

Fitted	Description	Designator	PartNumber	Quantity	Manufacturer	PackageReference	Value
Fitted	Printed Circuit Board	!PCB1	TIDA-060043	1	Any		
Fitted	CAP, CERM, 4.7 uF, 10 V, +/- 10%, X5R, 0402	C1, C3, C5, C7	C1005X5R1A475K050BC	4	TDK	0402	4.7uF
Fitted	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, 0402	C2, C4, C6, C8, C9, C10, C13, C17, C19, C20, C53	EMK105B7104KV-F	11	Taiyo Yuden	0402	0.1uF
Fitted	CAP, CERM, 10 uF, 10 V, +/- 20%, X5R, 0402	C11, C30, C32, C33, C36, C37, C40, C41, C45, C46	CL05A106MP8NUB8	10	Samsung Electro-Mechanics	0402	10uF
Fitted	CAP, CERM, 100 uF, 10 V, +/- 20%, X5R, 1206_190	C12, C27	C3216X5R1A107M160AC	2	TDK	1206_190	100uF
Fitted	CAP, CERM, 22 pF, 50 V, +/- 5%, COG/NPO, 0402	C14, C15	GRM1555C1H220JA01D	2	MuRata	0402	22pF
Fitted	CAP, CERM, 0.01 uF, 16 V, +/- 10%, X5R, 0402	C16	GRM155R61C103KA01D	1	MuRata	0402	0.01uF
Fitted	CAP, CERM, 27 pF, 50 V, +/- 5%, COG/NPO, 0402	C21, C22	GJM1555C1H270JB01	2	MuRata	0402	27pF
Fitted	CAP, CERM, 1 uF, 16 V, +/- 10%, X5R, 0402	C23, C24, C25, C42, C47	EMK105BJ105KVHF	5	Taiyo Yuden	0402	1uF
Fitted	CAP, CERM, 47 uF, 10 V, +/- 10%, X5R, AEC-Q200 Grade 1, 1206	C26	GRT31CR61A476KE13L	1	MuRata	1206	47uF
Fitted	CAP, CERM, 22 uF, 6.3 V, +/- 20%, X5R, 0402	C28, C29, C34, C35, C38, C39	GRM155R60J226ME11D	6	MuRata	0402	22uF
Fitted	CAP, CERM, 220 uF, 4 V, +/- 20%, X5R, 1206_190	C31	GRM31CR60G227ME11L	1	MuRata	1206_190	220uF
Fitted	CAP, CERM, 0.1 uF, 25 V, +/- 10%, X7R, 0402	C43, C44, C48, C49	GRM155R71E104KE14D	4	MuRata	0402	0.1uF
Fitted	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X5R, 0201	C50, C51, C52, C56, C60, C62, C63, C64, C67, C71, C73, C74, C75, C78, C82, C84, C85, C86, C89, C93	GRM033C71C104KE14D	20	MuRata	0201	0.1uF
Fitted	CAP, CERM, 0.01 uF, 25 V, +/- 10%, X5R, 0201	C54, C59, C65, C70, C76, C81, C87, C92	GRM033R61E103KA12D	8	MuRata	0201	0.01uF
Fitted	CAP, CERM, 0.22 uF, 16 V, +/- 10%, X7R, 0402	C55, C66, C77, C88	CL05B224KO5NNNC	4	Samsung Electro-Mechanics	0402	0.22uF
Fitted	CAP, CERM, 1 uF, 16 V, +/- 10%, X5R, 0603	C57, C58, C61, C68, C69, C72, C79, C80, C83, C90, C91, C94	GRM188R61C105KA93D	12	MuRata	0603	1uF
Fitted	CAP, CERM, 10 uF, 16 V, +/- 10%, X5R, 0805	C95	GRM21BR61C106KE15K	1	MuRata	0805	10uF
Fitted	CAP, CERM, 1 uF, 16 V, +/- 10%, X5R, 0603	C96	GRM185R61C105KE44D	1	MuRata	0603	1uF
Fitted	LED, Green, SMD	D1, D2, D3, D4, D5, D6, D7, D8, D9	LTST-C150KGKT	9	LiteOn	1.6x3.2mm	Green

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Fitted	LED, Green, SMD	D10, D11, D12, D13, D14	LG M67K-G1J2-24-Z	5	OSRAM	2x1.4mm	Green
Fitted	Fuse, 8 A, 32VAC/VDC, SMD	F1	0440008.WR	1	Littelfuse	1206	
Fitted	Fiducial mark. There is nothing to buy or mount.	FID1, FID2, FID3, FID4, FID5, FID6	N/A	6	N/A	N/A	
Fitted	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	H1, H2, H3, H4	NY PMS 440 0025 PH	4	B&F Fastener Supply	Screw	
Fitted	Header, 100mil, 3x1, Gold, TH	J1	HTSW-103-07-G-S	1	Samtec	Header, 100mil, 3x1, TH	
Fitted	Receptacle, USB Mini-AB, 0.8mm, 5x1, Gold, R/A, SMT	J2	0565790576	1	Molex	Receptacle, USB Mini-AB, 0.8mm, 5x1, R/A, SMT	
Fitted	Power Jack, mini, 2.5mm OD, R/A, TH	J3, J4, J5	RAPC712X	3	Switchcraft	Jack, 14.5x11x9mm	
Fitted	Header, 100mil, 2x1, Gold, TH	J6, J7, J8	HTSW-102-09-G-S	3	Samtec	Header, 2x1, 2.54mm, TH	
Fitted	2.92MM JACK,PCB,COMPRESSION W/SL	J9, J10, J14, J15, J17, J18, J20, J21	73252-0161	8	Molex	CONN_RF_JACK	
Fitted	Straight PCB plug Pin-in-hole/SMT	J11, J16, J19, J22	1X8A_81_MXP-S50-0-2/111_NE	4	Huber+Suhner	1373x268x203mil	
Fitted	Header, 2.54mm, 2x2, Gold, TH	J12, J25	PBC02DAAN	2	Sullins Connector Solutions	Header, 2.54mm, 2x2, TH	
Fitted	SMA Jack, Straight, 50 Ohm, Gold, TH	J13	SMA-J-P-H-ST-TH1	1	Samtec	TH, 5-Leads, Body 7x7mm	
Fitted	76 Position QSFP-DD (Double Density) Receptacle Connector Solder Surface Mount, Right Angle	J23	2027180100	1	Molex	HDR76	
Fitted	Header, 2.54mm, 3x1, Gold, TH	J24	TSW-103-08-G-S	1	Samtec	Header, 2.54mm, 3x1, TH	
Fitted	Header, 2.54mm, 5x2, Gold, TH	J26	TSW-105-08-G-D	1	Samtec	Header, 2.54mm, 5x2, TH	
Fitted	Position QSFP-DD (Double Density) Cage with Heat Sink Connector Press-Fit Through Hole, Right Angle	J27	2031431350	1	Molex	CAGE_QSFP-DD	
Fitted	Header, 100mil, 6x2, Gold, TH	J28	TSW-106-07-G-D	1	Samtec	6x2 Header	
Fitted	Ferrite Bead, 600 ohm @ 100 MHz, 0.5 A, 0402	L1, L2	BLM15AX601SN1D	2	MuRata	0402	600 ohm
Fitted	Ferrite Bead, 300 ohm @ 100 MHz, 2 A, 0603	L3, L4	742792641	2	Würth Elektronik	0603	300 ohm
Fitted	Ferrite Bead, 180 ohm @ 100 MHz, 0.5 A, 0603	L5	742792622	1	Würth Elektronik	0603	180 ohm
Fitted	FIXED IND 220NH 7.7A 8 MOHM SMD	L6, L7	744373210022	2	Würth Elektronik	3.2x2.5mm	220nH

Fitted	Description	Designator	PartNumber	Quantity	Manufacturer	PackageReference	Value
Fitted	Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll	LBL1	THT-14-423-10	1	Brady	PCB Label 0.650 x 0.200 inch	
Fitted	RES, 2.00 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0402	R1, R3, R61, R71, R81, R91	ERJ-2RKF2001X	6	Panasonic	0402	2.00k
Fitted	RES, 2.49, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	R2, R4, R5, R43, R51	CRCW04022R49FKED	5	Vishay-Dale	0402	2.49
Fitted	RES, 12.1 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	R6	CRCW040212K1FKED	1	Vishay-Dale	0402	12.1k
Fitted	RES, 4.70 k, 1%, 0.1 W, 0402	R7	ERJ-2RKF4701X	1	Panasonic	0402	4.70k
Fitted	RES, 1.00 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	R8, R52, R53, R54, R55, R65, R66, R67, R74, R76, R77, R86, R87	CRCW04021K00FKED	13	Vishay-Dale	0402	1.00k
Fitted	RES, 10.0 k, 0.1%, 0.063 W, 0402	R9, R10, R11, R12	PCF0402-12-10K0BT1	4	TT Electronics/IRC	0402	10.0k
Fitted	RES, 2.20 k, 0.1%, 0.0625 W, AEC-Q200 Grade 0, 0402	R13	ERA2AEB222X	1	Panasonic	0402	2.20k
Fitted	RES, 4.70, 1%, 0.05 W, 0201	R14	RC0201FR-074R7L	1	Yageo America	0201	4.70
Fitted	RES, 1.00 k, 1%, 0.063 W, 0402	R15, R17, R23, R41, R49	MCR01MZPF1001	5	Rohm	0402	1.00k
Fitted	RES, 100 k, 1%, 0.0625 W, 0402	R18, R24	RC0402FR-07100KL	2	Yageo America	0402	100k
Fitted	RES, 56.2 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	R19, R25	CRCW040256K2FKED	2	Vishay-Dale	0402	56.2k
Fitted	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0402	R20, R26, R37, R45	ERJ-2GE0R00X	4	Panasonic	0402	0
Fitted	RES, 15.0, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	R27, R29, R32, R34	CRCW040215R0FKED	4	Vishay-Dale	0402	15.0
Fitted	RES, 261, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	R28, R30, R33, R35	CRCW0402261RFKED	4	Vishay-Dale	0402	261
Fitted	RES, 1.87 k, 1%, 0.063 W, 0402	R38, R46	RC0402FR-071K87L	2	Yageo America	0402	1.87k
Fitted	RES, 44.2 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	R40, R48	CRCW040244K2FKED	2	Vishay-Dale	0402	44.2k
Fitted	RES, 1.50 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	R42, R50	CRCW04021K50FKED	2	Vishay-Dale	0402	1.50k
Fitted	RES, 10.2, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	R57, R69, R79, R89	CRCW040210R2FKED	4	Vishay-Dale	0402	10.2
Fitted	RES, 4.7 k, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	R58, R94, R95, R96, R97, R98	CRCW04024K70JNED	6	Vishay-Dale	0402	4.7k

Fitted	Description	Designator	PartNumber	Quantity	Manufacturer	PackageReference	Value
Fitted	RES, 33, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	R60	CRCW040233R0JNED	1	Vishay-Dale	0402	33
Fitted	RES, 20.0k, 0.1%, 0.063 W, 0402	R64, R75, R84, R85	PCF0402-12-20K0BT1	4	TT Electronics/IRC	0402	20.0k
Fitted	RES, 200, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	R99, R100, R101, R102, R103	CRCW0603200RFEA	5	Vishay-Dale	0603	200
Fitted	Switch, SPST-NO, Off-Mom, 0.05 A, 32 VDC, SMD	S1, S2, S3, S4	KMR211GLFS	4	C&K Components	4.2x2.8mm	
Fitted	Shunt, 100mil, Flash Gold, Black	SH-J1	SPC02SYAN	1	Sullins Connector Solutions	Closed Top 100mil Shunt	1x2
Fitted	Single Output LDO, 300 mA, Fixed 3.3 V Output, 2 to 5.5 V Input, with Low IQ, 5-pin SOT-23 (DBV), -40 to 125 degC, Green (RoHS & no Sb/Br)	U1	TLV70233DBVR	1	Texas Instruments	DBV0005A	
Fitted	8-Bit Bidirectional Voltage-Level Shifter with Auto Direction Sensing and +/-15-kV ESD Protect, RGY0020A (VQFN-20)	U2, U4	TXB0108RGYR	2	Texas Instruments	RGY0020A	
Fitted	IC USB HS QUAD UART/SYNC 64-LQFP	U3	FT4232HL-REEL	1	FTDI	LQFP64	
Fitted	1K Microwire Compatible Serial EEPROM, TSSOP-8	U5	93LC46B-I/ST	1	Microchip	TSSOP-8	
Fitted	2.4-V to 5.5-V Input, 6-A Step-Down Converter in 1.5-mm x 2.5-mm QFN Package	U6, U8	TPS62867RQY	2	Texas Instruments	VQFN-HR9	
Fitted	FILTER LC HIGH FREQ 27uF 1206	U7, U9, U12, U14	NFM31PC276B0J3L	4	MuRata	3.2x1.6mm	27 uF
Fitted	4-Bit Dual-Supply Bus Transceiver with Configurable Voltage-Level Shifting and 3-State Outputs, PW0016A (TSSOP-16)	U10	SN74AVC4T245PWR	1	Texas Instruments	PW0016A	
Fitted	3-A, High-Accuracy (0.75%), Low-Noise (4.4µVRMS), LDO Voltage Regulator, RPS0012A (VQFN-12)	U11, U13	TPS7A5201RPST	2	Texas Instruments	RPS0012A	

Fitted	Description	Designator	PartNumber	Quantity	Manufacturer	PackageReference	Value
Fitted	56 Gbps Multi-Rate 4-Channel Retimer with Crosspoint	U15, U16, U17, U18	DS560DF410AMN	4	Texas Instruments	FCBGA81	
Fitted	Crystal, 12 MHz, 20 ppm, SMD	Y1	ABMM2-12.000MHZ-E2-T	1	Abracon Corporation	6x3.6mm	
Fitted	XTAL OSC XO 25.0000MHZ CMOS SMD	Y2	ECS-1618-250-BN-TR	1	ECS Inc.	SMT4_1MM6_1MM2	
Not Fitted	CAP, CERM, 4.7 uF, 10 V, +/- 10%, X5R, 0402	C18	C1005X5R1A475K050BC	0	TDK	0402	4.7uF
Not Fitted	RES, 0, 5%, 0.1 W, AEC-Q200 Grade 0, 0402	R16, R21, R22, R31, R36, R44, R56, R59, R62, R63, R68, R70, R72, R73, R78, R80, R82, R83, R88, R90, R92, R93	ERJ-2GE0R00X	0	Panasonic	0402	0
Not Fitted	RES, 2.49, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	R39, R47	CRCW04022R49FKED	0	Vishay-Dale	0402	2.49
Not Fitted	Test Point, Miniature, SMT	TP1, TP2, TP3, TP4	5015	0	Keystone Electronics	Testpoint_Keystone_Miniature	

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