



# PIC32MZ EMBEDDED CONNECTIVITY WITH FLOATING POINT UNIT (EF)

## PIC32MZ Embedded Connectivity with Floating Point Unit (EF) 100-pin to 100-pin Plug-In Module (PIM) Information Sheet

The PIC32MZ Embedded Connectivity with Floating Point Unit (EF) PIM is designed to demonstrate the capabilities of the PIC32MZ Embedded Connectivity with Floating Point Unit (EF) family of devices using development boards, such as the Explorer 16 Development Board, which supports 100-pin PIM interfaces.

The PIC32MZ Embedded Connectivity with Floating Point Unit (EF) is a family of high performance 32-bit microcontrollers.

Table 1 shows the mapping between the 100-pin PIM interface board functions and a 100-pin device.

Figure 1 through Figure 2 provide schematics for the example device and the PIM.

**TABLE 1: PIC32MZ EMBEDDED CONNECTIVITY WITH FLOATING POINT UNIT (EF) FAMILY 100-PIN DEVICE TO 100-PIN PIM**

Device Pin #	PIC32MZ EF Functional Description	PIM Pin #
1	AN23/AERXERR/RG15	79
2	EBIA5/AN34/PMA5/RA5	10
3	EBID5/AN17/RPE5/PMD5/RE5	3
4	EBID6/AN16/PMD6/RE6	4
5	EBID7/AN15/PMD7/RE7	5
6	EBIA6/AN22/RPC1/PMA6/RC1	29
7	EBIA12/AN21/RPC2/PMA12/RC2	35
8	EBIWE/AN20/RPC3/PMWR/RC3	81
9	EBIOE/AN19/RPC4/PMRD/RC4	82
10	AN14/C1IND/ECOL/RPG6/SCK2/RG6	55
11	EBIA4/AN13/C1INC/ECRS/RPG7/SDA4/PMA4/RG7	11
12	EBIA3/AN12/C2IND/ERXDV/ECRS/SDV/AECRS/SDV/RPG8/SCL4/PMA3/RG8	12
13	Vss	15, 36, 45, 65, 75
14	Vdd	02, 16, 37, 46, 62
15	MCLR	13
16	EBIA2/AN11/C2INC/ERXCLK/EREFCLK/RPG9/PMA2/RG9	14
17	TMS/EBIA16/AN24/RA0	17
18	AN25/AERXD0/RPE8/RE8	18
19	AN26/AERXD1/RPE9/RE9	19
20	AN45/C1INA/RPB5/RB5	20
21	AN4/C1INB/RB4	21
22	AN3/C2INA/RPB3/RB3	22
23	AN2/C2INB/RPB2/RB2	23
24	PGEC1/AN1/RPB1/RB1	24
25	PGED1/AN0/RPB0/RB0	25
26	PGEC2/AN46/RPB6/RB6	26
27	PGED2/AN47/RPB7/RB7	27

Device Pin #	PIC32MZ EF Functional Description	PIM Pin #
28	VREF-/CVREF-/AN27/AERXD2/RA9	32
29	VREF+/CVREF+/AN28/AERXD3/RA10	33
30	AVDD	30
31	AVss	31
32	EBIA10/AN48/RPB8/PMA10/RB8	42
33	EBIA7/AN49/RPB9/PMA7/RB9	28
34	EBIA13/CVREFOUT/AN5/RPB10/PMA13/RB10	34
35	AN6/ERXERR/AETXERR/RB11	76
36	Vss	15, 36, 45, 65, 75
37	Vdd	02, 16, 37, 46, 62
38	TCK/EBIA19/AN29/RA1	38
39	TDI/EBIA18/AN30/RPF13/SCK5/RF13	60
40	TDO/EBIA17/AN31/RPF12/RF12	61
41	EBIA11/AN7/ERXD0/AECRS/PMA11/RB12	41
42	AN8/ERXD1/AECOL/RB13	77
43	EBIA1/AN9/ERXD2/AETXD3/RPB14/SCK3/PMA1/RB14	43
44	EBIA0/AN10/ERXD3/AETXD2/RPB15/OCFB/PMA0/RB15	44
45	Vss	15, 36, 45, 65, 75
46	Vdd	02, 16, 37, 46, 62
47	AN32/AETXD0/RPD14/RD14	69
48	AN33/AETXD1/RPD15/SCK6/RD15	9
49	OSCI/CLKI/RC12	NC
50	OSCO/CLKO/RC15	NC
51	VBUS	1
52	VUSB3v3	NC
53	Vss	15, 36, 45, 65, 75
54	D-	89

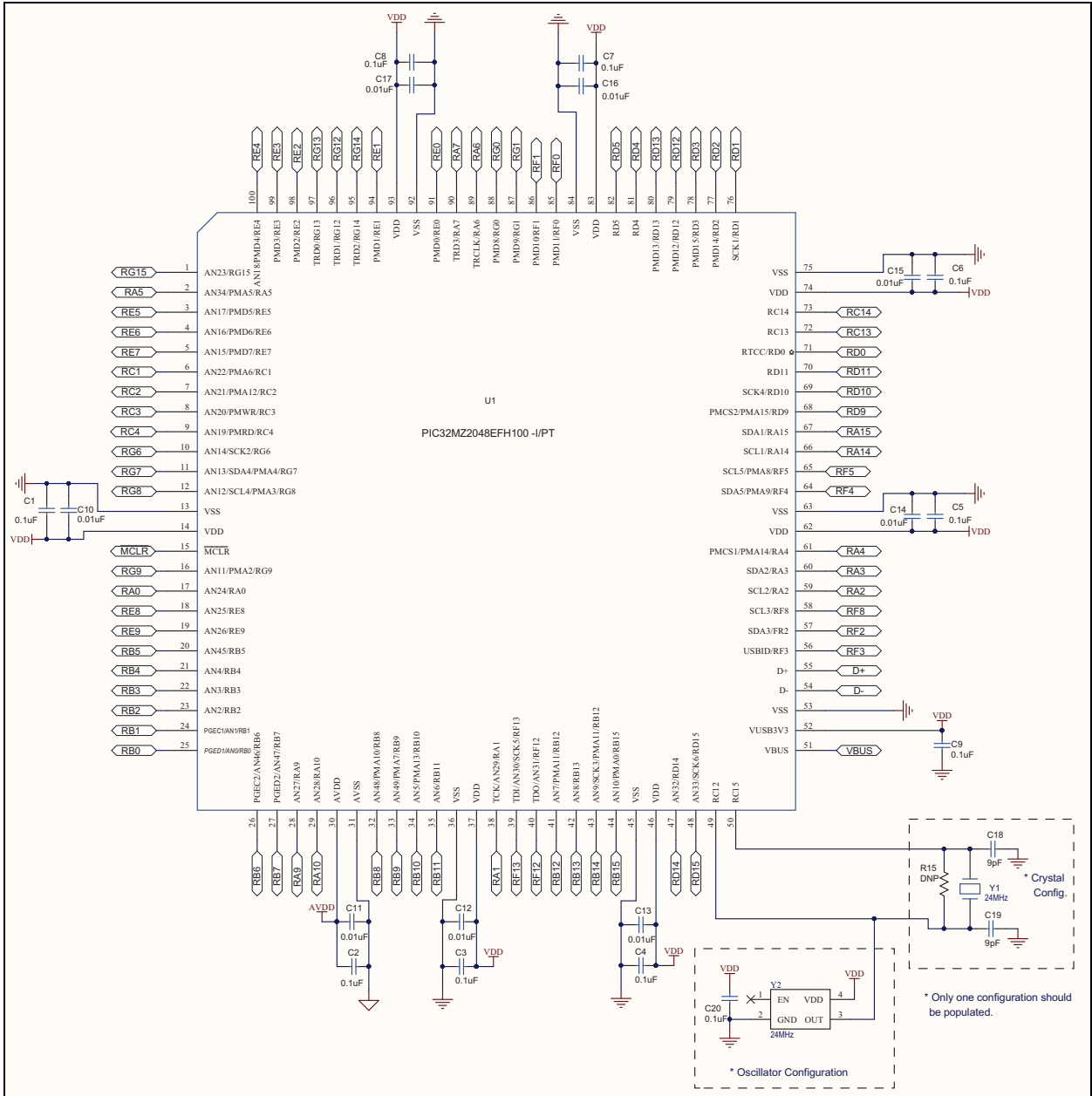
# PIC32MZ EMBEDDED CONNECTIVITY WITH FLOATING POINT UNIT (EF)

**TABLE 1: PIC32MZ EMBEDDED CONNECTIVITY WITH FLOATING POINT UNIT (EF) FAMILY 100-PIN DEVICE TO 100-PIN PIM (CONTINUED)**

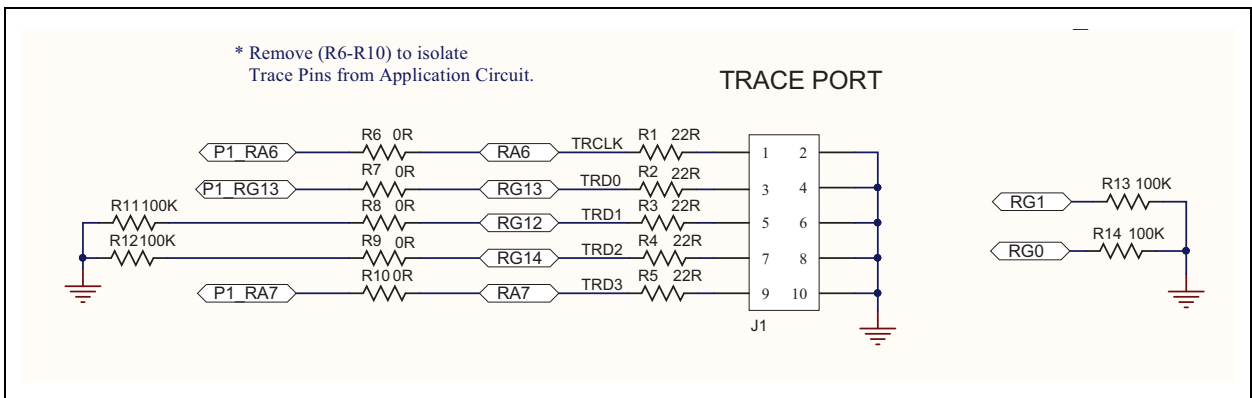
Device Pin #	PIC32MZ EF Functional Description	PIM Pin #	Device Pin #	PIC32MZ EF Functional Description	PIM Pin #
55	D+	90	78	EBID15/ETXCLK/RPD3/PMD15/RD3	67
56	USBID/RPF3/RF3	95	79	EBID12/ETXD2/RPD12/PMD12/RD12	8
57	EBIRDY3/RPF2/SDA3/RF2	52	80	EBID13/ETXD3/PMD13/RD13	84
58	EBIRDY2/RPF8/SCL3/RF8	80	81	SQICS0/RPD4/RD4	40
59	EBICS0/SCL2/RA2	58	82	SQICS1/RPD5/RD5	39
60	EBIRDY1/SDA2/RA3	59	83	VDD	02, 16, 37, 46, 62
61	EBIA14/PMCS1/PMA14/RA4	71	84	VSS	15, 36, 45, 65, 75
62	VDD	02, 16, 37, 46, 62	85	EBID11/ETXD1/RPF0/PMD11/RF0	87
63	VSS	15, 36, 45, 65, 75	86	EBID10/ETXD0/RPF1/PMD10/RF1	88
64	EBIA9/RPF4/SDA5/PMA9/RF4	49	87	EBID9/ETXERR/RPG1/PMD9/RG1	78, 89
65	EBIA8/RPF5/SCL5/PMA8/RF5	50	88	EBID8/RPG0/PMD8/RG0	66, 90
66	AETXCLK/RPA14/SCL1/RA14	57	89	TRCLK/SQICLK/RA6	91
67	AETXEN/RPA15/SDA1/RA15	56	90	TRD3/SQID3/RA7	92
68	EBIA15/RPD9/PMCS2/PMA15/RD9	70	91	EBID0/PMD0/RE0	93
69	RPD10/SCK4/RD10	54	92	VSS	15, 36, 45, 65, 75
70	EMDC/AEMDC/RPD11/RD11	53	93	VDD	02, 16, 37, 46, 62
71	EMDIO/AEMDIO/RPD0/RTCC/INT0/RD0	72	94	EBID1/PMD1/RE1	94
72	SOSCI/RPC13/RC13	73	95	TRD2/SQID2/RG14	97
73	SOSCO/RPC14/T1CK/RC14	74	96	TRD1/SQID1/RG12	96
74	VDD	02, 16, 37, 46, 62	97	TRD0/SQID0/RG13	68
75	VSS	15, 36, 45, 65, 75	98	EBID2/PMD2/RE2	98
76	RPD1/SCK1/RD1	51	99	EBID3/RPE3/PMD3/RE3	99
77	EBID14/ETXEN/RPD2/PMD14/RD2	6	100	EBID4/AN18/PMD4/RE4	100

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**FIGURE 1: 100-PIN DEVICE SCHEMATIC**



**FIGURE 2: TRACE PORT SCHEMATIC**





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