

BCF Technology Ltd.
PRP System Board
PBA-PP510_REV_F

#	Location	Qty	BCF Part No.	Description	Value	Tolerance	Package Type	Manufacturer	Manufacturers Part No
1	C379, C390	2	CAP2014	Capacitor Electrolytic 22uF 100V Through-Hole 6x11 2.4mm pitch	22uF 100V	20% 85 C	Thro-Hole	ANY	
2	C2, C8, C9, C10, C11, C12, C13	42	CAP2040	Capacitor 100nF 16V X7R 0402	100nF 16V	X7R	SMD 0402	ANY	
3	C51, C54, C55, C56, C57, C58, C59	42	CAP2040	Capacitor 100nF 16V X7R 0402	100nF 16V	X7R	SMD 0402	ANY	
4	C98, C99, C102, C103, C104, C105	42	CAP2040	Capacitor 100nF 16V X7R 0402	100nF 16V	X7R	SMD 0402	ANY	
5	C213, C215, C220, C238, C240, C241	42	CAP2040	Capacitor 100nF 16V X7R 0402	100nF 16V	X7R	SMD 0402	ANY	
6	C409, C412, C413, C426, C428, C429	15	CAP2040	Capacitor 100nF 16V X7R 0402	100nF 16V	X7R	SMD 0402	ANY	
7	C400, C469, C470, C471	4	CAP2041	Capacitor 100pF 50V COG 0402	100pF 50v	COG	SMD 0402	ANY	
8	C3, C4, C5, C6, C7, C37, C38, C39	42	CAP2042	Capacitor 10uF 10V X5R 0805	10uF 10V	X5R 10%	SMD 0805	ANY	
9	C423, C424, C425, C427, C430, C431	13	CAP2042	Capacitor 10uF 10V X5R 0805	10uF 10V	X5R 10%	SMD 0805	ANY	
10	C147, C148, C158, C159, C160, C161	28	CAP2043	Capacitor 10nF 16V X7R 0402	10nF 16V	X7R	SMD 0402	ANY	
11	C105, C137, C143, C203, C207, C208	13	CAP2054	Capacitor 1N 0402 16V X7R	1nF 16V	X7R	SMD 0402	ANY	
12	C133, C134, C386, C389, C402, C403	10	CAP2061	Capacitor 100uF 6.3V 1210 X5R	100uF 6.3V	X5R	SMD 1210	ANY	
13	C380, C391	2	CAP2077	Capacitor 1nF 100V 0402 X7R	1nF, 100V	X7R	SMD 0402	ANY	
14	C1, C140, C142, C145, C146, C147	12	CAP2078	Capacitor 1uF 16V 0402 X5R	1uF, 16V	X5R	SMD 0402	ANY	
15	C166, C175, C176, C177, C182, C183	15	CAP2079	Capacitor 470nF 100V 0805 X7R	470nF,100V	X7R	SMD 0805	ANY	
16	C476, C477, C478, C479, C480, C481	8	CAP2081	Capacitor 68pF 100V 0805 COG	68pF, 100V	COG	SMD 0805	ANY	
17	C144, C149	2	CAP2082	Capacitor 22nF 50V 0402 X7R	22nF, 50V	X7R	SMD 0402	ANY	
18	C206	1	CAP2084	Capacitor 1pF 50V 0402 COG	1pF, 50V	COG/NPO	SMD 0402	ANY	
19	J1	1	CON6088	Connector 6-Way Horizontal ZIF PFC 1mm pitch			SMD	Molex	52271-0679
20	J2	1	CON6160	Connector Receptacle 1.27mm 40Way (harwin)			Thru-hole	Harwin	M50-3002045
21	L1, L40	2	DES15029	Inductor BMB-2A-1000L-N2 Ferrite chip 350mA 0805	1K0 350mA		SMD 0805	Sigma	BMB-2A-1000L-N2
22	CLIP1	1	DES15030	Clip CLM-E18/PLT18 Clamp for E18 Core + Plate			N/A	Ferroxcube	CLM-E18/PLT18
23	PLT1	1	DES15031	Ferrite PLT18/10/2/S Plate for Planar Core	3F3		N/A	Ferroxcube	PLT18/10/2/S-3F3
24	CORE1	1	DES15032	Ferrite E18/4/10/R-3F3-A315-P PLANAR GAPPED E-CORE	170um GAP		N/A	Ferroxcube	E18/4/10/R-3F3-A315P
25	ANT1	1	DES15060	Dualband WLAN Ceramic Chip Antenna (Pulse)			SMD	Pulse Electronics	W3006
26	U6	1	DES15062	Dual Band Wifi Module WL1837 (TI)			MOC-100	TI	WL1837MOD
27	U12	1	ICS4004	IC AD5220 Digital Potentiometer 10K SO-8	10K		SMD SO-8	Analog Devices	AD5220BRZ-10
28	D1, D2, D6	3	ICS4009	Diode BAS16 General purpose SOT23	85V 0.2A		SMD SOT-23	ANY	
29	D3, D5	2	ICS4011	Diode BAV103 SOD80-C	250V 0.25A		SMD SOD80C	ANY	
30	M1, M2, M4, M5	4	ICS4012	Transistor BSS123 NMOS SOT23 (Fairchild)	100V 0.15A		SMD SOT-23	FAIRCHILD SEMI	BSS123
32	L37, L39, L41	3	ICS4018	Inductor HF50ACC Ferrite chip SMD 1210			SMD 1210	TDK	HF50ACC322513
33	U11	1	ICS4082	IC TLV431 Shunt Voltage reference SC70-6			SMD SC70-6	Texas Instruments	TLV431BCDCK
34	U9	1	ICS4143	IC AD9278 8-Channel AFE CSPBGA-144 (Analog Devices)			SCP-BGA144	Analog Devices	AD9278BBCZ
35	U4	1	ICS4144	IC Battery Gas gauge (TI)			TSSOP-14	TI	BQ34Z100-G1
36	U2	1	ICS4145	IC 256Mx16 4Gb DDR3L SDRAM (ISSI)			FBGA-96	ISSI	IS43TR16256AL-125KBL
37	U3	1	ICS4147	IC FLASH 512Mb QSPI (Micron)			SOIC-16W	Micron	N25Q512A83GSF40
38	U7	1	ICS4148	IC 8-Channel Pulser with integrated TR Switch (ST Micro)			TFLGA-56LD	ST Micro	STHV800L
39	U19	1	ICS4149	Regulator Switched LT3472 (Linear Tech)			DFN10	Linear Tech	LT3472EDD
40	U15	1	ICS4150	Regulator Switched LT3957 (Linear Tech)			UHE36	Linear Tech	LT3957AEUHE#PBF
41	U18	1	ICS4151	Regulator Switched LTC3370 (Linear Tech)			QFN-32	Linear Tech	LTC3370EUH#PBF
42	U17	1	ICS4152	Regulator Switched LTC3536 (Linear Tech)			DFN10	Linear Tech	LTC3536EDD
43	U22, U23	2	ICS4153	IC ECN32911 16 Channel HV Mux LQFP48(Hitachi)			SMD LQFP48	Hitachi	ECN32911TF
44	U26	1	ICS4154	Accelerometer Gyro 6axis LSM6DS3 (ST Micro)			LGA-14L	ST Micro	LSM6DS3
45	M9	1	ICS4155	MOSFET N-channel 20V 1A PMZB300XN (NXP)			SOT883B	NXP	PMZB300XN
46	U5	1	ICS4156	QI Wireless charger IC BQ51050BRHLR (TI)				TI	BQ51050BRHLR
47	U1	1	ICS4164	IC FPGA Cyclone 5 SOC 25K Single core 5CSEBA2U23C8SN			FBGA 672	Altera	5CSEBA2U23C8SN
48	L42, L43, L46	3	IND5015	Inductor 4R7uH SMD 2525	4R7 uH	20%	SMD 2525	Vishay-Dale	IHL P-2525-CZ-4R7-M01
49	L48, L49	2	IND5028	Inductor 10R0 uH SMD 2525 (Vishay-Dale)	4R7 uH	20%	SMD 2525	Vishay-Dale	IHL P2525CZER-100-M01

50 L44, L45, L47	3 IND5030	Inductor LPS3015 22uH SMD (Coilcraft)	10uH	20% SMD3015	Coilcraft	LPS3015-223ML
51 R48, R56, R59, R61, R62, R149	8 IND5031	Ferrite Bead LI0805H121R-10 0805 (LAIRD TECHNOLOGIES)	120R	SMD 0805	LAIRD TECHNOLOGIES	LI0805H121R-10
52 R114	1 IND5033	Inductor 1.3nH high frequency 0402	1.3nH	+/-1 0.1nH SMD 0402	Murata	LQP15MN1N3B02D
53 FOAM1, FOAM2, FOAM3, FOA	4 MEC15047	TAPE, 2 SIDED, FOAM, 19mm x 1mm 10M/ROLL				
54 PCB	1 PCB-PP510_REV_B	Pig Probe Bare PCB			ANY	
55 R138, R150, R168, R172, R173	8 RES1000	Resistor 0R0 0805	0R0	SMD 0805	ANY	
56 R136, R141	2 RES1014	Resistor 1M0 1% 0805 thick film	1M0	1% SMD 0805	ANY	
57 R187	1 RES1048	Resistor 5K6 1% 0402 thick film	5K6	1% SMD 0402	ANY	
58 R5, R6, R8, R9, R11, R12, R15,	35 RES1049	Resistor 10K 1% 0402 thick film	10K	1% SMD 0402	ANY	
59 R184, R185	2 RES1050	Resistor 33K 1% 0402 thick film	33K	1% SMD 0402	ANY	
60 R120	1 RES1051	Resistor 75R 1% 0402 thick film	75R	1% SMD 0402	ANY	
61 R36, R37, R38, R40, R54, R58,	27 RES1054	Resistor 1K0 1% 0402 thick film	1K0	1% SMD 0402	ANY	
62 R146, R159	2 RES1055	Resistor 27K 1% 0402 thick film	27K	1% SMD 0402	ANY	
63 R2, R3, R35, R42, R64, R80, R1	11 RES1056	Resistor 100R 1% 0402 thick film	100R	1% SMD 0402	ANY	
64 R186	1 RES1057	Resistor 2K2 1% 0402 thick film	2K2	1% SMD 0402	ANY	
65 R76, R162	2 RES1062	Resistor 18K 1% 0402 thick film	18K	1% SMD 0402	ANY	
66 R45, R60, R77, R112	4 RES1063	Resistor 100K 1% 0402 thick film	100K	1% SMD 0402	ANY	
67 R163, R166	2 RES1065	Resistor 47K 1% 0402 thick film	47K	1% SMD 0402	ANY	
68 C210	1 RES1067	Resistor 0R0 Zero Ohm Link 0402	0R0	SMD 0402	ANY	
69 R30, R68, R75, R104, R106, R1	7 RES1067	Resistor 0R0 Zero Ohm Link 0402	0R0	SMD 0402	ANY	
70 R143	1 RES1084	Resistor 56K 1% 0402 thick film	56K	1% SMD 0402	ANY	
71 R181	1 RES1085	Resistor 82K 1% 0402 thick film	82K	1% SMD 0402	ANY	
72 R111, R167	2 RES1090	Resistor 68K 1% 0402 thick film	68K	1% SMD 0402	ANY	
73 R41, R65	2 RES1091	Resistor 33R 1% 0402 thick film	33R	1% SMD 0402	ANY	
74 R165	1 RES1093	Resistor 6K8 1% 0402 thick film	6K8	1% SMD 0402	ANY	
75 R43	1 RES1109	Resistor 200R 1% 0402 thick film	200R	1% SMD 0402	ANY	
76 RN7	1 RES1114	Resistor Network 10K 5% MNR18	10K	5% SMD	ROHM	MNR18E0APJ103
77 RN2	1 RES1116	Resistor Network 56R 5% MNR18	56R	5% SMD	ROHM	MNR18E0APJ560
78 R193	1 RES1117	Resistor 56R 1% 0402 thick film	56R	1% SMD 0402	ANY	
79 R158	1 RES1118	Resistor 160K 1% 0402 thick film	160K	1% SMD 0402	ANY	
80 R44	1 RES1124	Resistor 150R 1% 0402 thick film	150R	1% SMD 0402	ANY	
81 R135, R139	2 RES1128	Resistor 56R 1% 0805 thick film	56R	1% SMD 0805	ANY	
82 R164, R180	2 RES1132	Resistor 24K 1% 0402 thick film	24K	1% SMD 0402	ANY	
83 R213, R222, R223, R224, R225	8 RES1137	Resistor 5K1 1% 0402 thick film	5K1	1% SMD 0402	ANY	
84 R83, R84, R85, R86, R91, R93,	9 RES1139	Resistor 1K5 1% 0402 thick film	1K5	1% SMD 0402	ANY	
85 R53	1 RES1142	Resistor 0R01 1% 2512 2W	0R01	1% SMD 2512	ANY	
86 R154, R160, R178	3 RES1143	Resistor 130K 1% 0402 thick film	130K	1% SMD 0402	ANY	
87 R32, R33, R34	3 RES1144	Resistor 240R 1% 0402 thick film	240R	1% SMD 0402	ANY	
88 R4	1 RES1145	Resistor 2K0 1% 0402 thick film	2K0	1% SMD 0402	ANY	
89 R52, R121	2 RES1146	Resistor 2K7 1% 0402 thick film	2K7	1% SMD 0402	ANY	
90 R161	1 RES1147	Resistor 4K7 1% 0402 thick film	4K7	1% SMD 0402	ANY	
91 R177	1 RES1150	Resistor 390K 1% 0402 thick film	390K	1% SMD 0402	ANY	
92 R169	1 RES1151	Resistor 820K 1% 0402 thick film	820K	1% SMD 0402	ANY	
93 R123	1 RES1152	Resistor 9K1 1% 0402 thick film	9K1	1% SMD 0402	ANY	
94 R192	1 RES1155	Resistor 12R 1% 0402 thick film	12R	1% SMD 0402	ANY	
95 R194	1 RES1156	Resistor 22R 1% 0402 thick film	22R	1% SMD 0402	ANY	
96 R67	1 RES1157	Resistor NTC 3K3 , B4250K 0603 5% (Panasonic)	3K3	5% SMD 0603	Panasonic	ERT-J1VR332J
97 R63	1 RES1159	Resistor NTC 4K7 , B4250K 0603 5% (Panasonic)	4K7	5% SMD 0603	Panasonic	ERT-J1VR472J
98 OSC1	1 XTL7007	Oscillator CFPS-39IB - 25MHz 50PPM 3.3volt (IDQ)		50ppm SMD	IDQ	CFPS-39IB 25MHz