

Bill of Materials

Project: PicoZed FMC Carrier Gen2
 Project Name: PZCC-FMC-Gen2
 Revision: 1
 Variant: 00



Report Date: 3/15/2016 10:36:41 AM

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#	Quantity	Designator	Description	Manufacturer 1	Manufacturer Part Number 1	Fitted	Notes
1	8	BMPR1, BMPR2, BMPR3, BMPR4, BMPR5, BMPR6, BMPR7, BMPR8	BUMPER CYLIN 0.375" DIA BLK	3M	SJ61A4	Fitted	
2	1	BPH1	SFP+ Cage	TE CONNECTIVITY / AMP	2007194-1	Fitted	
3	1	BTH1	HOLDER BATT FOR 1025 CELL SMD	MPD (Memory Protection Devices)	BHX1-1025-SM	Fitted	
4	110	C1, C4, C5, C6, C8, C9, C10, C12, C13, C14, C15, C16, C17, C19, C20, C21, C22, C23, C25, C26, C27, C28, C29, C31, C32, C36, C38, C41, C43, C44, C45, C46, C48, C50, C51, C52, C53, C54, C55, C56, C57, C58, C60, C62, C63, C64, C65, C66, C67, C68, C69, C70, C71, C72, C73, C75, C80, C82, C83, C87, C88, C89, C91, C92, C94, C95, C97, C98, C103, C104, C108, C112, C113, C114, C115, C116, C117, C118, C119, C125, C128, C129, C132, C133, C138, C144, C145, C146, C147, C148, C149, C151, C152, C154, C161, C163, C165, C167, C171, C172, C176, C177, C180, C181, C185, C187, C188, C189, C190, C191	CAP CER 0.1UF 25V 10% X5R 0201	TDK Corporation	C0603X5R1E104K030BB	Fitted	
5	2	C3, C74	CAP ALUM 100UF 20% 25V SMD	Panasonic Electronic Components	EEE-1EA101UP	Fitted	
6	6	C7, C11, C18, C24, C30, C101	CAP CER 10UF 10V 10% X5R 0603	TDK Corporation	C1608X5R1A106K080AC	Fitted	
7	1	C33	CAP CER 0.022UF 25V 10% X5R 0402	TDK Corporation	C1005X5R1E223K050BA	Fitted	
8	1	C34	CAP CER 2.2PF 50V ±0.25pF NP0 0402	AVX Corporation	04025A2R2CAT2A	Fitted	
9	1	C35	CAP CER 1500PF 50V 20% X5R 0402	TDK Corporation	CGA2B2X5R1H152M050BA	Fitted	
10	2	C37, C81	CAP CER 1UF 16V 10% X5R 0402	TDK Corporation	C1005X5R1C105K050BC	Fitted	
11	1	C39	CAP CER 100UF 10V 20% X5R 1206	TDK Corporation	C3216X5R1A107M160AC	Fitted	
12	5	C40, C47, C49, C77, C79	CAP CER 22UF 16V 10% X5R 0805	TDK Corporation	C2012X5R1C226K125AC	Fitted	
13	12	C42, C139, C150, C153, C158, C162, C173, C174, C178, C182, C183, C186	CAP CER 10000PF 25V 10% X7R 0402	AVX Corporation	04023C103KAT2A	Fitted	
14	1	C59	CAP CER 2.2UF 25V 10% X5R 0603	Taiyo Yuden	TMK107ABJ225KA-T	Fitted	
15	10	C61, C90, C105, C123, C140, C141, C143, C155, C157, C160	CAP CER 4.7UF 25V 10% X5R 0805	Kemet	C0805C475K3PACTU	Fitted	
16	12	C76, C85, C86, C107, C109, C110, C120, C121, C122, C134, C135, C136	CAP CER 100UF 16V 20% X5R 1210	Taiyo Yuden	EMK325ABJ107MM-T	Fitted	
17	2	C78, C127	CAP CER 22UF 25V 10% X5R 1206	Samsung Electro-Mechanics America, Inc.	CL31A226KAHNNNE	Fitted	
18	1	C84	CAP CER 2.2UF 25V 20% X5R 0402	TDK Corporation	C1005X5R1E225M050BC	Fitted	
19	4	C93, C96, C99, C100	CAP CER 0.1UF 50V 10% X7R 0603	AVX Corporation	06035C104KAT2A	Fitted	
20	3	C102, C164, C170	CAP CER 1UF 25V 10% X5R 0603	AVX Corporation	06033D105KAT2A	Fitted	
21	1	C106	CAP CER 8PF 50V 5% NP0 0402	Murata	GRM1555C1H8R0DA01D	Fitted	
22	1	C111	CAP CER 6PF 50V 5% NP0 0402	Murata	GRM1555C1H6R0DA01D	Fitted	

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23	2	C124, C126	CAP CER 22UF 10V 20% X5R 0603	TDK Corporation	C1608X5R1A226M080AC	Fitted	
24	2	C130, C169	CAP CER 1800PF 50V 5% X7R 0402	AVX Corporation	04025C182KAT2A	Fitted	
25	1	C131	CAP CER 2700PF 50V 10% X7R 0402	Kemet	C0402C272K5RACTU	Fitted	
26	7	C137, C142, C156, C166, C175, C179, C184	CAP CER 10UF 16V 10% X5R 0805	AVX Corporation	0805YD106KAT2A	Fitted	
27	1	C159	CAP CER 10UF 10V 20% X5R 0402	Samsung Electro-Mechanics America, Inc	CL05A106MP5NUNC	Fitted	
28	1	C168	CAP CER 2200PF 25V 10% X7R 0402	Kemet	C0402C222K3RACTU	Fitted	
29	1	CON1	CONN SINGL-END ARRAY FEMALE 160POS	Samtec	ASP-134603-01	Fitted	
30	3	D1, D13, D14	LED YELLOW 587NM 0603 SMD	OSRAM Opto Semiconductors Inc	LY L29K-H1K2-26-Z	Fitted	
31	2	D2, D12	TVS DIODE 20VWM SMD	Bourns	CDSOT23-SR208	Fitted	
32	1	D3	LED CHIPLED BLUE 470NM 0603 SMD	OSRAM Opto Semiconductors Inc	LB Q39G-L2N2-35-1	Fitted	
33	2	D4, D5	LED SMARTLED 570NM GREEN 0603	OSRAM Opto Semiconductors Inc	LG L29K-F2J1-24-Z	Fitted	
34	6	D6, D7, D8, D9, D10, D11	LED CHIPLED 633NM RED 0603 SMD	OSRAM Opto Semiconductors Inc	LS Q976-NR-1	Fitted	
35	3	D15, D16, D17	TVS DIODE 7VWM 9.2VC SMD (4 CHANNEL)	TE CONNECTIVITY / AMP	SESD0802Q4UG-0020-090	Fitted	
36	1	D18	DIODE SCHOTTKY 30V 0.2A SOT23-3	ON Semiconductor	BAT54LT1G	Fitted	
37	2	D19, D20	DIODE SCHOTTKY 30V 3A SMA	Diodes Inc.	B330A-13-F	Fitted	
38	1	ESD1	ESD Bag	3M	=ESDBagPN	Fitted	
39	5	FB1, FB2, FB3, FB4, FB5	FERRITE BEAD 220 OHM 1.0A 0402	Taiyo Yuden	BKP1005EM221-T	Fitted	
40	6	FL1, FL2, FL3, FL4, FL5, FL6	FILTER LC HIGH FREQ 4700PF 2606	Murata	NFE61PT472C1H9L	Fitted	
41	1	J1	CONN RCPT MICRO USB AB R/A SMD	Molex Inc	0475890001	Fitted	
42	1	J2	CONN HEADER 6POS 4.2MM R/A TIN	Molex Inc	0039301060	Fitted	
43	4	J3, J4, J5, J6	CONN SMA JACK STR 50 OHM SMD	Molex, LLC	0732511350	Fitted	
44	1	J7	CONN HEADER 14POS 2MM VERT SMD	Molex Inc	0878321420	Fitted	
45	1	J8	CONN RCPT USB A R/A, HORIZONTAL	FCI	87520-0010BLF	Fitted	
46	1	J9	CONN MAGJACK 1PORT 1000 BASE-T	Bel Fuse Inc	L829-1J1T-43	Fitted	
47	1	J10	HDMI REC SMT SHORT TYPE	TE CONNECTIVITY / AMP	5-1903015-1	Fitted	
48	1	J13	CONN MICRO SD CARD PUSH-PUSH R/A	Molex	502570-0893	Fitted	
49	4	JA1, JB1, JPS1, JZ1	Header TH 100mil 6X2 Right Angle PMOD Horizontal	SAMTEC	SSW-106-02-T-D-RA	Fitted	
50	4	JH1, JH2, JH3, JH4	SHUNT, ECON, PHBR 15 AU,BLACK	TE Connectivity	1-382811-6	Fitted	
51	1	JP2	CONN HEADR BRKWAY .100 2POS STR, SINGLE ROW	TE CONNECTIVITY / AMP	5-146280-2	Fitted	
52	1	JP3	CONN HEADER 3PIN	Molex Inc	0022292031	Fitted	
53	2	JP4, JP5	CONN HEADR BRKWAY .100 3POS STR, DUAL ROW	TE Connectivity AMP Connectors	5-146257-3	Fitted	
54	1	JSFP1	CONN HEADER 12POS .100" DUAL TIN	Samtec	TSW-106-14-T-D	Fitted	
55	6	JT1, JT2, JT3, JT4, JT5, JT6	RES 4.7K OHM 1/16W 1% 0402 SMD-3 PAD JUMPER (1-2)	Vishay Dale	CRCW04024K70FKED	Fitted	Position 1-2
56	3	JX1, JX2, JX3	CONN HEADER 100POS .8MM DUAL SMD	FCI	61083-101400LF	Fitted	
57	1	L1	FIXED IND 2.2UH 9A 15.5 mOHM SMD	Bourns	SRP6540-2R2M	Fitted	
58	2	L2, L6	FIXED IND 2.2uH 2.1A 102 mOHM	Bourns Inc.	SRP2512-2R2M	Fitted	
59	7	L3, L5, L7, L8, L9, L10, L16	FIXED IND 10uH 210mA 1.69 OHM SMD	TDK Corporation	NLCV25T-100K-PF	Fitted	
60	2	L4, L14	FIXED IND 4.7UH 6A 33.5 mOHM SMD	Bourns	SRP6540-4R7M	Fitted	
61	1	L11	CHOKE COMMON MODE WW 190 OHM SMD	Murata	DLW5BSN191SQ2L	Fitted	
62	2	L12, L13	FIXED IND 1UH 2.05A 45 mOHM SMD	Murata	LQH32PN1RONN0L	Fitted	
63	1	L15	FERRITE BEAD 220 OHM 2.0A 0805	Murata	BLM21PG221SN1D	Fitted	
64	1	Label1	Label, Product	AES	=PCBA_PN	Fitted	-
65	1	Label2	Label, Serial Number	AES	=SerialNumberFormat	Fitted	-
66	1	Label_ESD1	Label, ESD	AES	=ESD_Label_PN	Fitted	-
67	1	Label_NATX	Label, Non-ATX	AES	=Non-ATX_Label_PN	Fitted	-
68	1	P1	CONN PT USE W/SFP+ CAGE 30AU SMD	TE CONNECTIVITY / AMP	1888247-1	Fitted	
69	1	PCB1	BARE PCB Part Number	AES	=PCBDocumentName	Fitted	
70	10	Q1, Q2, Q3, Q4, Q7, Q14, Q15, Q16, Q17, Q18	MOSFET N-CH 50V 200MA SOT23-3	Diodes Incorporated	BSS138-7-F	Fitted	
71	1	Q5	MOSFET 2N-CH 20V 6.5A 8SOIC	Fairchild Semiconductor	FDS9926A	Fitted	
72	7	Q6, Q8, Q9, Q10, Q11, Q12, Q13	TRANS NPN 40V 200MA SOT23	ON Semiconductor	MMBT3904LT1G	Fitted	
73	23	R1, R31, R34, R37, R40, R45, R47, R49, R51, R53, R63, R65, R84, R88, R93, R103, R105, R120, R133, R161, R167, R172, R175	RES 0.0 OHM JUMP 0402 1/16W	Vishay Dale	CRCW04020000Z0ED	Fitted	
74	10	R2, R12, R13, R22, R57, R62, R64, R67, R75, R86	RES 240 OHM 0402 1% 1/16W	Panasonic	ERJ-2RKF2400X	Fitted	
75	5	R4, R10, R106, R107, R111	RES 100 OHM 0402 1% 1/16W	Panasonic Electronic Components	ERJ-2RKF1000X	Fitted	

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76	25	R6, R8, R9, R11, R19, R28, R29, R38, R42, R66, R85, R87, R90, R91, R92, R100, R101, R102, R104, R116, R124, R178, R179, R180, R181	RES 10.0K OHM 0402 1% 1/16W	Vishay Dale	CRCW040210K0FKED	Fitted	
77	3	R7, R58, R68	RES 4.99K OHM 0402 1% 1/16W	Vishay Dale	CRCW04024K99FKED	Fitted	
78	2	R14, R35	RES 715 OHM 0402 1% 1/16W	Yageo	RC0402FR-07715RL	Fitted	
79	15	R17, R32, R33, R36, R43, R46, R48, R50, R52, R96, R98, R99, R126, R127, R163	RES 4.75K OHM 0402 1% 1/16W	Bourns	CR0402-FX-4751GLF	Fitted	
80	23	R18, R69, R70, R71, R72, R73, R74, R78, R79, R80, R81, R82, R83, R94, R95, R109, R122, R129, R131, R164, R165, R166, R169	RES 1.00K OHM 0402 1% 1/16W	Vishay Dale	CRCW04021K00FKED	Fitted	
81	12	R20, R21, R24, R25, R182, R183, R184, R185, R187, R188, R189, R190	RES 4.70K OHM 0402 1% 1/16W	Vishay Dale	CRCW04024K70FKED	Fitted	
82	1	R27	RES 124K OHM 0402 1% 1/16W	Vishay Dale	CRCW0402124KFKED	Fitted	
83	1	R30	RES 44.2K OHM 0402 1% 1/16W	Vishay Dale	CRCW040244K2FKED	Fitted	
84	1	R44	RES 31.6K OHM 0402 1% 1/16W	Vishay Dale	CRCW040231K6FKED	Fitted	
85	1	R54	RES 16.9K OHM 0402 1% 1/16W	Vishay Dale	CRCW040216K9FKED	Fitted	
86	1	R55	RES 7.32K OHM 0402 1% 1/16W	Panasonic	ERJ-2RK7F321X	Fitted	
87	1	R61	RES 40.2 OHM 0402 1% 1/16W	VISHAY	CRCW040240R2FKED	Fitted	
88	1	R76	RES 100K OHM 0402 1% 1/16W	Vishay Dale	CRCW0402100KFKED	Fitted	
89	2	R89, R117	RES 0.0 OHM JUMP 1206 1/4W	Vishay Dale	CRCW1206000Z0EA	Fitted	
90	1	R112	RES 3.00K OHM 0402 1% 1/16W	Vishay Dale	CRCW04023K00FKED	Fitted	
91	1	R113	RES 4.64K OHM 0402 1% 1/16W	Vishay Dale	CRCW04024K64FKED	Fitted	
92	1	R114	RES 9.76K OHM 0402 1% 1/16W	Vishay Dale	CRCW04029K76FKED	Fitted	
93	2	R115, R177	RES 22.0K OHM 0402 1% 1/16W	Vishay Dale	CRCW040222K0FKED	Fitted	
94	2	R119, R125	RES 23.2K OHM 0402 0.1% 1/16W	TE Connectivity AMP Connectors	6-1879215-8	Fitted	
95	1	R121	RES 13.3K OHM 0402 1% 1/16W	Vishay Dale	CRCW040213K3FKED	Fitted	
96	1	R123	RES 46.4K OHM 0402 0.1% 1/16W	TE Connectivity AMP Connectors	9-1879215-7	Fitted	
97	1	R128	RES 887 OHM 0402 1% 1/16W	Vishay Dale	CRCW0402887RFKED	Fitted	
98	1	R130	RES 60.4K OHM 0402 1% 1/16W	Stackpole Electronics Inc	RMCF0402F760K4	Fitted	
99	1	R132	RES 64.9K OHM 0402 0.1% 1/16W	TE Connectivity AMP Connectors	1-1879216-2	Fitted	
100	1	R134	RES 47K OHM 0402 1% 1/16W	VISHAY	CRCW080547K0FKEA	Fitted	
101	16	R135, R136, R137, R138, R139, R140, R141, R142, R147, R148, R149, R150, R151, R152, R153, R154	RES 33 OHM 0402 1% 1/16W	Yageo	RC0402FR-0733RL	Fitted	
102	1	R143	RES 16.2K OHM 0402 0.1% 1/16W	TE Connectivity AMP Connectors	5-1879215-4	Fitted	
103	4	R144, R159, R170, R171	RES 2.00K OHM 0402 1% 1/16W	Vishay Dale	CRCW04022K00FKED	Fitted	
104	1	R146	RES 15.0K OHM 0402 1% 1/16W	Vishay Dale	CRCW040215K0FKED	Fitted	
105	1	R156	RES 6.65K OHM 0402 1% 1/16W	Vishay Dale	CRCW04026K65FKED	Fitted	
106	1	R157	RES 5.62K OHM 0402 1% 1/16W	Vishay Dale	CRCW04025K62FKED	Fitted	
107	2	R158, R173	RES 330 OHM 0402 1% 1/16W	Rohm Semiconductor	MCR01MRTF3300	Fitted	
108	8	SW1, SW2, SW3, SW4, SW5, SW6, SW8, SW9	SWITCH TACTILE SPST-NO 0.05A 24V	TE Connectivity Acoswitch Switches	1825910-7	Fitted	
109	1	SW7	SWITCH SLIDE SPDT 6A 120V	C&K Components	1101M2S3CQE2	Fitted	
110	1	U1	IC SGL USB-TO-UART BRIDGE 24QFN	Silicon Labs	CP2104-F03-GM	Fitted	
111	1	U2	IC BUFFER QUAD LV N-INV 14TSSOP	Fairchild Semiconductor	74LCX125MTC	Fitted	
112	1	U3	IC SWITCH SPDT SOT23-6	Analog Devices Inc	ADG719BRTZ-REEL	Fitted	
113	2	U4, U11	IC I2C BUS REP LVL-TRANSL 8VSSOP	Texas Instruments	TCA9517ADGKR	Fitted	
114	1	U5	IC REG BUCK ADJ 4A SYNC 24LFCSP	Analog Devices	ADP2384ACPZN-R7	Fitted	
115	1	U6	IC REG 5OUT BCK/LINEAR 48LFCSP	Analog Devices	ADP5052ACPZ-R7	Fitted	
116	1	U7	IC XMITTER HDMI 12BIT 100LQFP	Analog Devices Inc	ADV7511KSTZ-P	Fitted	
117	1	U8	IC SDIO PORT EXPANDER 24WQFN	Texas Instruments	TXS02612RTWR	Fitted	
118	1	U9	IC RTC CLK/CALENDAR I2C 8-SOIC	Maxim Integrated	DS3231MZ+	Fitted	
119	1	U10	IC USB PWR SW 1CH 0.5A SOT23-5	Texas Instruments	TPS2051CDBVR	Fitted	
120	1	U12	IC REG LDO 2.5V 0.15A TSOT23-5	Analog Devices Inc.	ADP121-AUJZ25R7	Fitted	
121	1	U13	UNIVERSAL FREQUENCY TRANSLATOR	IDT, Integrated Device Technology Inc	8T49N242-006NLGI	Fitted	
122	1	U14	IC EEPROM 2KBIT 400KHZ SOT23-6	Microchip Technology	24AA025T-I/OT	Fitted	
123	1	U15	IC EEPROM 2KBIT 400KHZ SOT23-6, With MAC ID	Microchip Technology	24AA025E48T-I/OT	Fitted	

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124	1	U16	IC EEPROM 2KBIT 100KHZ SOT23-3	Microchip Technology	11AA02E48T-I/TT	Fitted	
125	1	X1	CRYSTAL 38.88MHZ 12PF SMD	IDT, Integrated Device Technology Inc	603-38.88-7JA4I	Fitted	
126	0	C2	CAP CER 4.7UF 25V 10% X5R 0805	Kemet	C0805C475K3PACTU	Not Fitted	
127	0	J11, JP1	CONN HEADR BRKWAY .100 2POS STR, SINGLE ROW	TE CONNECTIVITY / AMP	5-146280-2	Not Fitted	
128	0	J12	CONN HEADR BRKWAY .100 4POS STR, DUAL ROW	Molex Inc	0010897081	Not Fitted	
129	0	J14	Header TH 100mil 6X2 PMOD Vertical	TE CONNECTIVITY / AMP	5-146252-6	Not Fitted	
130	0	L17	FERRITE BEAD 220 OHM 2.0A 0805	Murata	BLM21PG221SN1D	Not Fitted	
131	0	R3, R5, R15, R16, R39, R41, R56, R59, R60, R77, R108, R110, R145, R162, R174	RES 0.0 OHM JUMP 0402 1/16W	Vishay Dale	CRCW04020000Z0ED	Not Fitted	
132	0	R23	RES 1.00K OHM 0402 1% 1/16W	Vishay Dale	CRCW04021K00FKED	Not Fitted	
133	0	R26, R118	RES 0.0 OHM JUMP 1206 1/4W	Vishay Dale	CRCW12060000Z0EA	Not Fitted	
134	0	R97	RES 10.0K OHM 0402 1% 1/16W	Vishay Dale	CRCW040210K0FKED	Not Fitted	
135	0	R155	VARISTOR 30V 0603	Panasonic	EZJ-S1VC392	Not Fitted	
136	0	R160, R168	RES 2.00K OHM 0402 1% 1/16W	Vishay Dale	CRCW04022K00FKED	Not Fitted	
137	0	R176	RES 22.0K OHM 0402 1% 1/16W	Vishay Dale	CRCW040222K0FKED	Not Fitted	
138	0	R191, R192, R193	RES 4.70K OHM 0402 1% 1/16W	Vishay Dale	CRCW04024K70FKED	Not Fitted	
Approved				Notes			