

Fitted	Description	Designator	PartNumber	Quantity	Manufacturer	PackageReference	Value
Fitted	Printed Circuit Board	!PCB	TIDA-010973	1	Any		
Fitted	0.1 μ F $\pm$ 10% 25V Ceramic Capacitor X5R 0201 (0603 Metric)	C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C17, C18, C19, C27, C28, C29, C30, C31, C32, C33, C34, C40, C41, C42, C45, C48, C52, C53, C54, C55, C59, C60, C190, C198, C199, C200, C201, C202, C203, C204, C205, C209, C210, C213, C215, C217	885012104005	49	Wurth Electronics	0201	100nF
Fitted	CAP, CERM, 3.3 μ F, 10 V, +/- 10%, X5R, 0402	C14, C15, C16, C35, C36, C37, C38, C39, C49, C50, C51, C56, C57, C58, C212, C214, C216	C1005X5R1A335K050BC	17	TDK	0402	3.3 μ F
Fitted	CAP, CERM, 22 μ F, 10 V, +/- 20%, X5R, 0805	C20, C21, C26, C43	885012107011	4	Wurth Elektronik	0805	22 μ F
Fitted	CAP, CERM, 4.7 μ F, 10 V, +/- 10%, X5R, 0402	C22, C23, C24, C25	C1005X5R1A475K050BC	4	TDK	0402	4.7 μ F
Fitted	CAP, CERM, 2.2 μ F, 16 V, +/- 20%, X5R, 0603	C44	885012106018	1	Wurth Elektronik	0603	2.2 μ F
Fitted	4.7 μ F $\pm$ 10% 50V Ceramic Capacitor X7R 1206 (3216 Metric)	C46	885012208094	1	Wurth Electronics	1206	
Fitted	CAP, CERM, 0.1 μ F, 10 V, +/- 20%, X5R, 0402	C61, C62, C111, C112, C113, C115, C116, C120, C121, C122, C123, C124, C172, C173, C174, C175, C176, C177, C178, C179, C192, C207, C208	885012105010	23	Wurth Elektronik	0402	0.1 μ F
Fitted	CAP, CERM, 0.1 μ F, 16 V, +/- 10%, X7R, 0402	C63, C64, C65, C66, C67, C68, C70_SOM-ETH1, C70_SOM-ETH2, C74_SOM-ETH1, C74_SOM-ETH2, C82, C83, C84, C86, C117, C118, C119, C139, C145, C146, C147, C148, C149, C150, C152, C154, C155, C162, C164, C167, C168, C171, C183, C184, C185, C186, C196, C197, C211, C218, C219	885012205037	41	Wurth Elektronik	0402	0.1 μ F

Fitted	Description	Designator	PartNumber	Quantity	Manufacturer	PackageReference	Value
Fitted	CAP, CERM, 0.01 uF, 16 V, +/- 10%, X7R, 0402	C69_SOM-ETH1, C69_SOM-ETH2, C73_SOM-ETH1, C73_SOM-ETH2	885012205031	4	Würth Elektronik	0402	0.01uF
Fitted	CAP, CERM, 1 uF, 10 V, +/- 20%, X5R, 0402	C71_SOM-ETH1, C71_SOM-ETH2, C75_SOM-ETH1, C75_SOM-ETH2, C153, C163, C170, C191_SOM-ETH1, C191_SOM-ETH2	885012105012	9	Würth Elektronik	0402	1uF
Fitted	CAP, CERM, 10 uF, 10 V, +/- 20%, X5R, 0402	C72_SOM-ETH1, C72_SOM-ETH2, C76_SOM-ETH1, C76_SOM-ETH2	GRM155R61A106ME11D	4	MuRata	0402	10uF
Fitted	CAP, CERM, 4.7 pF, 50 V, +/- 5%, COG/NP0, 0402	C77_SOM-ETH1, C77_SOM-ETH2, C78_SOM-ETH1, C78_SOM-ETH2, C79_SOM-ETH1, C79_SOM-ETH2, C80_SOM-ETH1, C80_SOM-ETH2	GRM1555C1H4R7CA01D	8	MuRata	0402	4.7pF
Fitted	CAP, CERM, 2200 pF, 10 V, +/- 10%, X7R, 0402	C81_SOM-ETH1, C81_SOM-ETH2	885012205008	2	Würth Elektronik	0402	2200pF
Fitted	10 µF ±20% 10V Ceramic Capacitor X5R 0402 (1005 Metric)	C85, C180, C182	GRM155R61A106ME18D	3	Murata	0402	10µF
Fitted	CAP, CERM, 1 uF, 16 V, +/- 10%, X5R, 0402	C87	EMK105BJ105KVHF	1	Taiyo Yuden	0402	1uF
Fitted	22 µF ±10% 25V Ceramic Capacitor X7R 1210 (3225 Metric)	C88, C89, C90	885012209074	3	Würth	1210	22µF
Fitted	CAP, AL, 47 µF, 35 V, +/- 20%, 0.26 ohm, AEC-Q200 Grade 2, SMD	C91	EEEFP1V470AP	1	Panasonic	D6.3xL5.8	47uF
Fitted	100 nF ±10% 50V Ceramic Capacitor X7R 0402 (1005 Metric)	C92, C93, C97, C98, C100, C101, C193	885012205086	7	Würth	0402	100nF
Fitted	4.7 µF ±10% 50V Ceramic Capacitor X7R 1210 (3225 Metric)	C94, C95	885012209048	2	Würth	1210	4.7µF
Fitted	CAP, CERM, 10 uF, 50 V, +/- 10%, X7R, 1210	C96	GRM32ER71H106KA12L	1	MuRata	1210	10uF
Fitted	CAP, CERM, 22 pF, 10 V, +/- 5%, COG/NP0, 0402	C99	885012005009	1	Würth Elektronik	0402	22pF
Fitted	CAP, CERM, 1 uF, 16 V, +/- 10%, X7R, 0603	C102, C103, C106, C107	885012206052	4	Würth Elektronik	0603	1uF

Fitted	Description	Designator	PartNumber	Quantity	Manufacturer	PackageReference	Value
Fitted	CAP, CERM, 0.1 uF, 16 V, +/- 10%, X7R, 0603	C104, C105, C108, C109	885012206046	4	Würth Elektronik	0603	0.1uF
Fitted	CAP, CERM, 1000 pF, 2000 V, +/- 10%, X7R, 1812	C110, C129, C138, C141, C151	1812GC102KA1	5	AVX	1812	1000pF
Fitted	CAP, CERM, 0.47 uF, 6.3 V, +/- 10%, X5R, 0402	C114, C194, C195	04026D474KAT2A	3	AVX	0402	0.47uF
Fitted	10 µF ±20% 25V Ceramic Capacitor X5R 0603 (1608 Metric)	C125, C126, C130, C131, C135, C142, C144	885012106031	7	Würth	0603	10µF
Fitted	CAP, CERM, 0.1 uF, 100 V, +/- 10%, X5R, 0402	C127, C128, C132, C133, C136, C137, C143	GRM155R62A104KE14D	7	MuRata	0402	0.1uF
Fitted	CAP, CERM, 1000 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402	C134	GCM155R71H102KA37D	1	MuRata	0402	1000pF
Fitted	CAP, CERM, 0.01 µF, 25 V, +/- 5%, X7R, 0402	C140, C156, C157, C158, C165	04023C103JAT2A	5	AVX	0402	0.01uF
Fitted	Cap Ceramic 8pF 50V COG 0.5pF SMD 0402 125C Paper T/R	C159, C160	GCM1555C1H8R0DA16D	2	Murata Electronics North America	0402	
Fitted	CAP, CERM, 15 pF, 50 V, +/- 5%, COG/NPO, 0402	C161	885012005056	1	Würth Elektronik	0402	15pF
Fitted	CAP, CERM, 3.3 µF, 16 V, +/- 10%, X7R, 0805	C166, C169	C2012X7R1C335K125AB	2	TDK	0805	3.3uF
Fitted	4.7 µF ±20% 10V Ceramic Capacitor X5R 0603 (1608 Metric)	C181	885012106012	1	Würth Electronics	0603	4.7µF
Fitted	CAP, CERM, 10 µF, 6.3 V, +/- 20%, X5R, 0402	C187	GRM155R60J106ME47D	1	MuRata	0402	10uF
Fitted	CAP, CERM, 3.3 uF, 16 V, +/- 10%, X6S, 0603	C206	CL608X6SLC335K080AC	1	TDK	0603	3.3uF
Fitted	LED, Green, SMD	D1, D2, D3, D4, D5, D6, D10, D11, D12, D13, D14, D15, D16, D17, D20, D23, D24	150060VS75000	17	Würth Elektronik	LED_0603	Green
Fitted	Green, Red 520nm Green, 625nm Red LED Indication - Discrete 3.2V Green, 2V Red 0606 (1616 Metric)	D7, D8	150066RG74000	2	Würth	0606	
Fitted	Diode, TVS, Bi, 6.5 V, SMB	D18, D22	SMBJ6.5CA	2	Littelfuse	SMB	6.5V
Fitted	LED, Red, SMD	D19, D21	150060RS75000	2	Würth Elektronik	LED_0603	Red

Fitted	Description	Designator	PartNumber	Quantity	Manufacturer	PackageReference	Value
Fitted	Fuse, 2 A, 125VAC/VDC, SMD	F1	0454002.MR	1	Littelfuse	SoBo452	
Fitted	Fiducial mark. There is nothing to buy or mount.	FD1, FD2, FD3, FD4, FD5, FD6	N/A	6	N/A	N/A	
Fitted	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	H1, H2	NYPMS440 0025 PH	2	B&F Fastener Supply	Screw	
Fitted	DC POWER JACK, R/A, TH	J1	PJ-102AH	1	CUI Inc.	DC POWER JACK, R/A, TH	
Fitted	1 Port RJ45 Surface Mount 10/100 Base-T, Auto MDIX	J2, J3	7498011211	2	Würth Electronics	RJ45MAG	
Fitted	2 Pin Screw Terminal, Power Tap M3 Surface Mount, Right Angle	J4, J7	7466313R	2	Würth Electronics	SMT_RED CUBE_7MM00_4MM33	
Fitted	Header, 2.54mm, 2x1, Gold, TH	J5, J17, J18, J20	61300211121	4	Würth Elektronik	Header, 2.54mm, 2x1, TH	
Fitted	MicroSD Card Connector, R/A, Gold, SMT	J6	693071010811	1	Würth Elektronik	MicroSD Card Connector, R/A, SMT	
Fitted	Header, 2.54mm, 3x2, Gold, TH	J7, J8	61300621121	2	Würth Elektronik	Header, 2.54mm, 3x2, TH	
Fitted	Header, 2.54mm, 5x2, Gold, TH	J9	61301021121	1	Würth Elektronik	Header, 2.54mm, 5x2, TH	
Fitted	THT Vertical Pin Header WR-PHD, Pitch 2.54mm, Dual Row, 12 pins	J10	61301221121	1	Würth Electronics	HDR12	
Fitted	Receptacle, 0.5mm, 30x2, Gold, TH	J11	QSH-030-01-L-D-A	1	Samtec	Receptacle, 0.5mm, 30x2, TH	
Fitted	Header, 2.54mm, 3x1, Gold, TH	J12	61300311121	1	Würth Elektronik	Header, 2.54mm, 3x1, TH	
Fitted	Conn Micro USB 2.0 Type A B RCP 5 POS 0.65mm Solder RA SMD 5 Terminal 1 Port T/R	J13, J15	629105150921	2	Würth Electronics	CONN_PTH_USB_8MM0_5MM6	
Fitted	USB-C (USB TYPE-C) USB 3.2 Gen 2 (USB 3.1 Gen 2, Superspeed + (USB 3.1)) Receptacle Connector 24 Position Surface Mount, Right Angle, Through Hole	J14	632723300011	1	Würth	CONN_USB_8MM74_11MM20	

Fitted	Description	Designator	PartNumber	Quantity	Manufacturer	PackageReference	Value
Fitted	Conn Unshrouded Header HDR20 POS1.27mm Solder ST Top Entry SMD Tube	J16	FTR-110-51-L-D-06	1	Samtec	HDR20	
Fitted	Inductor, Shielded, 470 nH, 1.5 A, 0.1 ohm, SMD	L1, L2, L3	74479262147	3	Würth Elektronik	1.6x0.8mm	470nH
Fitted	Ferrite Bead, 22 ohm @100 MHz, 1 A, 0603	L4_SOMETH1, L4_SOMETH2, L5_SOMETH1, L5_SOMETH2, L17, L18	742792604	6	Würth Elektronik	0603	22 ohm
Fitted	Inductor, Shielded Drum Core, Ferrite, 2.5 uH, 1.25 A, 0.05 ohm, SMD	L6	744031002	1	Würth Elektronik	WE-TPC-S	2.5uH
Fitted	Ferrite Bead, 120 ohm @100 MHz, 3 A, 1206	L7	742792113	1	Würth Elektronik	1206	120 ohm
Fitted	330 uH @100 kHz 2 Line Common Mode Choke Surface Mount 2 kOhms @20 MHz 300mA DCR 300mOhm	L8	744212331	1	Würth Electronics	SMT_CMC_6MM5_3MM6	
Fitted	Ferrite Bead, 30 ohm @100 MHz, 3 A, 0805	L9, L12	74279206	2	Würth Elektronik	0805	30 ohm
Fitted	2 Line Common Mode Choke Surface Mount 90 Ohms @100 MHz 280mA DCR 300mOhm	L10, L11	744233900	2	Würth	SMT4	
Fitted	Ferrite Bead, 120 ohm @100 MHz, 0.5 A, 0402	L13, L14, L15	74279271	3	Würth Elektronik	0402	120 ohm
Fitted	Ferrite Bead, 1000 ohm @100 MHz, 0.2 A, 0603	L16	74279266	1	Würth Elektronik	0603	1000 ohm
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	100mA 45V NPN Signal Transistor DFN0806	Q1	BC847BFA-7B	1	Diodes Inc.	DFN3	45V
Fitted	MOSFET, N-CH, 12 V, 2.9 A, YJC0003A (PICOSTAR-3)	Q2, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14	CSD13383F4	11	Texas Instruments	YJC0003A	12V
Fitted	MOSFET, N-CH, 100 V, 4.5 A, DQK0006C (WSON-6)	Q3, Q4	CSD19538Q2	2	Texas Instruments	DQK0006C	100V

Fitted	Description	Designator	PartNumber	Quantity	Manufacturer	PackageReference	Value
Fitted	RES 10.0 k, 1%, 0.063 W, AEC- Q200 Grade 0, 0402	R1, R6, R7, R8, R9, R10, R12, R14, R15, R21, R24_SOM-ETH1, R24_SOM-ETH2, R27_SOM-ETH1, R27_SOM-ETH2, R34, R35, R56, R57, R93, R95, R99, R100, R103, R105, R107, R114, R115, R116, R117, R118, R119, R124, R125, R126, R127, R133, R134, R136, R137, R140, R141, R142, R164, R169, R171, R172, R173, R175, R176, R177, R178, R179, R180, R181, R188, R192, R193, R213, R214, R220, R221	CRCW040210K0FK ED	61	Vishay-Dale	0402	10.0k
Fitted	RES 2.67 k, 1%, 0.063 W, AEC- Q200 Grade 0, 0402	R2, R96	CRCW04022K67FK ED	2	Vishay-Dale	0402	2.67k
Fitted	RES 180, 5%, 0.063 W, AEC- Q200 Grade 0, 0402	R3, R4, R5, R89, R91, R94	CRCW0402180RJN ED	6	Vishay-Dale	0402	180
Fitted	RES 1.00 k, 1%, 0.063 W, AEC- Q200 Grade 0, 0402	R11, R51, R64, R128, R129, R130, R131, R151, R152, R154, R155, R156, R157, R165, R190, R194, R197, R202	CRCW04021K00FK ED	18	Vishay-Dale	0402	1.00k
Fitted	RES 4.70 k, 1%, 0.05 W, 0201	R13, R17, R217, R219	RC0201FR-074K7L	4	Yageo America	0201	4.70k
Fitted	RES 10.0 k, 1%, 0.05 W, 0201	R16, R120, R121, R123	CRCW020110K0FK ED	4	Vishay-Dale	0201	10.0k
Fitted	RES 33.0, 1%, 0.063 W, AEC- Q200 Grade 0, 0402	R18, R19, R20, R198, R223, R224, R225	RMCF0402FT33R0	7	Sackpole Electronics Inc	0402	33.0
Fitted	RES 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	R22, R145, R215, R?	CRCW04020000Z0 ED	4	Vishay-Dale	0402	0
Fitted	RES 2.20 k, 1%, 0.063 W, AEC- Q200 Grade 0, 0402	R23_SOM-ETH1, R233_SOM-ETH1	CRCW04022K20FK ED	2	Vishay-Dale	0402	2.20k
Fitted	RES 6.49 k, 1%, 0.063 W, AEC- Q200 Grade 0, 0402	R26_SOM-ETH1, R26_SOM-ETH2	CRCW04026K49FK ED	2	Vishay-Dale	0402	6.49k
Fitted	RES 1.50 k, 1%, 0.063 W, AEC- Q200 Grade 0, 0402	R28_SOM-ETH1, R28_SOM-ETH2	CRCW04021K50FK ED	2	Vishay-Dale	0402	1.50k

Fitted	Description	Designator	PartNumber	Quantity	Manufacturer	PackageReference	Value
Fitted	RES 2.49 k, 1%, 0.063 W, AEC- Q200 Grade 0, 0402	R29_SOM-ETH1, R29_SOM-ETH2, R30_SOM-ETH2, R31_SOM-ETH1, R31_SOM-ETH2, R32_SOM-ETH1, R32_SOM-ETH2	CROW04022K49FK ED	7	Vishay-Dale	0402	2.49k
Fitted	RES 49.9 k, 1%, 0.05 W, 0201	R37, R38, R40, R41, R42, R43, R44, R66, R67, R69, R70, R71, R72, R73	RC0201FR- 0749K9L	14	Yageo America	0201	49.9k
Fitted	RES 4.70 k, 1%, 0.05 W, 0201	R39, R68	CROW02014K70FK ED	2	Vishay-Dale	0201	4.70k
Fitted	RES 22, 5%, 0.05 W, 0201	R45, R46, R47, R48, R49, R50, R53, R54, R74, R75, R76, R77, R78, R79, R80, R81, R82, R183, R212, R226, R227, R228, R229, R230, R231	RC0201JR-0722RL	25	Yageo America	0201	22
Fitted	RES 100 k, 1%, 0.063 W, AEC- Q200 Grade 0, 0402	R52, R58, R108, R109, R110, R111, R191	CROW0402100KFK ED	7	Vishay-Dale	0402	100k
Fitted	RES 35.7 k, 1%, 0.063 W, AEC- Q200 Grade 0, 0402	R59	CROW040235K7FK ED	1	Vishay-Dale	0402	35.7k
Fitted	RES 40.2 k, 1%, 0.063 W, AEC- Q200 Grade 0, 0402	R60	CROW040240K2FK ED	1	Vishay-Dale	0402	40.2k
Fitted	RES 13.0 k, 1%, 0.063 W, AEC- Q200 Grade 0, 0402	R61	CROW040213K0FK ED	1	Vishay-Dale	0402	13.0k
Fitted	RES 10.0 k, 0.5%, 0.063 W, AEC- Q200 Grade 0, 0402	R62	CROW040210K0DH EDP	1	Vishay-Dale	0402	10.0k
Fitted	RES 750, 1%, 0.063 W, AEC- Q200 Grade 0, 0402	R63, R65	CROW0402750RFK ED	2	Vishay-Dale	0402	750
Fitted	RES 220, 5%, 0.063 W, AEC- Q200 Grade 0, 0402	R84, R85, R86, R87, R90, R92	CROW0402220RJN TD	6	Vishay-Dale	0402	220
Fitted	RES 1.00 M, 1%, 0.75 W, AEC-Q200 Grade 0, 2010	R88, R139, R144, R153, R162	CROW20101M00FK EF	5	Vishay-Dale	2010	1.00Meg
Fitted	RES 100, 1%, 0.063 W, AEC- Q200 Grade 0, 0402	R98, R112, R113, R146	CROW0402100RFK ED	4	Vishay-Dale	0402	100
Fitted	RES 49.9, 1%, 0.063 W, AEC- Q200 Grade 0, 0402	R122, R163	CROW040249R9FK ED	2	Vishay-Dale	0402	49.9

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Fitted	RES 110 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	R132	CRCW0402110KFKED	1	Vishay-Dale	0402	110k
Fitted	RES 200 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	R135	CRCW0402200KFKED	1	Vishay-Dale	0402	200k
Fitted	RES 909 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	R138	CRCW0402909KFKED	1	Vishay-Dale	0402	909k
Fitted	RES 715, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	R143	CRCW0402715RFFKED	1	Vishay-Dale	0402	715
Fitted	RES 330 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	R147, R148	CRCW0402330KFKED	2	Vishay-Dale	0402	330k
Fitted	RES 360, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	R149, R150	CRCW0402360RJNED	2	Vishay-Dale	0402	360
Fitted	RES 51.1 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	R166	CRCW040251K1FKED	1	Vishay-Dale	0402	51.1k
Fitted	RES 4.87 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	R167	CRCW04024K87FKED	1	Vishay-Dale	0402	4.87k
Fitted	RES 30.0 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	R168	CRCW040230K0FKED	1	Vishay-Dale	0402	30.0k
Fitted	RES 0, 5%, 0.05 W, 0201	R182, R184, R185, R208, R209, R210, R211, R232, R234, R235, R236, R237, R238	CRCW02010000Z0ED	13	Vishay-Dale	0201	0
Fitted	RES 150, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	R216	CRCW0402150RFFKED	1	Vishay-Dale	0402	150
Fitted	RES 33.0, 1%, 0.05 W, 0201	R218	RC0201FR-0733RL	1	Yageo America	0201	33.0
Fitted	Jumper 0.063W, 1/16W Chip Resistor 0402 (1005 Metric) - Thick Film	R222	CRCW04020000Z0EDC	1	Vishay	0402	0
Fitted	Shunt, 2.54mm, Gold, Black	SH-J2	60900213421	1	Würth Elektronik	Shunt, 2.54mm, Black	
Fitted	Dip Switch SPST 4 Position Surface Mount Side (Standard) Actuator 25mA 24VDC	SW1, SW6	416131160804	2	Würth	SVMT_SW	

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Fitted	Tactile Switch SPST-NO Side Actuated Surface Mount, Right Angle	SW2, SW4, SW5	434351045816	3	Würth Electronics	SMT_SW_4MM7_4 MM5	
Fitted	Dip Switch Hexadecimal 16 Position Surface Mount Rotary for Tool Actuator 100mA 42VDC	SW3	428542320816	1	Würth	SMT_SW_7MM4_7 MM4	
Fitted	Test Point, Multipurpose, Black, TH	TP2, TP3, TP4, TP5	5011	4	Keystone Electronics	Black Multipurpose Testpoint	
Fitted	Integrated Power Management IC for ARM Cortex®-Low Power Processors and FPGAs	U1	TPS65214	1	Texas Instruments	WQFN-HR24	
Fitted	ARM®Cortex®R5F Stara™ Microcontroller IC 32-Bit Dual-Core 500MHz 512KB (512Kx8) Tightly Coupled Memory (TCM) 304-NFBGA (13.25x13.25)	U2	AM2612A0FFHIZF GR	1	Texas Instruments	NFBGA304	
Fitted	Dual 2-Input Positive-AND Gate, DCU0008A (VSSOP-8)	U3	SN74LVC2G08DCU R	1	Texas Instruments	DCU0008A	
Fitted	Single 2-Input Positive-AND Gate with Open Drain Output, DCK0005A, LARGE T&R	U4, U29	SN74AHC1G09DCK R	2	Texas Instruments	DCK0005A	
Fitted	2-Channel, 2:1 Analog Switch with Low On-State Resistance (1ohm) and Powered Off Protection, DGS0010A (VSSOP- 10)	U5	TS5A23159DGSR	1	Texas Instruments	DGS0010A	
Fitted	Single Bus Buffer Gate With 3-State Outputs, DSF0006A, LARGE T&R	U6	SN74LVC1G125DS FR	1	Texas Instruments	DSF0006A	
Fitted	Low-Voltage 8-Bit I2Cand SMBus I/O Expander, 1.65 to 5.5 V, -40 to 85 degC, 16-pin QFN (RGT), Green (RoHS& no Sb/Br)	U7, U23	TCA6408ARGTR	2	Texas Instruments	RGT0016A	

Fitted	Description	Designator	PartNumber	Quantity	Manufacturer	PackageReference	Value
Fitted	5 output referenceless clock generator with bulk acoustic wave (BAW) 16-TQFN -40 to 85	U8	LMK3C0105V33RE RR	1	Texas Instruments	TQFN16	
Fitted	Deterministic, Low-Latency, Low-Power, 10/100 Mbps, Industrial Ethernet PHY	U9_SOM-ETH1, U9_SOM-ETH2	DP83826A	2	Texas Instruments	VQFN-32	
Fitted	1.8V/64M-BIT [x1/x8] Read-While-Write octaflash Memory	U10	MX25UM6445GXD Q00	1	Macronix	BGA24	
Fitted	EEPROM Serial-I2C 1M-bit 128Kx8 2.5V/3.3V/5V 8-Pin UDFN EP T/R	U11	CAT24M01HU5I- GT3	1	onsemi	UDFN8	
Fitted	3-V to 36-V Input, 1-V to 6-V Output, 3-A Power Module	U12	TLVM13630FDHR	1	Texas Instruments	QFN-FCMOD30	
Fitted	33V Bidirectional Flat-Clamp Surge Protection Device, DRB0008A (VSON-8)	U13	TVS3301DRBT	1	Texas Instruments	DRB0008A	
Fitted	Low Iq Always ON Smart Diode Controller, DBV0006A (SOT-23-6)	U14, U15	LM74700QDBVRQ 1	2	Texas Instruments	DBV0006A	
Fitted	DRAM IoT RAM 128Mb OPI (x8) DDR 200MHz, 1.8V, Ext. Temp., BGA24	U16	AP512808L-OBMX- BA	1	AP Memory	BGA24	
Fitted	Data-Line Surge and ESD Protection Diode Array, DBV0005A (SOT-23-5)	U17, U57	ESDS314DBVR	2	Texas Instruments	DBV0005A	
Fitted	Low-Capacitance +/- 15 kVESD Protection Array for High-Speed Data Interfaces, 6 Channels, -40 to +85 degC, 10-pin UQFN (RSE), Green (RoHS& no Sb/Br)	U19	TPD6E001RSE	1	Texas Instruments	RSE0010A	
Fitted	Single Buffer/Driver With Open-Drain Output, DRY0006A (USON-6)	U20	SN74LVC1G07DRY R	1	Texas Instruments	DRY0006A	

Fitted	Description	Designator	PartNumber	Quantity	Manufacturer	PackageReference	Value
Fitted	2-pF, 3.3-V, 2:1 (SPDT), 2-channel, switch with 1.8-V compatible logic	U21	TMUX121NKGR	1	Texas Instruments	UQFN10	
Fitted	8-Bit Fast Mode Plus (FM+) I2C Bus Constant-Current LED Sink Driver, 3 to 5.5 V, -40 to 85 degC, 20-pin SOP (PW20), Green (RoHS& no Sb/Br)	U22	TLC59108IPWR	1	Texas Instruments	PW0020A	
Fitted	Remote 4-Bit I2C and SMBus I/O Expander With Configuration Registers, DGK0008A (VSSOP-8)	U24	PCA9536DGKR	1	Texas Instruments	DGK0008A	
Fitted	Single Schmitt-Trigger Buffer, DRL0005A, LARGE T&R	U25	SN74LVC1G17DRLR	1	Texas Instruments	DRL0005A	
Fitted	Low-capacitance, 2:1 (SPDT) 4-channel, powered-off protection switch with 1.8 V logic, RSV0016A (UQFN-16)	U26, U27, U28, U49, U51, U52	TMUX1574RSVR	6	Texas Instruments	RSV0016A	
Fitted	Single Schmitt-Trigger Buffer, DRY0006A (USON-6)	U30	SN74LVC1G17DRYR	1	Texas Instruments	DRY0006A	
Fitted	Single 2-Input Positive-AND Gate, DRL0005A, LARGE T&R	U31	SN74LVC1G08DRLR	1	Texas Instruments	DRL0005A	
Fitted	4-Bit Dual-Supply Bus Transceiver with Configurable Voltage-Level Shifting and 3-State Outputs, RSV0016A (UQFN-16)	U32	SN74AVC4T245RSVR	1	Texas Instruments	RSV0016A	
Fitted	USB Type-C Configuration Channel Logic and Port Control, RWB0012A (X2QFN-12)	U33	TUSB320U1RWBVR	1	Texas Instruments	RWB0012A	

Fitted	Description	Designator	PartNumber	Quantity	Manufacturer	PackageReference	Value
Fitted	USB 2.0 High-Speed (480 Mbps) and Audio Switch, DP3T, 6.5 ohm RON, -40 to 85 degC, 12-Pin UQFN (RUT), Green (RoHS& no Sb/Br)	U34	TS3USBA225RUTR	1	Texas Instruments	RUT0012A	
Fitted	4-Channel ESD Protection Diode for USB Type-C and HDMI 2.0, DQA0010A (USON-10)	U35, U36, U44	TPD4E02B04DQAR	3	Texas Instruments	DQA0010A	
Fitted	5.5V, 4A, 16mΩ Automotive Load Switch With Adjustable Rise Time and Optional Quick Output Discharge, DSG0008B (WSON-8)	U37	TPS22965TDSGRQ1	1	Texas Instruments	DSG0008B	
Fitted	Single, Current-Limited, Power-Distribution Switch, DBV0005A (SOT-23-5)	U38	TPS2051BDBVR	1	Texas Instruments	DBV0005A	
Fitted	Single 2-Input Positive-NOR Gate, DRL0005A, TARGET&R	U39	SN74AHC1G02DRLR	1	Texas Instruments	DRL0005A	
Fitted	25 Mbps Dual Channels, 2 / 0, Digital Isolator, 3.3 V / 5 V, -40 to +125 degC, 8-pin SOIC (D), Green (RoHS& no Sb/Br)	U40	ISO7220CDR	1	Texas Instruments	D0008B	
Fitted	Tiva C Series Microcontroller, 1024 KB Flash, 256 KB SRAM, 12 Bit, 20 Channels, -40 to 105 degC, 128-Pin TQFP (PDT), Green (RoHS& no Sb/Br), Tray	U41	TM4C1294NCPDTT3	1	Texas Instruments	PDT0128A	
Fitted	High Speed, Robust EMC Dual-Channel Digital Isolator, D0008B (SOIC-8)	U42, U43	ISO7721DR	2	Texas Instruments	D0008B	

Fitted	Description	Designator	PartNumber	Quantity	Manufacturer	PackageReference	Value
Fitted	Single Output High PSRR LDO, 1 A, Adjustable 1.2 to 5.5 V Output, 2.7 to 5.5 V Input, 8-pin SON (DRB), -40 to 125 degC, Green (RoHS& no Sb/Br)	U45	TPS79601DRBR	1	Texas Instruments	DRB0008B	
Fitted	Precision Micropower Shunt Voltage Reference, 0.5% accuracy, 2.5 V, 15 ppm / degC, 15 mA, -40 to 125 degC, 3-pin SOT-23 (DBZ), Green (RoHS& no Sb/Br)	U46	LM4040C25QDBZR	1	Texas Instruments	DBZ0003A	
Fitted	Single 2-Input Positive-AND Gate, DRL0005A, LARGET&R	U47	SN74AHC1G08DRLR	1	Texas Instruments	DRL0005A	
Fitted	Dual Schmitt-Trigger Buffer, DRY0006A (USON-6)	U48	SN74LVC2G17DRYR	1	Texas Instruments	DRY0006A	
Fitted	5.5-V, 2-A, 52-mΩ load switch with adj. rise time and adj. output discharge	U50	TPS22918DBVR	1	Texas Instruments	SOT23-6	
Fitted	1-Bit Bidirectional Voltage-Level Shifter for Open-Drain and Push-Pull Application, DCK0006A (SOT-SC70-6)	U53	TXS0101DCKR	1	Texas Instruments	DCK0006A	
Fitted	Single Inverter Gate, DRL0005A, LARGET&R	U54	SN74AHC1G04DRLR	1	Texas Instruments	DRL0005A	
Fitted	Single-Bit Dual-Supply Bus Transceiver, DRL0006A (SOT-OTHER-6)	U55	SN74AXC1T45DRLR	1	Texas Instruments	DRL0006A	
Fitted	Crystal, 16 MHz, 8pF, SMD	Y1	NX3225GA-16.000M-STD-CRG-1	1	NDK	3.2x0.75x2.5mm	
Not Fitted	CAP, CERAM, 22 µF, 10 V, +/- 20%, X5R, 0805	C188, C189	885012107011	0	Würth Elektronik	0805	22µF
Not Fitted	RES, 2.20 k, 1%, 0.063 W, AEC-Q200 Grade 0, 0402	R23_SOM-ETH2, R233_SOM-ETH2	CRCW04022K20FKED	0	Vishay-Dale	0402	2.20k

Fitted	Description	Designator	PartNumber	Quantity	Manufacturer	PackageReference	Value
Not Fitted	RES 10.0 k, 1%, 0.063 W, AEC- Q200 Grade 0, 0402	R25_SOM-ETH1, R25_SOM-ETH2, R33, R36, R55, R187, R189, R239, R240, R241, R242	CRCW040210K0FK ED	0	Vishay-Dale	0402	10.0k
Not Fitted	RES 2.49 k, 1%, 0.063 W, AEC- Q200 Grade 0, 0402	R30_SOM-ETH1, R201_SOM-ETH1, R201_SOM-ETH2, R207_SOM-ETH1, R207_SOM-ETH2	CRCW04022K49FK ED	0	Vishay-Dale	0402	2.49k
Not Fitted	RES 0, 5%, 0.05 W, 0201	R83	CRCW02010000Z0 ED	0	Vishay-Dale	0201	0
Not Fitted	RES 1.00 k, 1%, 0.063 W, AEC- Q200 Grade 0, 0402	R158, R159, R160, R161, R195, R196	CRCW04021K00FK ED	0	Vishay-Dale	0402	1.00k
Not Fitted	RES 0, 5%, 0.063 W, AEC-Q200 Grade 0, 0402	R199, R200	CRCW04020000Z0 ED	0	Vishay-Dale	0402	0
Not Fitted	RES 1.50 k, 1%, 0.063 W, AEC- Q200 Grade 0, 0402	R204_SOM-ETH1, R204_SOM-ETH2, R205_SOM-ETH1, R205_SOM-ETH2, R206_SOM-ETH1, R206_SOM-ETH2	CRCW04021K50FK ED	0	Vishay-Dale	0402	1.50k
Not Fitted	Shunt, 2.54mm, Gold, Black	SH-J1	60900213421	0	Würth Elektronik	Shunt, 2.54mm, Black	
Not Fitted	Test Point, Multipurpose, Black, TH	TP31	5011	0	Keystone Electronics	Black Multipurpose Testpoint	

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