

No.	Reference	Description	Specification	Part Number	Manufacturer	Qty	Fitted	Remarks
1	C1, C7, C8, C13	4.7 μ F \pm 10% 16V Ceramic Capacitor X5R 0603 (1608 Metric)	4.7 μ	GRM188R61C475KE11D	MURATA	4	Fitted	-
2	C2, C6	1 μ F \pm 10% 16V Ceramic Capacitor X6S 0402 (1005 Metric)	1 μ	GRM155C81C105KE11D	MURATA	2	Fitted	-
3	C3	0.1 μ F \pm 10% 16V Ceramic Capacitor X7S 0201 (0603 Metric)	0.1 μ	GRM033C71C104KE14D	MURATA	0	Not Fitted	-
4	C4	10 μ F \pm 20% 16V Ceramic Capacitor X6S 0603 (1608 Metric)	10 μ	GRM188C81C106MA73D	MURATA	1	Fitted	-
5	C5	47 pF \pm 5% 50V Ceramic Capacitor C0G, NP0 0201 (0603 Metric)	47p	GRM0335C1H470JA01D	MURATA	1	Fitted	-
6	C9, C10	15 pF \pm 5% 100V Ceramic Capacitor C0G 0603 (1608 Metric)	15p	C1608C0G2A150J080AA	TDK	0	Not Fitted	-
7	C11, C12, C16, C17, C18, C19, C20, C21, C22, C26	0.1 μ F \pm 10% 16V Ceramic Capacitor X7S 0201 (0603 Metric)	0.1 μ	GRM033C71C104KE14D	MURATA	10	Fitted	-
8	C14	2.2 μ F \pm 10% 25V Ceramic Capacitor X5R 0603 (1608 Metric)	0.1 μ	GRM188R61E225KA12D	MURATA	1	Fitted	-
9	C15	0.1 μ F \pm 10% 50V Ceramic Capacitor X7R 0603 (1608 Metric)	0.1 μ	C1608X7R1H104K080AA	TDK	0	Not Fitted	-
10	C23	220 nF \pm 10% 16V Ceramic Capacitor X7R 0402 (1005 Metric)	220n	GRM155R71C224KA12D	MURATA	1	Fitted	-
11	C24, C25	10 pF \pm 2% 25V Ceramic Capacitor C0G, NP0 0201 (0603 Metric)	10p	GRM0335C1E100GA01D	MURATA	2	Fitted	-
12	CN4	Connector Header Surface Mount 10 position 0.050" (1.27mm)	20021121-00010C4LF	20021121-00010C4LF	Amphenol Communications Solutions	1	Fitted	-
13	CN5, CN30	2 pin jumper, 2.54mm, DIP	61300211121	61300211121	Wuerth Elektronik	0	Not Fitted	-
14	CN6	USB-C (USB TYPE-C) USB 2.0 Receptacle Connector 24 (16+8 Dummy) Position Surface Mount, Right Angle; Through Hole	USB4105-GF-A-120	USB4105-GF-A-120	GCT	1	Fitted	-
15	D1, D2	Diode 30 V 2A Surface Mount PMDTM	PMEG3020BEP	PMEG3020BEP,115	Nexperia	2	Fitted	-
16	E1, E3, E6, E7, E8, E9, E11, E14, E15, E21, E22, E24, E25, E26, E28, E29, E33, E41, E42, E43, E44, E45, E46, E47, E48, E49, E50, E51, E52, E53, E54, E55, E56, E57, E58, E59, E60, E61	0805 Pads on PCB with Trace Between for Cutting to isolate	Jumper Trace Cut (closed)	-	-	0	Not Fitted	-
17	E2, E5, E10, E12, E13, E16, E18, E27, E34, E35, E39, E40	0805 Pads on PCB with Narrow Gap to allow Solder Bridging	Jumper Solder Bridge (open)	-	-	0	Not Fitted	-
18	FL1	120 Ohms @ 100 MHz 1 Power Line Ferrite Bead 0805 (2012 Metric) 3A 30mOhm	BLM21PG121SN1D	BLM21PG121SN1D	MURATA	1	Fitted	-
19	J1	10 Position Header Connector 0.100" (2.54mm) Through Hole Gold	PPPC101LFBN-RC	PPPC101LFBN-RC	SULLINS CONNECTOR	1	Fitted	-
20	J2, J5	8 Position Header Connector 0.100" (2.54mm) Through Hole Gold	PPPC081LFBN-RC	PPPC081LFBN-RC	SULLINS CONNECTOR	2	Fitted	-
21	J3, J4	24 pin jumper, 2.54mm, DIP	61302421121	61302421121	Wuerth Elektronik	0	Not Fitted	-
22	J6	6 Position Header Connector 0.100" (2.54mm) Through Hole Gold	PPPC061LFBN-RC	PPPC061LFBN-RC	SULLINS CONNECTOR	1	Fitted	-
23	J7	2 pin jumper, 2.54mm, DIP	61300211121	61300211121	Wuerth Elektronik	0	Not Fitted	-
24	J8	3 pin jumper, 2.54mm, DIP	XJ8B-0311	XJ8B-0311	Omron	0	Not Fitted	-
25	J9	3 pin jumper, 2.54mm, SMT	TSM-103-04-L-SV-P-TR	TSM-103-04-L-SV-P-TR	Samtec	1	Fitted	-
26	J29	8 pin jumper, 2.54mm, DIP	NRPN042PAEN-RC	NRPN042PAEN-RC	SULLINS CONNECTOR	0	Not Fitted	-
27	JMP9	Shunt Jumper	XJ8A-0241	XJ8A-0241	Omron	1	Fitted	Default: 1-2 short on JP9
28	LED1, LED2, LED4	LED GREEN DIFFUSED 1608 SMD	SML-D12P8WT86	SML-D12P8WT86	ROHM	3	Fitted	-
29	LED3	LED YELLOW CLEAR 0603 SMD	150060YS75000	150060YS75000	Wuerth Elektronik	1	Fitted	-
30	PMOD1, PMOD2	Pmod connector,SMT	SMH-106-02-T-D	SMH-106-02-T-D	Samtec	2	Fitted	-
31	R1, R7, R14, R15, R16, R17, R18, R25, R30	10 kOhms \pm 1% 0.1W, 1/10W Chip Resistor 0402 (1005 Metric) Automotive AEC-Q200, Moisture Resistant Thick Film	10k	RK73H1ETTP1002F	KOA	9	Fitted	-
32	R2	2.61 kOhms \pm 1% 0.1W, 1/10W Chip Resistor 0402 (1005 Metric) Automotive AEC-Q200, Moisture Resistant Thick Film	2.61k	RK73H1ETTP2611F	KOA	1	Fitted	-
33	R3, R32	0 Ohms Jumper Chip Resistor 0603 (1608 Metric) Automotive AEC-Q200, Moisture Resistant Metal Element	0	RK73Z1JTTD	KOA	2	Fitted	-
34	R4	464 Ohms \pm 1% 0.1W, 1/10W Chip Resistor 0402 (1005 Metric) Automotive AEC-Q200, Moisture Resistant Thick Film	464	RK73H1ETTP4640F	KOA	1	Fitted	-
35	R6	4.7 kOhms \pm 1% 0.1W, 1/10W Chip Resistor 0402 (1005 Metric) Automotive AEC-Q200, Moisture Resistant Thick Film	4.7k	RK73H1ETTP4701F	KOA	1	Fitted	-
36	R8	1.5 kOhms \pm 1% 0.1W, 1/10W Chip Resistor 0402 (1005 Metric) Automotive AEC-Q200, Moisture Resistant Thick Film	1.5k	RK73H1ETTP1501F	KOA	1	Fitted	-
37	R9, R10, R11	1 kOhms \pm 1% 0.125W, 1/8W Chip Resistor 0603 (1608 Metric) Automotive AEC-Q200, Moisture Resistant Thick Film	1k	RK73H1JTTD1001F	KOA	3	Fitted	-
38	R12, R13	2.2 kOhms \pm 1% 0.1W, 1/10W Chip Resistor 0402 (1005 Metric) Automotive AEC-Q200, Moisture Resistant Thick Film	2.2k	RK73H1ETTP2201F	KOA	2	Fitted	-
39	R19, R20, R21, R22, R31	150 Ohms \pm 1% 0.1W, 1/10W Chip Resistor 0402 (1005 Metric) Automotive AEC-Q200, Moisture Resistant Thick Film	150	RK73H1ETTP1500F	KOA	5	Fitted	-
40	R23	15 kOhms \pm 1% 0.1W, 1/10W Chip Resistor 0402 (1005 Metric) Automotive AEC-Q200, Moisture Resistant Thick Film	15k	RK73H1ETTP1502F	KOA	1	Fitted	-
41	R24	30 kOhms \pm 1% 0.1W, 1/10W Chip Resistor 0402 (1005 Metric) Automotive AEC-Q200, Moisture Resistant Thick Film	30k	RK73H1ETTP3002F	KOA	1	Fitted	-

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42	R26, R27	27 Ohms ±1% 0.1W, 1/10W Chip Resistor 0402 (1005 Metric) Automotive AEC-Q200, Moisture Resistant Thick Film	27	RK73H1ETTP27R0F	KOA	2	Fitted	-
43	R28, R29	5.1 kOhms ±1% 0.1W, 1/10W Chip Resistor 0402 (1005 Metric) Automotive AEC-Q200, Moisture Resistant Thick Film	5.1k	RK73H1ETTP5101F	KOA	2	Fitted	-
44	S1, S2	SWITCH TACTILE SPST-NO 0.05A 16V	SKRPANE010	SKRPANE010	ALPS	2	Fitted	-
45	U1	RA2T1 48LFQFP	R7FA2T1073CFL	R7FA2T1073CFL	Renesas	1	Fitted	-
46	U2	RA4M2 48LFQFP	R7FA4M2AD3CFL	R7FA4M2AD3CFL	Renesas	1	Fitted	-
47	U3	LDO Voltage Regulators	ISL80102IRAJZ	ISL80102IRAJZ	Renesas	1	Fitted	-
48	X1	Crystal 20MHz ±10ppm 10pF SMD-4 3.2mm x 2.5mm	ABM8-20.000MHZ-10-B1U-T	ABM8-20.000MHZ-10-B1U-T	ABRACON	0	Not Fitted	-
49	X2	Crystals 12MHz ESR 130 10pF-30C +85C	ECS-120-10-36B-CWY-TR	ECS-120-10-36B-CWY-TR	ECS	1	Fitted	-