

## PIC32MX795F512L 100-pin to 100-pin TQFP CAN-USB Plug-in Module (PIM) Information Sheet

### OVERVIEW

The PIC32MX795F512L CAN-USB PIM is designed to demonstrate the capabilities of the PIC32MX795F512L family of devices using development boards such as the Explorer 16 Development Board, which supports 100-pin PIM interfaces.

The PIC32MX795F512L is a high performance 32-bit Microcontroller in a 100-pin TQFP package.

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

**TABLE 1: 100-PIN TO 100-PIN PIM**

Device Pin #	PIC32MX795F512L Functional Description	PIM Pin #
1	AERXERR/RG15	69
2	VDD	2
3	PMD5/RE5	3
4	PMD6/RE6	4
5	PMD7/RE7	5
6	T2CK/RC1	6
7	T3CK/AC2TX/RC2	7
8	T4CK/AC2RX/RC3	8
9	T5CK/SDI1/RC4	9, 54
10	ECOL/SCK2/U6TX/U3RTS/PMA5/CN8/RG6	10
11	ECRS/SDA4/SDI2/U3RX/PMA4/CN9/RG7	11
12	ERXDVI/AERXDVI/ECRSDVI/AECRSDVI/SCL4/SDO2/U3TX/PMA3/CN10/RG8	12
13	MCLR	13
14	ERXCLK/AERXCLK/EREFCLK/AEREFCLK/SS2/U6RX/U3CTS/PMA2/CN11/RG9	14
15	Vss	15
16	VDD	16
17	TMS/RA0	17
18	AERXD0/INT1/RE8	18, 66
19	AERXD1/INT2/RE9	19
20	AN5/C1IN+/VBUSON/CN7/RB5	96
21	AN4/C1IN-/CN6/RB4	21
22	AN3/C2IN+/CN5/RB3	22
23	AN2/C2IN-/CN4/RB2	20
24	PGEC1/AN1/CN3/RB1	24
25	PGED1/AN0/CN2/RB0	25
26	PGEC2/AN6/OCFA/RB6	26
27	PGED2/AN7/RB7	27
28	VREF-/CVREF-/AERXD2/PMA7/RA9	28
29	VREF+/CVREF+/AERXD3/PMA6/RA10	29
30	AVDD	30
31	AVss	31
32	AN8/C1OUT/RB8	32
33	AN9/C2OUT/RB9	33
34	AN10/CVREFOUT/PMA13/RB10	34

Device Pin #	PIC32MX795F512L Functional Description	PIM Pin #
35	AN11/ERXERR/AETXERR/PMA12/RB11	35
36	Vss	36
37	VDD	37
38	TCK/RA1	38
39	AC1TX/SCK4/U5TX/U2RTS/RF13	39
40	AC1RX/SS4/U5RX/U2CTS/RF12	40
41	AN12/ERXD0/AECRS/PMA11/RB12	41
42	AN13/ERXD1/AECOL/PMA10/RB13	42
43	AN14/ERXD2/AETXD3/PMALH/PMA1/RB14	43
44	AN15/ERXD3/AETXD2/OCFB/PMALL/PMA0/CN12/RB15	44
45	Vss	45
46	Vss	46
47	AETXD0/SS3/U4RX/U1CTS/CN20/RD14	47
48	AETXD1/SCK3/U4TX/U1RTS/CN21/RD15	48
49	SDA5/SDI4/U2RX/PMA9/CN17/RF4	49
50	SCL5/SDO4/U2TX/PMA8/CN18/RF5	50
51	USBID/RF3	95
52	SDA3/SDI3/U1RX/RF2	52
53	SCL3/SDO3/U1TX/RF8	51
54	VBUS	1
55	VUSB	62
56	D-/RG3	89
57	D+/RG2	90
58	SCL2/RA2	58
59	SDA2/RA3	59
60	TDI/RA4	60
61	TDO/RA5	61
62	VDD	62
63	OSC1/CLKI/RC12	63
64	OSC2/CLKO/RC15	64
65	Vss	65
66	AETXCLK/SCL1/INT3/RA14	57
67	AETXEN/SDA1/INT4/RA15	56, 67
68	RTCC/EMDIO/AEMDIO/IC1/RD8	68

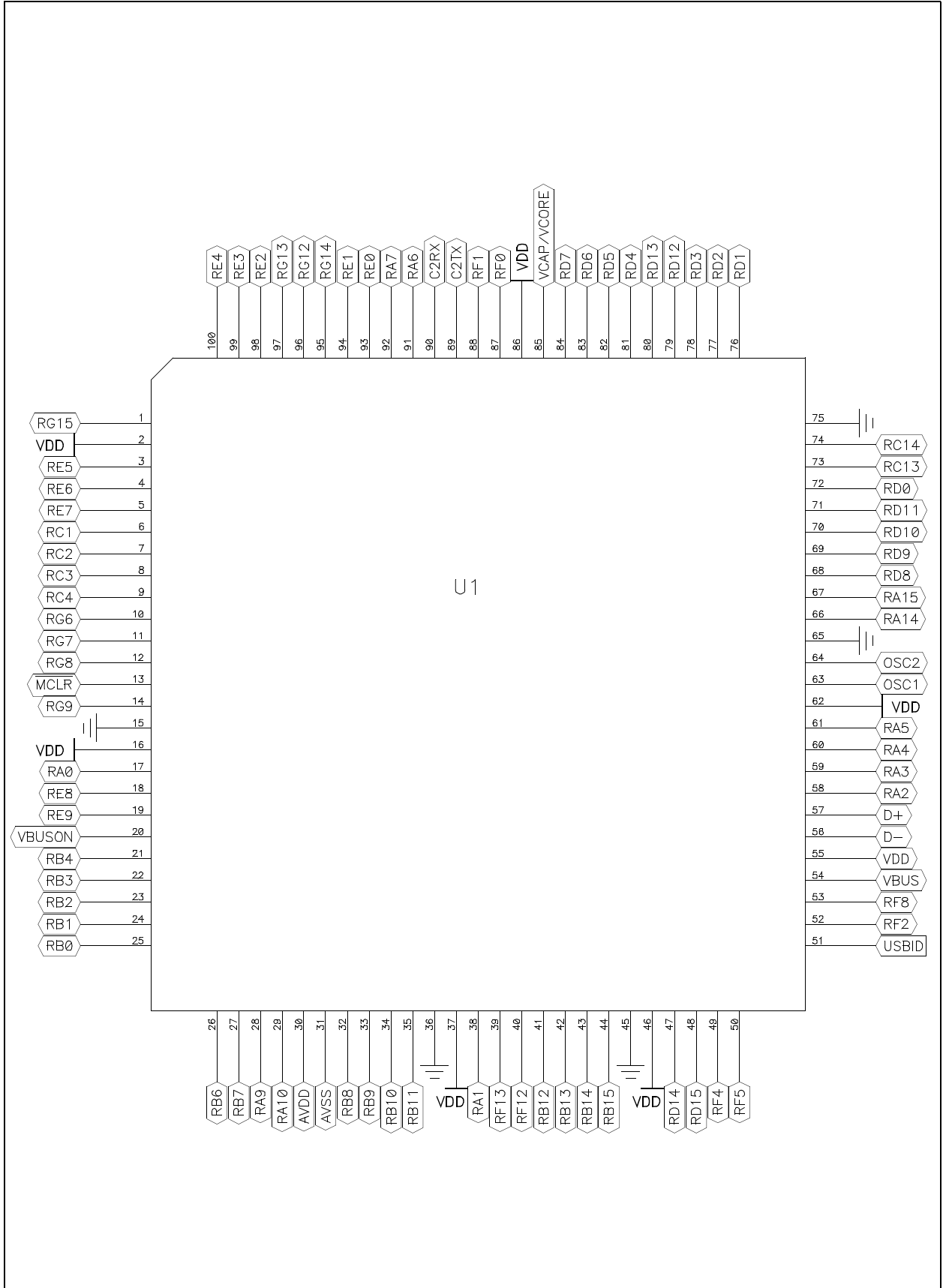
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**TABLE 1: 100-PIN TO 100-PIN PIM (CONTINUED)**

Device Pin #	PIC32MX795F512L Functional Description	PIM Pin #
69	SS1/IC2/RD9	23
70	SCK1/IC3/PMCS2/PMA15/RD10	55, 70
71	EMDC/AEMDC/IC4/PMCS1/PMA14/RD11	71
72	SDO1/OC1/INT0/RD0	53, 72
73	SOSCI/CN1/RC13	73
74	SOSCO/T1CK/CN0/RC14	74
75	Vss	75
76	OC2/RD1	76
77	OC3/RD2	77
78	OC4/RD3	78
79	ETXD2/IC5/PMD12/RD12	79
80	ETXD3/PMD13/CN19/RD13	80
81	OC5/PMWR/CN13/RD4	81
82	PMRD/CN14/RD5	82
83	ETXEN/PMD14/CN15/RD6	83
84	ETXCLK/PMD15/CN16/RD7	84

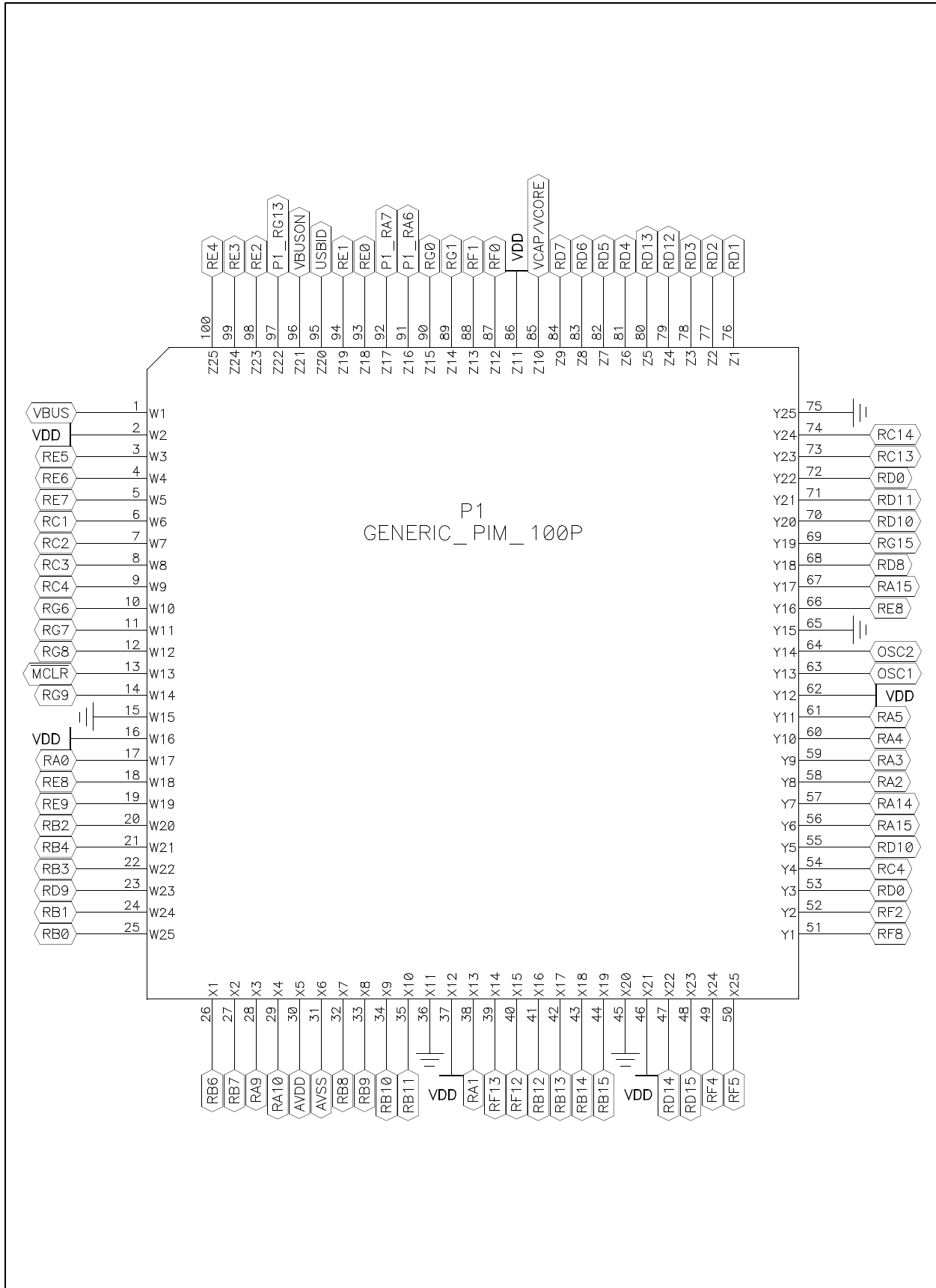
Device Pin #	PIC32MX795F512L Functional Description	PIM Pin #
85	VCAP/VCORE	85
86	VDD	86
87	C1RX/ETXD1/PMD11/RF0	87
88	C1TX/ETXD0/PMD10/RF1	88
89	C2TX/ETXERR/PMD9/RG1	89
90	C2RX/PMD8/RG0	90
91	TRCLK/RA6	91
92	TRD3/RA7	92
93	PMD0/RE0	93
94	PMD1/RE1	94
95	TRD2/RG14	NC
96	TRD1/RG12	NC
97	TRD0/RG13	97
98	PMD2/RE2	98
99	PMD3/RE3	99
100	PMD4/RE4	100

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

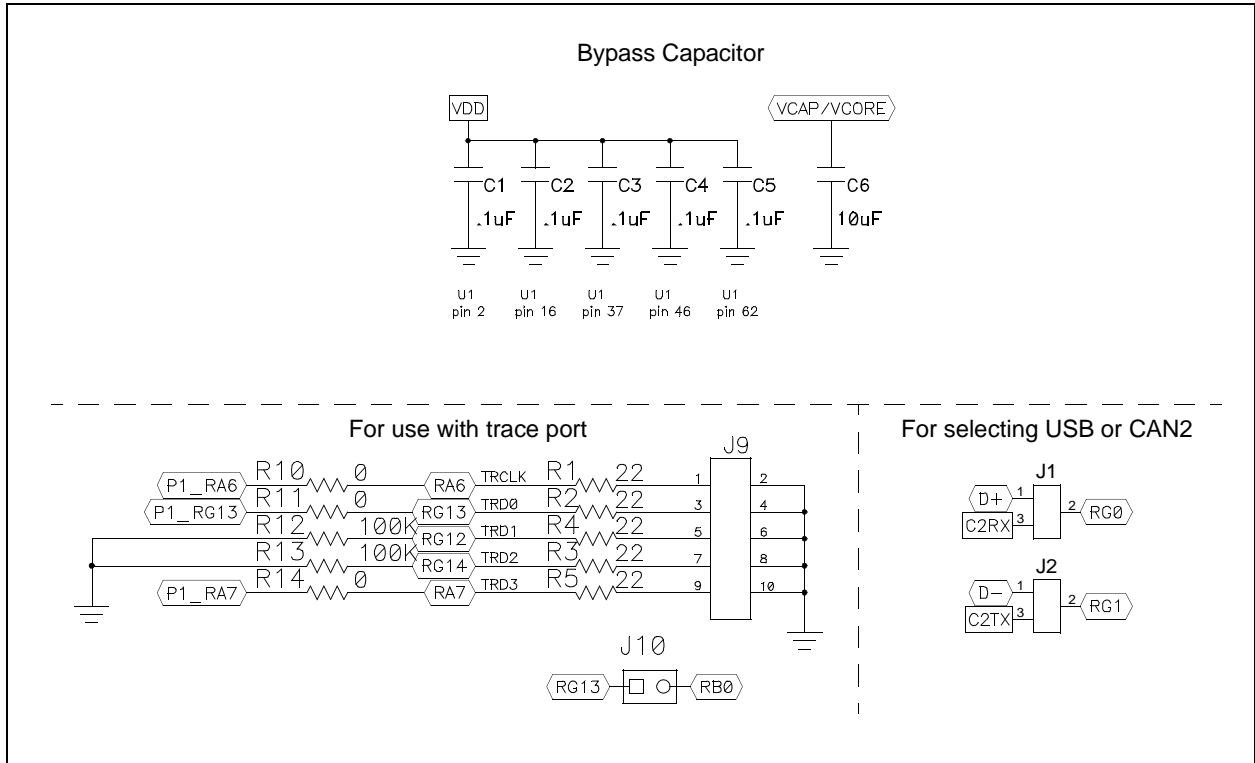


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FIGURE 2: 100-PIN PIM SOCKET SCHEMATIC



**FIGURE 3: BYPASS CAPACITOR, TRACE PORT, AND USB/CAN2 SELECTION SCHEMATICS**



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NOTES:

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