

Component List

Source Data: pZed Carrier C.PrjPcb
 Project: PicoZed FMC Carrier Card Rev C (www.picozed.org)
 Variant: C02 BOM

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#	Quantity	Designator	Description	MFG Code	MFG	MFG PN	DNP
1	8	BMPR1, BMPR2, BMPR3, BMPR4, BMPR5, BMPR6, BMPR7, BMPR8	3M Bumper, 7.9mm	MMM	3M INTERCONNECT SOLUTIONS	SJ61A4	
2	1	BPH1	1 Port Solder SFP+ Cage Right Angle	WA2	TE CONNECTIVITY	2007194-1	
3	3	C89, C170, C171	CAP SM 100uF 16V 1210	TYC	TAIYO YUDEN	EMK325ABJ107MM-T	DNP
4	2	C1, C88	CAP SM 100uF 16V 1210	TYC	TAIYO YUDEN	EMK325ABJ107MM-T	
5	96	C2, C4, C5, C6, C11, C13, C14, C16, C17, C18, C19, C22, C23, C26, C27, C31, C32, C35, C38, C40, C42, C44, C46, C51, C53, C57, C60, C66, C67, C68, C69, C70, C72, C73, C74, C75, C76, C82, C83, C84, C85, C86, C87, C90, C91, C92, C94, C97, C98, C107, C110, C114, C116, C118, C121, C123, C126, C131, C136, C137, C138, C139, C140, C144, C146, C147, C148, C150, C151, C152, C153, C154, C155, C156, C157, C158, C159, C160, C161, C162, C163, C166, C169, C172, C175, C176, C179, C181, C182, C183, C184, C186, C188, C189, C190, C191	CAP SM 0.1uF 10V 10% X5R C0201	TDK	TDK	C0603X5R1C104K030BC	
6	8	C55, C101, C102, C111, C117, C124, C132, C133,	CAP SM 0.1uF 10V 10% X5R C0201	TDK	TDK	C0603X5R1C104K030BC	DNP
7	5	C3, C109, C115, C120, C125	CAP SM 22uF 10V 20% X5R C0805	TYC	TAIYO YUDEN	LMK212BJ226MG-T	
8	1	C180	CAP SM 22uF 10V 20% X5R C0805	TYC	TAIYO YUDEN	LMK212BJ226MG-T	DNP
9	4	C7, C8, C9, C10	CAP SM 0.1uF 50V 10% X7R C0603	KEM	KEMET	C0603C104K5RAC TU	
10	2	C12, C15	CAP 22UF 4V X5R 20% SMD 0603	TYC	TAIYO YUDEN	AMK107BJ226MA-T	
11	1	C20	Cap, 2.2uF, 16V, 0402	TYC	TAIYO YUDEN	EMK105ABJ225MV-F	
12	13	C21, C65, C71, C106, C112, C119, C127, C128, C130, C165, C168, C174, C178	CAP SM 4.7uF 16V 20% X5R C0805 85C	SEH	SAMSUNG ELECTRO-MECHANICS	CL21A475KOFNNNE	
13	1	C25	CAP SM 4.7uF 16V 20% X5R C0805 85C	SEH	SAMSUNG ELECTRO-MECHANICS	CL21A475KOFNNNE	DNP
14	1	C24	CAP SM 2.2uF 6.3V 10% X5R C0603	AVX	AVX CORPORATION	06036D225KAT2A	
15	2	C93, C96	CAP SM 22uF 16V 20% X5R C1210	TYC	TAIYO YUDEN	EMK325F226ZN-T	
16	1	C28	CAP SM 100uF 16V 20% Y5V C1210	TYC	TAIYO YUDEN	EMK325F226ZN-T	DNP
17	4	C29, C30, C33, C34	CAP SM 100uF 6.3V 20% X5R C1210	MUR	MURATA ELECTRONICS	GRM31CR60J107ME39L	DNP
18	8	C36, C45, C47, C49, C56, C59, C149, C185	CAP SM 10uF 10V 10% X5R C0805	MUR	MURATA ELECTRONICS	GRM21BR61A106KE19L	
19	13	C37, C39, C41, C43, C48, C50, C52, C54, C58, C61, C64, C145, C187	CAP SM 0.01uF 16V 10% X7R C0402	MUR	MURATA ELECTRONICS	GRM155R71C103KA01D	
20	2	C62, C63	CAP SM 1.0uF 6.3V 20% X5R C0402	PIC	PANASONIC	ECJ-0EB0J105M	
21	1	C77	CAP SM 10uF 6.3V 20% X5R C0603	AVX	AVX CORPORATION	06036D106MAT2A	
22	4	C78, C79, C80, C81	CAP SM 0.1uF 50V 10% X7R C0603	KEM	KEMET	C0603C104K5RAC TU	

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23	2	C95, C100	CAP SM 10nF C0603 50V	AVX	AVX CORPORATION	06035C103KAT2A	
24	3	C99, C104, C105	CAP CER 1UF 16V 10% X7R 0603	AVX	AVX CORPORATION	0603YC105KAT2A	
25	1	C103	CAP CER 6800PF 50V 10% X7R 0603	AVX	AVX CORPORATION	06035C682KAT2A	
26	1	C108	CAP SM 3300pF 10V 10% X5R C0402	MUR	MURATA ELECTRONICS	GRM1557U1A332JA01D	
27	1	C113	CAP SM 2700pF 10V 5% X5R C0402	MUR	MURATA ELECTRONICS	GRM1557U1A272JA01D	
28	2	C122, C129	CAP SM 1800pF 10V 5% X5R C0402	MUR	MURATA ELECTRONICS	GRM1557U1A182JA01D	
29	5	C134, C135, C141, C142, C143	CAP SM 10uF 6.3V 20% X5R C0603	AVX	AVX CORPORATION	06036D106MAT2A	
30	4	C164, C167, C173, C177	CAP SM 100uF 6.3V 20% X5R C1210	MUR	MURATA ELECTRONICS	GRM32EF50J107ZE20K	
31	1	CON1	FMC Carrier Card Low Pin Count Connector (10mm stacking height)	SAT	SAMTEC	ASP-134603-01	
32	2	CON2, J9	DIL-6	AMP	TE CONNECTIVITY	5-146257-3	
33	1	CON3	DIL-6	AMP	TE CONNECTIVITY	5-146257-3	DNP
34	3	D1, D17, D18	LED, Red, 631nm, Vf=2.0V, If=20mA, Iv=54mcd	LTP	LITE-ON	LTST-C191KRKT	
35	3	D2, D7, D13	Schottky Diodes Vf=0.35V@10mA Vr=30V	MOT-O	ON SEMICONDUCTOR	BAT54LT1G	
36	1	D3	Schottky Diodes Vf=0.35V@10mA Vr=30V	MOT-O	ON SEMICONDUCTOR	BAT54LT1G	DNP
37	2	D4, D5	ESD Protection array	BNS	BOURNS	CDSOT23-SR208	
38	1	D6	LED, Yel, 585nm, Vf=2.1V, If=10mA, Iv=6mcd	LTP	LITE-ON	LTST-C190YKT	
39	1	D8	Diode SM Schottky 30V DIO-S SOT-23	MOT-O	ON SEMICONDUCTOR	BAT54LT1G	
40	1	D9	LED, YELLOW 585nm SM 2.1V 10mA 6mcd LED-Y LED_LITE-LTST-C191TBKT-Y	LTP	LITE-ON	LTST-C190YKT	
41	3	D10, D11, D12	PTC SM 4 Channel ESD Protection 3A 6V SESD0802Q4UG-0020-090 SESD0802Q4UG	RCP	TE CONNECTIVITY	SESD0802Q4UG-0020-090	
42	2	D14, D19	LED, GREEN 525nm 3.2V 20mA 150mcd LED-G LED_LITE-LTST-C191TBKT-G	HPO	AVAGO	HSMC-C190	
43	1	D15	OVP SM Over Voltage Protection 1.3A 24V 5.6V POLY_ZEN PolyZen	RCP	TE CONNECTIVITY	ZEN056V130A24LS	
44	1	D21	LED, BLUE 468nm SM 3.4V 20mA 20mcd LED-B LED_LITE-LTST-C191TBKT-B	HPO	AVAGO	HSMN-C190	
45	2	D22, D23	Diode SM Barrier Rectifier Schottky 3A 30V DIO-S SMA	DII	DIODES, INC.	B330A-13-F	
46	6	FER1, FER2, FER3, FER4, FER5, FER6	FER_EMIFILTER.1 SM @ 2000mA @DC	MUR	MURATA ELECTRONICS	NFE61PT472C1H9L	
47	2	J1, J11	Bel Fuse - RJ45 Right Angle Jack 10/100/1000 Base-T AutoMDIX w/Mags and LEDs - Tab Up	BEL	BEL FUSE	L829-J1T-43	
48	1	J2	Secure Micro Digital Card Socket	MLX	MOLEX	502570-0893	
49	3	J3, J4, J7	Header TH 100mil 6X2 Right Angle PMOD Horizontal	SAT	SAMTEC	SSQ-106-02-T-D-RA	
50	2	J5, J6	CONN RCPT MICRO USB TYPE AB RA	FCI	FCI	10104111-0001LF	
51	2	J8, J12	Conn Shrouded Header HDR 14 POS 2mm Solder ST SMD Tube	MLX	MOLEX	0878321420	
52	1	J10	CONN SM HDMI HDMI-1903015 HDMI_1903015	WA2	TE CONNECTIVITY	5-1903015-1	
53	1	J13	2P 2.54mm Header	WA2	TE CONNECTIVITY	5-146280-2	DNP
54	1	J14	Xilinx 6P Power 12V 5A	MLX	MOLEX	0039301060	
55	6	J15, J16, J19, J20, J21, J22	CONN SMA JACK STR 50 OHM SMD	EFJ	CINCH CONNECTIVITY	142-0711-202	
56	2	JH1, JH2	Shunt Jumper 100mil	MMM	3M INTERCONNECT SOLUTIONS	969102-0000-DA	
57	1	JH3	Shunt Jumper 100mil	MMM	3M INTERCONNECT SOLUTIONS	969102-0000-DA	DNP
58	3	JP1, JP4, JP6	CONN HEADR BRKWAY .100 2POS STR	WA2	TE CONNECTIVITY	5-146280-2	
59	1	JP2	CONN HEADR BRKWAY .100 2POS STR	WA2	TE CONNECTIVITY	5-146280-2	DNP
60	1	JP3	Header TH 100mil 3x1 HDR3 HDR3-100	WA2	TE CONNECTIVITY	5-146280-3	
61	1	JT1	Jumper 3-pad 0402 RES-3padJPR R0402-DUAL_JMP - 0 Ohm at Pads 2-3	DAL	VISHAY DALE	CRCW04020000Z0ED	
62	3	JX1, JX2, JX3	Microheader 100 pos Plug .8mm	FCI	FCI	61083-101400LF	
63	2	L1, L2	Inductor, 1uH, 2300mA, 1210	MUR	MURATA ELECTRONICS	LQH32PN1R0NN0L	NEW PN
64	2	L3, L10	FB SM 220 ohm@100MHz 2000mA 0.25 0.045 ohm@DC L0805	MUR	MURATA ELECTRONICS	BLM21PG221SN1D	DNP
65	2	L11, L12	FB SM 220 ohm@100MHz 2000mA 0.25 0.045 ohm@DC L0805	MUR	MURATA ELECTRONICS	BLM21PG221SN1D	
66	7	L4, L5, L6, L7, L8, L9, L21	IND SM 10uH@2.52MHz 80mA 10% @DC L1008	PIC	PANASONIC	ELJ-FC100KF	
67	1	L13	Choke-ComMode SM @ 5A 0.25 .02ohm@DC	MUR	MURATA ELECTRONICS	DLW5BSN191SQ2L	
68	1	L14	FIXED IND 8.2uH 11A 15.5 mOHM	RCP	TE CONNECTIVITY	SRP1270-8R2M	
69	1	L15	1uH, 36mO, 3.2Apk	BNS	BOURNS	SRU6013-1R0Y	
70	1	L16	1.5uH, 40mO, 3.0Apk	BNS	BOURNS	SRU6013-1R5Y	
71	1	L17	2.2uH, 21mO, 3.2Apk	BNS	BOURNS	SRU5028-2R2Y	
72	1	L18	4.7uH, 32mO, 2.2Apk	BNS	BOURNS	SRU5028-4R7Y	

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73	2	L19, L20	Ind Chip Bead 220Ohm 25% 100MHz Ferrite 2A 0805 Paper T/R	MUR	MURATA ELECTRONICS	BLM21PG221SN1D	
74	1	P1	PCIe x1 Connector	N/A	NONE		
75	1	P2	SFP Host Connector	WA2	TE CONNECTIVITY	1367073-1	
76	1	PCB1	PCB	ADX	AVNET DESIGN SERVICES	PZCC-FMC-PCB-C	
77	14	Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q11, Q12, Q13, Q17, Q18	MOSFET N-CH 50V 200MA SOT-23	MOT-O	ON SEMICONDUCTOR	BSS138LT1G	
78	4	Q10, Q15, Q16, Q19	TRANSISTOR GP NPN AMP SOT-23	FSC	FAIRCHILD	MMBT3904	
79	1	Q14	DUAL N CH MOSFET SO8, 6.5A	FSC	FAIRCHILD	FDS9926A	
80	7	R1, R4, R20, R79, R85, R162, R168	RES SM 4.99K 62mW 0.01 R0402	DAL	VISHAY DALE	CRCW04024K99FKED	
81	2	R101, R102	RES SM 4.99K 62mW 0.01 R0402	DAL	VISHAY DALE	CRCW04024K99FKED	DNP
82	5	R2, R38, R84, R180, R181	RES SM 40.2 62mW 0.01 R0402	DAL	VISHAY DALE	CRCW040240R2FKED	
83	26	R3, R5, R6, R8, R9, R18, R19, R21, R46, R69, R70, R78, R80, R82, R117, R123, R126, R127, R136, R141, R147, R153, R154, R172, R174, R177	RES SM 0 ohm 62mW J R0402	DAL	VISHAY DALE	CRCW04020000Z0ED	
84	3	R10, R11, R17	RES SM 0 ohm 62mW J R0402	DAL	VISHAY DALE	CRCW04020000Z0ED	DNP
85	19	R7, R12, R13, R15, R16, R98, R110, R114, R116, R135, R151, R152, R165, R166, R26, R27, R144, R146, R164	RES 10K OHM 1/10W 5% 0603 SMD	DAL	VISHAY DALE	CRCW060310K0JNEA	
86	10	R14, R23, R24, R25, R159, R160, R169, R170, R171, R175	RES SM 100 ohm 62mW J R0402	BNS	BOURNS	CR0402-JW-101GLF	
87	9	R22, R49, R74, R77, R89, R92, R93, R96, R178	RES SM 240 62mW 0.01 R0402	DAL	VISHAY DALE	CRCW0402240RFKED	
88	5	R28, R29, R30, R31, R68	RES SM 4.7k 62mW 0.05 R0402	DAL	VISHAY DALE	CRCW04024K70JNED	
89	5	R32, R33, R34, R83, R173	RES 10K OHM 1/10W 5% 0603 SMD	DAL	VISHAY DALE	CRCW060310K0JNEA	DNP
90	2	R35, R36	RES SM 330 R0402	DAL	VISHAY DALE	CRCW0603330R0JNEA	
91	1	R37	RES SM 27.4K 62mW 0.01 R0402	DAL	VISHAY DALE	CRCW040227K4FKED	
92	1	R39	RES SM 33 62mW 0.05 R0402	DAL	VISHAY DALE	CRCW040233R0JNED	DNP
93	4	R40, R41, R133, R163	4.87K resistor, 1%, 0402	DAL	VISHAY DALE	CRCW04024K87FKED	
94	5	R42, R43, R71, R148, R149	RES SM 2.0K 62mW 0.01 R0402	DAL	VISHAY DALE	CRCW04022K00FKED	
95	2	R44, R45	RES SM 49.9 62mW 0.01 R0402	DAL	VISHAY DALE	CRCW040249R9FKED	
96	2	R47, R56	RES SM 10K 62mW 0.01 R0402	DAL	VISHAY DALE	CRCW040210K0FKED	
97	24	R48, R73, R75, R76, R81, R86, R87, R88, R91, R94, R95, R97, R99, R100, R103, R104, R108, R109, R112, R158, R161, R167, R176, R179	RES SM 1K 62mW 0.01 R0402	DAL	VISHAY DALE	CRCW04021K00FKED	
98	16	R50, R51, R52, R53, R54, R55, R57, R58, R59, R60, R61, R62, R63, R64, R65, R66	RES SM 33 62mW 0.05 R0402	DAL	VISHAY DALE	CRCW040233R0JNED	
99	1	R67	Varistor Varistor RES_VARISTOR.1 R0603	PIC	PANASONIC	EZJ-S1VC392	
100	1	R72	RES SM 887 62mW 0.01 R0402	DAL	VISHAY DALE	CRCW0402887RFKED	
101	1	R90	RES SMD 0.0 OHM JUMPER 1/4W 1206	DAL	VISHAY DALE	CRCW12060000Z0EA	
102	1	R105	RES SMD 0.0 OHM JUMPER 1/4W 1206	DAL	VISHAY DALE	CRCW12060000Z0EA	DNP
103	1	R157	RES SMD 0.0 OHM JUMPER 1/4W 1206	DAL	VISHAY DALE	CRCW12060000Z0EA	
104	3	R106, R107, R150	Res Thick Film 0402 4.75K Ohm 1% 1/16W ±100ppm/°C Molded SMD SMD Paper T/R	DAL	VISHAY DALE	CRCW04024K75FKED	
105	8	R118, R124, R130, R137, R145, R150, R155, R156	Res Thick Film 0402 4.75K Ohm 1% 1/16W ±100ppm/°C Molded SMD SMD Paper T/R	DAL	VISHAY DALE	CRCW04024K75FKED	DNP
106	1	R111	Resistor 2.0 0603 1%	DAL	VISHAY DALE	CRCW06032R00FKEA	
107	1	R113	Resistor 73.2K 0603 0.1%	DAL	VISHAY DALE	TNPW060373K2BEEN	
108	1	R115	Resistor 3.57K 0603 1%	DAL	VISHAY DALE	CRCW06033K57FKEA	

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109	1	R119	31.6K resistor, 1%, 0402	DAL	VISHAY DALE	CRCW040231K6FKED	
110	1	R120	64.9K resistor, 1%, 0402	DAL	VISHAY DALE	CRCW040264K9FKED	
111	1	R121	16.2K resistor, 1%, 0402	DAL	VISHAY DALE	CRCW040216K2FKED	
112	1	R122	4.42K resistor, 1%, 0402	DAL	VISHAY DALE	CRCW04024K42FKED	
113	1	R125	2.43K resistor, 1%, 0402	DAL	VISHAY DALE	CRCW04022K43FKED	
114	2	R128, R131	13.3K resistor, 1%, 0402	DAL	VISHAY DALE	CRCW040213K3FKED	
115	1	R129	41.2K resistor, 1%, 0402	DAL	VISHAY DALE	CRCW040241K2FKED	
116	1	R132	16.9k resistor, 1%, 0402	DAL	VISHAY DALE	CRCW040216K9FKED	
117	1	R134	7.32k resistor, 1%, 0402	DAL	VISHAY DALE	CRCW04027K32FKED	
118	1	R138	Resistor 46.4K 0402 1%	DAL	VISHAY DALE	CRCW040246K4FKED	
119	2	R139, R142	Resistor 23.2K 0402 1%	DAL	VISHAY DALE	CRCW040223K2FKED	
120	1	R140	6.81K resistor, 1%, 0402	DAL	VISHAY DALE	CRCW04026K81FKED	
121	1	R143	60.4K resistor, 1%, 0402	DAL	VISHAY DALE	CRCW040260K4FKED	
122	1	REG1	DC-DC 4A /w Internal Power Switch	MXM	MAXIM INTEGRATED PRODUCTS	MAX15066EWE+	
123	4	RP1, RP3, RP5, RP6	Res Thick Film Array 4.7K Ohm 5% ISOL Molded 8-Pin 1206 Concave SMD Paper T/R	BNS	BOURNS	CAT16-47ZJ4LF	
124	3	SH1, SH3, SH4	SHUNT,ECON,PHBR 15AU,BLACK L/P	WA2	TE CONNECTIVITY	1-382811-6	
125	5	SW1, SW2, SW3, SW5, SW6	Switch Momentary SM PB-SPST Push Button NO 1ch 16VDC 100mA SW-PB-SPST SW_BOU-7914	BNS	BOURNS	7914J-1-000E	
126	1	SW7	Switch - Single Pole 6A@28VDC	CKS	C&K COMPONENTS	1101M2S3CQE2	
127	1	SW8	4-position SPST DIP switch (SMT)	CKS	C&K COMPONENTS	TDA04H0SB1R	
128	1	SW9	Switch DIP OFF ON SPST 2 Recessed Slide 0.025A 24VDC Gull Wing 1000Cycle 1.27mm SMD Tube	CKS	C&K COMPONENTS	TDA02H0SB1	
129	1	SW10	Switch DIP OFF ON SPST 4 Recessed Slide 0.025A 24VDC Gull Wing 1000Cycle 1.27mm SMD T/R	CKS	C&K COMPONENTS	TDA04H0SB1R	
130	8	TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8	Test Point 24 mil pad, round, 10 mil hole, small symbol TPS TP24TH	N/A	NONE	None	DNP
131	1	U1	IC SDIO PORT EXPANDER 24WQFN	TIS	TEXAS INSTRUMENTS	TXS02612RTWR	
132	3	U2, U3, U4	74CBTLV3245 8b bus switch	TIS	TEXAS INSTRUMENTS	SN74CBTLV3245APWR	
133	1	U5	USB UART Bridge	SLL	SILICON LABS	CP2104-F03-GM	
134	1	U6	I2C Level Translator	TIS	TEXAS INSTRUMENTS	TCA9517ADGKR	
135	1	U7	Encoder HDMI ICS_ADV7511.1	ANA	ANALOG DEVICES	ADV7511KSTZ-P	
136	1	U8	Osc SM 12MHz 1.8-3.3V 7 X 5mm OSC-4	DSE	MICREL	DSC1001AE2-012.0000 T	DNP
137	1	U9	High Integrated 10/100/1000 Ultra Gigabit Ethernet Transceiver	G22	MARVELL	88E1512-A0-NNP2C000	
138	1	U10	OSC, SM, ABRACON, 1.8V, 25.000MHz, 50ppm, 2.5x2.0mm	ABR	ABRACON	ASDMB-25.000MHZ-LC-T	
139	1	U11	5-CH Power w/ Quad Buck Reg and 200mA LDO	ANA	ANALOG DEVICES	ADP5052ACPZ-R7	
140	1	U12	PCIe SYNTH, Dual Out, LVPECL/LVDS/LVCMOS, 625MHz, 3.3V	TIS	TEXAS INSTRUMENTS	CDCM61002RHBR	
141	1	U13	PCI Express Jitter Attenuator, TSSOP-20	IDT	INTEGRATED DEVICE TECHNOLOGY	874003BG-05LF	
142	1	U14	IC CLK MULTIPLX 2:1 2.5GHZ 32MLF		MICREL	SY89853UMG	
143	1	U15	Bus Switch, Logic, SOT23-5, 5 Ohms, 5V	FSC	FAIRCHILD	NC7SZ66M5X	
144	1	U16	AND SM LVCMOS Single	TIS	TEXAS INSTRUMENTS	SN74LVC1G08DCKT	
145	2	U17, U18	Logic Voltage Translator, 8 bits	TIS	TEXAS INSTRUMENTS	TXS0108EPWR	
146	1	Y1	Silicon Oscillator 25MHz 15pF ±50ppm 6-Pin QFN EP T/R	FOX	INTEGRATED DEVICE TECHNOLOGY	FXO-HC335-25	
Approved				Notes			
				1. Added 2 Rubber Bumpers to the assembly-MS			