	6		Straight Plug PCB	SMA	59S10H-40ML5-Y	Rosenberger	-	-

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CN6, CN8, CN10, CN12, CN14, CN16	6		Straight Plug		D4S10A-400L5-Z	Rosenberger		
D1	1	40V	Diode, Schottky, 40V, 7A, DPAK	DPAK	6CWQ04FNPBF	Vishay-Semiconductor		
L1	1	4.7uH	Inductor, Drum Core, Ferrite, 4.7uH, 8.5A, 0.0088 ohm, SMD	SDR2207	SDR2207-4R7ML	Bourns		
L2, L3	2		INDUCTOR 2.2UH 1300MA 2220 10%	2220 (5750 Metric)	B82442A1222K	EPCOS Inc		
L4, L5, L14, L15, L24, L25, L34, L35, L44, L45, L54, L55	12		Fixed Inductors Power Inductor 10 uH 10 % 0.59 A	1008	1008PS-103KLB	Coilcraft		
L6, L16, L26, L36, L46, L56	6		CHOKE COMMON MODE 67 OHM 0805	Horizontal, 4 PC Pad	DLW21HN670SQ2L	Murata Electronics North Ame		
L7, L17, L27, L37, L47, L57	6		FERRITE CHIP 1000 OHM 400MA 0603	0603 (1608 Metric)	BLM18AG102SN1D	Murata Electronics North Ame		
L8, L18, L28, L39, L48, L58	6		Fixed Inductors Power Inductor 4.7 uH 10 % 0.95 A	1008	1008PS-472KLB	Coilcraft		
L9, L19, L29, L38, L49, L59	6		Fixed Inductors Power Inductor 100 uH 20 % 1.15 A		MSS7341T-104MLB	Coilcraft		
L10, L11, L12, L13, L20, L21, L22, L23, L30, L31, L32, L33, L40, L41, L42, L43, L50, L51, L52, L53, L60, L61, L62, L63	24		FERRITE CHIP 1000 OHM 0402	0402 (1005 Metric)	BLM15AX102SN1D	Murata Electronics North Ame		
LD1	1	Red	LED, Red, SMD	Red LED, 1.6x0.8x0.8mm	LTST-C190CKT	Lite-On		
R1, R38, R39, R63, R87, R111, R136	7	0	RES, 0 ohm, 5%, 0.063W, 0402	0402	CRCW04020000Z0ED	Vishay-Dale		
R2, R13	2	1.00k	RES, 1.00k ohm, 1%, 0.063W, 0402	0402	CRCW04021K00FKED	Vishay-Dale		
R3	1	15.0k	RES, 15.0k ohm, 1%, 0.063W, 0402	0402	CRCW040215K0FKED	Vishay-Dale		
R4, R5, R6, R9, R12, R17, R18, R19, R21	9	10.0k	RES, 10.0k ohm, 1%, 0.063W, 0402	0402	CRCW040210K0FKED	Vishay-Dale		
R7	1	13.0k	RES, 13.0k ohm, 1%, 0.063W, 0402	0402	CRCW040213K0FKED	Vishay-Dale		
R8, R64, R135, R159	4	3.01k	RES, 3.01k ohm, 1%, 0.063W, 0402	0402	CRCW04023K01FKED	Vishay-Dale		
R10	1	4.99k	RES, 4.99k ohm, 1%, 0.063W, 0402	0402	CRCW04024K99FKED	Vishay-Dale		
R11, R49, R73, R88, R97, R121, R145, R160, R169	9	11.0k	RES, 11.0k ohm, 1%, 0.063W, 0402	0402	CRCW040211K0FKED	Vishay-Dale		
R14	1	2.87k	RES, 2.87k ohm, 1%, 0.063W, 0402	0402	CRCW04022K87FKED	Vishay-Dale		
R15	1	61.9k	RES, 61.9k ohm, 1%, 0.063W, 0402	0402	CRCW040261K9FKED	Vishay-Dale		
R16	1	270	RES, 270 ohm, 5%, 0.125W, 0805	0805	CRCW0805270RJNEA	Vishay-Dale		
R23, R24, R25, R50, R51, R52, R74, R75, R76, R98, R99, R101, R122, R123, R124, R146, R147, R148	18	0	RES, 0 ohm, 5%, 0.125W, 0805	0805	CRCW08050000Z0EA	Vishay-Dale		
R26, R27, R53, R54, R77, R78, R100, R102, R125, R126, R149, R150	12	1k	RES 1.0K OHM 1/10W 5% 0603 SMD	0603 (1608 Metric)	RC0603JR-071KL	Yageo		
R28, R29, R30, R55, R56, R57, R79, R80, R81, R103, R104, R105, R127, R128, R129, R151, R152, R153	18	49.9	RES, 49.9 ohm, 1%, 0.063W, 0402	0402	CRCW040249R9FKED	Vishay-Dale		

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R31, R34, R35, R44, R47, R59, R60, R68, R69, R83, R84, R92, R93, R107, R108, R116, R117, R131, R132, R140, R141, R155, R156, R164, R165, R172, R175, R178, R181, R184	30	10k	RES 10K OHM 1/16W .1% 0402 SMD	0402 (1005 Metric)	ERA-2AEB103X	Panasonic Electronic Compon		
R32, R36, R37, R58, R61, R62, R82, R85, R86, R106, R109, R110, R130, R133, R134, R154, R157, R158, R185, R186, R187, R188, R189, R190	24	33	RES, 33 ohm, 5%, 0.063W, 0402	0402	CRCW040233R0JNED	Vishay-Dale		
R33, R40, R170, R171, R173, R174, R176, R177, R179, R180, R182, R183	12	130	RES, 130 ohm, 5%, 0.063W, 0402	0402	CRCW0402130RJNED	Vishay-Dale		
R41, R42, R43, R46, R65, R66, R67, R70, R89, R90, R91, R94, R113, R114, R115, R118, R137, R138, R139, R142, R161, R162, R163, R166	24	2.2k	RES, 2.2k ohm, 5%, 0.063W, 0402	0402	CRCW04022K20JNED	Vishay-Dale		
R112	1	100k	RES, 100k ohm, 1%, 0.063W, 0402	0402	CRCW0402100KFKED	Vishay-Dale		
TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8, TP9, TP10, TP11, TP12, TP13, TP14, TP15, TP16, TP17, TP18, TP19, TP20, TP21, TP22, TP23, TP24	24	STD	Test Point, O.032 Hole		STD	STD		
U1, U4, U5	3		IC I/O EXPANDER I2C 16B 24QFN	24-VFQFN Exposed Pad	MCP23018-E/MJ	Microchip Technology		
U2	1		IC ACCEL SMBUS DUAL TSOT23-5	SOT-23-5 Thin, TSOT-23-5	LTC1694-1IS5#TRMPBF	Linear Technology		
U3	1		IC EEPROM 2KBIT 1MHZ 8SOIC	8-SOIC (0.154", 3.90mm Width)	AT24C02BN-SH-B	Atmel		
U6	1		5A SIMPLE SWITCHER®, Step-Down Voltage Regulator with Synchronization or Adjustable Switching Frequency, 7-pin TO-263 Thin, Pb-Free	TJ7A	LM22677TJ-ADJ/NOPB	National Semiconductor		
U7, U8	2		2MHz, 600mA Step-Down DC-DC Converter with Mode Control, 8-pin LLP, Pb-Free	SDA08A	LM3676SD-1.8/NOPB	National Semiconductor		
U9, U10, U11, U12, U13, U14	6		FPD-Link III Serializer and Deserializer, RHS0048A	RHS0048A	DS90UB914ATRHSTQ1	Texas Instruments		None
FID1, FID2, FID3, FID4, FID5, FID6	0		Fiducial mark. There is nothing to buy or mount.	Fiducial	N/A	N/A		
R20, R22	0	10.0k	RES, 10.0k ohm, 1%, 0.063W, 0402	0402	CRCW040210K0FKED	Vishay-Dale		
R45, R71, R95, R119, R143, R167	0	0	RES, 0 ohm, 5%, 0.063W, 0402	0402	CRCW04020000Z0ED	Vishay-Dale		
R48, R72, R96, R120, R144, R168	0	3.01k	RES, 3.01k ohm, 1%, 0.063W, 0402	0402	CRCW04023K01FKED	Vishay-Dale		

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TR1, TR2, TR3, TR4, TR5, TR6	0		Low-Capacitance +/- 15 kV ESD-Protection Array for High-Speed Data Interfaces, 2 Channels, -40 to +85 degC, 5-pin SOT (DRL), Green (RoHS & no Sb/Br)	DRL0005A	TPD2E001DRLR	Texas Instruments	Equivalent	None

Notes:

Unless otherwise noted in the Alternate PartNumber and/or Alternate Manufacturer columns, all parts may be substituted with equivalents.

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