

## 3.7 Pinout Tables

The following tables give the relationship between the chipKIT digital pin numbers, the connector pin numbers, and the microcontroller pin numbers. Columns labeled chipKIT pin # refer to the digital pin number. This is the value that is passed to the pinMode(), digitalRead(), digitalWrite(), and other functions to refer to the pin.

For most pins, this pin number will agree with the pin number labeled on the board. For the pins whose function can be switched using jumpers, the pin number labeled on the board is correct when the jumper is in the 'normal' position.

For example, the normal position for JP4 is the RD4 position. The digital pin number for the microcontroller signal RD4 is 10. With JP4 in the RD4 position, digital pin 10 is connected to the pin labeled 10 on the board. The alternate position for JP4 is the RG9 position. The digital pin number for the microcontroller signal RG9 is 44. With JP4 in the RG9 position, digital pin 44 is connected to the pin labeled 10 on the board, and digital pin 10 is not connected.

The pin labeled 10 on the board is connected to connector J5 pin 5. This is shown as J5-05 in the following tables. In the table found in section 3.7.2 below, J5-05 is shown as being either chipKIT pin # 10 or 44. J5-04 is connected to chipKIT pin # 10 when JP4 is in the RD4 position and is connected to chipKIT pin # 44 when in the RG9 position.

### 3.7.1 Pinout Table by Logical Pin Number

chipKIT Pin #	Connector Pin #	PIC32 Pin #	PIC32 Signal	Notes
0	J6-01	34	U1RX/SDI1/RF2	
1	J6-03	33	U1TX/SDO1/RF3	
2	J6-05	42	IC1/RTCC/INT1/RD8	
3	J6-07	46	OC1/RD0	
4	J6-09	59	RF1	
5	J6-11	49	OC2/RD1	
6	J6-13	50	OC3/RD2	
7	J6-15	43	IC2/U1CTS/INT2/RD9	
8	J5-01	44	IC3/PMCS2/PMA15/INT3/RD10	
9	J5-03	51	OC4/RD3	
10	J5-05	52	PMWR/OC5/IC5/CN13/RD4	selected by JP4, also on J8-6
11	J5-07	6	SDO2/PMA3/CN10/RG8	selected by JP5, also on J8-1
12	J5-09	5	SDI2/PMA5/CN8/RG7	selected by JP7, also on J8-4
13	J5-11	4	SCK2/PMA5/CN8/RG6	also on J8-3, User LED LD4r
14/A0	J7-01	14	C2IN-/AN2/SS1/CN4/RB2	
15/A1	J7-03	12	C1IN-/AN4/CN6/RB4	
16/A2	J7-05	21	U2CTS/C1OUT/AN8/RB8	
17/A3	J7-07	23	TMS/CVREFOUT/PMA13/AN10/RB10	

chipKIT Pin #	Connector Pin #	PIC32 Pin #	PIC32 Signal	Notes
18/A4	J7-09	27	TCK/PMA11/AN12/RB12	selected by JP6
19/A5	J7-11	29	PMALH/PMA1/U2RTS/AN14/RB14	selected by JP8
20/A6	J7-02	13	C2IN+/AN3/CN5/RB3	
21/A7	J7-03	11	C1IN+/AN5/CN7/RB5	
22/A8	J7-06	22	PMA7/C2OUT/AN9/RB9	
23/A9	J7-08	24	TDO/PMA12/AN11/RB11	
24/A10	J7-10	28	TDI/PMA10/AN13/RB13	
25/A11	J7-12	30	PMALL/PMA0/AN15/OCFB/CN12/RB15	
26	J6-02	60	PMD0/RE0	
27	J6-04	61	PMD1/RE1	
28	J6-06	62	PMD2/RE2	
29	J6-08	63	PMD3/RE3	
30	J6-10	64	PMD4/RE4	
31	J6-12	1	PMD5/RE5	
32	J6-14	2	PMD6/RE6	
33	J6-16	3	PMD7/RE7	
34	J5-02	53	PMRD/CN14/RD5	
35	J5-04	45	IC4/PMCS1/PMA14/INT4/RD11	
36	J5-06	54	CN15/RD6	
37	J5-08	55	CN16/RD7	
38	J5-10	35	U1RTS/BCLK1/SCK1/INT0/RF6	
39	J5-12	31	PMA9/U2RX/SDA2/CN17/RF4	
40	J5-14	32	PMA8/U2TX/SCL2/CN18/RF5	
41	J5-16	15	PGC1/AN1/VREF-/CVREF-/CN3/RB1	
42	J5-15	16	PGED1/PMA6/AN0/VREF+/CVREF+/CN2/RB0	
43	N/A	58	RF0	User LED LD5
44	J5-05	8	PMA2/SS2/CN11/RG9	selected by JP4, also on J8-6
45	J11-1, J7-09	36	SDA1/RG3	J7-09 selected by JP6
46	J11-2, J7-11	37	SCL1/RG2	J7-11 selected by JP8

### 3.7.2 Pinout Table By Shield Connector Pin

Connector Pin #	chipKIT Pin #	PIC32 Pin #	PIC32 Signal	Notes
J5-01	8	44	IC3/PMCS2/PMA15/INT3/RD10	
J5-02	34	53	PMRD/CN14/RD5	
J5-03	9	51	OC4/RD3	
J5-04	35	45	IC4/PMCS1/PMA14/INT4/RD11	
J5-05	10 or 44	52 or 8	(PMWR/OC5/IC5/CN13/RD4) or (SS2/PMA2/CN11/RG9)	selected by JP4, also on J8-6
J5-06	36	54	CN15/RD6	
J5-07	11 or 12	6 or 5	(SDO2/PMA3/CN10/RG8) or (SDI2/PMA5/CN8/RG7)	selected by JP5, also on J8-1
J5-08	37	55	CN16/RD7	
J5-09	12 or 11	5 or 6	(SDI2/PMA5/CN8/RG7) or (SDO2/PMA3/CN10/RG8)	selected by JP7, also on J8-4
J5-10	38	35	U1RTS/BCLK1/SCK1/INT0/RF6	
J5-11	13	4	SCK2/PMA5/CN8/RG6	also on J8-3, user LED LD4
J5-12	39	31	PMA9/U2RX/SDA2/CN17/RF4	
J5-13			GND	
J5-14	40	32	PMA8/U2TX/SCL2/CN18/RF5	
J5-15	42	16	PGED1/PMA6/AN0/VREF+/CVREF+/CN2/RB0	
J5-16	41	15	PGC1/AN1/VREF-/CVREF-/CN3/RB1	
J6-01	0	34	U1RX/SDI1/RF2	
J6-02	26	60	PMD0/RE0	
J6-03	1	33	U1TX/SDO1/RF3	
J6-04	27	61	PMD1/RE1	
J6-05	2	42	IC1/RTCC/INT1/RD8	
J6-06	28	62	PMD2/RE2	
J6-07	3	46	OC1/RD0	
J6-08	29	63	PMD3/RE3	
J6-09	4	59	RF1	
J6-10	30	64	PMD4/RE4	
J6-11	5	49	OC2/RD1	
J6-12	31	1	PMD5/RE5	
J6-13	6	50	OC3/RD2	
J6-14	32	2	PMD6/RE6	
J6-15	7	43	IC2/U1CTS/INT2/RD9	

Connector Pin #	chipKIT Pin #	PIC32 Pin #	PIC32 Signal	Notes
J6-16	33	3	PMD7/RE7	
J7-01	A00/14	14	C2IN-/AN2/SS1/CN4/RB2	
J7-02	A06/20	13	C2IN+/AN3/CN5/RB3	
J7-03	A01/15	12	C1IN-/AN4/CN6/RB4	
J7-03	A07/21	11	C1IN+/AN5/CN7/RB5	
J7-05	A02/16	21	U2CTS/C1OUT/AN8/RB8	
J7-06	A08/22	22	PMA7/C2OUT/AN9/RB9	
J7-07	A03/17	23	TMS/CVREFOUT/PMA13/AN10/ RB10	
J7-08	A09/23	24	TDO/PMA12/AN11/RB11	
J7-09	A04/18 or 45	27 or 36	(TCK/PMA11/AN12/RB12) or (SDA1/RG3)	selected by JP6
J7-10	A10/24	28	TDI/PMA10/AN13/RB13	
J7-11	A05/19 or 46	29 or 37	(PMALH/PMA1/U2RTS/AN14/RB 14) or (SCL1/RG2)	selected by JP8
J7-12	A11/25	30	PMALL/PMA0/AN15/OCFB/CN12 /RB15	
J11-1	45	36	SDA1/RG3	
J11-2	46	37	SCL1/RG2	

### 3.7.3 Pinout Table by PIC32 Microcontroller Pin

PIC32 Pin #	Connector Pin #	chipKIT Pin #	PIC32 Signal	Notes
1	J6-12	31	PMD5/RE5	
2	J6-14	32	PMD6/RE6	
3	J6-16	33	PMD7/RE7	
4	J5-11	13	SCK2/PMA5/CN8/RG6	also on J8-3, User LED LD4
5	J5-09 or J5-07	12	SDI2/PMA5/CN8/RG7	selected by JP7/JP5, also on J8-1
6	J5-07 or J5-09	11	SDO2/PMA3/CN10/RG8	selected by JP5/JP7, also on J8-4
7	JP3-01		MCLR	PIC32 reset, ICSP signal
8	J5-05	44	SS2/PMA2/CN11/RG9	selected by JP4, also on J8-6
9			VSS	
10			VDD	
11	J7-03	A07/21	C1IN+/AN5/CN7/RB5	
12	J7-03	A01/15	C1IN-/AN4/CN6/RB4	
13	J7-02	A06/20	C2IN+/AN3/CN5/RB3	

PIC32 Pin #	Connector Pin #	chipKIT Pin #	PIC32 Signal	Notes
14	J7-01	A00/14	C2IN-/AN2/SS1/CN4/RB2	
15	J5-16	41	PGC1/AN1/VREF-/CVREF-/CN3/RB1	
16	J5-15	42	PGED1/PMA6/AN0/VREF+/CVREF+/CN2/RB0	
17	JP3-05		PGEC2/AN8/OCFARB6	ICSP signal
18	JP3-04		PGED2/AN7/RB7	ICSP signal
19			AVDD	
20			AVSS	
21	J7-05	A02/16	U2CTS/C1OUT/AN8/RB8	
22	J7-06	A08/22	PMA7/C2OUT/AN9/RB9	
23	J7-07	A03/17	TMS/CVREFOUT/PMA13/AN10/RB10	
24	J7-08	A09/23	TDO/PMA12/AN11/RB11	
25			VSS	
26			VDD	
27	J7-09	A04/18	TCK/PMA11/AN12/RB12	selected by JP6
28	J7-10	A10/24	TDI/PMA10/AN13/RB13	
29	J7-11	A05/19	PMALH/PMA1/U2RTS/AN14/RB14	selected by JP8
30	J7-12	A11/25	PMALL/PMA0/AN15/OCFB/CN12/RB15	
31	J5-12	39	PMA9/U2RX/SDA2/CN17/RF4	
32	J5-14	40	PMA8/U2TX/SCL2/CN18/RF5	
33	J6-03	1	U1TX/SDO1/RF3	
34	J6-01	0	U1RX/SDI1/RF2	
35	J5-10	38	U1RTS/BCLK1/SCK1/INT0/RF6	
36	J7-09, J11-1	45	SDA1/RG3	J7-09 selected by JP6
37	J7-11, J11-2	46	SCL1/RG2	J7-11 selected by JP8
38			VDD	
39			OSC1/CLKI/RC12	X1, system clock oscillator
40			OSC2/CLKO/RC15	X1, system clock oscillator
41			VSS	
42	J6-05	2	IC1/RTCC/INT1/RD8	
43	J6-15	7	IC2/U1CTS/INT2/RD9	
44	J5-01	8	IC3/PMCS2/PMA15/INT3/RD10	
45	J5-04	35	IC4/PMCS1/PMA14/INT4/RD11	
46	J6-07	3	OC1/RD0	
47			SOSCI/CN1/RC13	X2, secondary oscillator

PIC32 Pin #	Connector Pin #	chipKIT Pin #	PIC32 Signal	Notes
48			SOSCO/T1CK/CN0/RC14	X2, secondary oscillator
49	J6-11	5	OC2/RD1	
50	J6-13	6	OC3/RD2	
51	J5-03	9	OC4/RD3	
52	J5-05	10	PMWR/OC5/IC5/CN13/RD4	selected by JP4
53	J5-02	34	PMRD/CN14/RD5	
54	J5-06	36	CN15/RD6	
55	J5-08	37	CN16/RD7	
56			VCAP/VDDcore	
57			ENVREG	
58		43	RF0	User LED LD5
59	J6-09	4	RF1	
60	J6-02	26	PMD0/RE0	
61	J6-04	27	PMD1/RE1	
62	J6-06	28	PMD2/RE2	
63	J6-08	29	PMD3/RE3	
64	J6-10	30	PMD4/RE4	

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