



# MICROCHIP

# dsPIC33FJ32GP204

## dsPIC33FJ32GP204 PIM Information Sheet

The dsPIC33FJ32GP204 PIM is designed to demonstrate the capabilities of the dsPIC33FJ32GP204 family of general purpose devices using the Explorer 16 Development Board and the PICtail™ Plus daughter boards.

The dsPIC33FJ32GP204 is a high-performance 16-bit digital signal controller within a small 44-pin QFN package.

The dsPIC33FJ32GP204 is equipped with Peripheral Pin Select (PPS), which allows many of the digital peripherals to be remapped to use any number of pins on the device.

The PIM takes advantage of PPS by using zero ohm resistors to connect the I/O to the 100-pin Explorer 16 Development Board. Simply removing the zero ohm resistors and using the test points associated with each I/O pin (i.e., Pin1, Pin2, etc.), allows the designer to reroute the pin to any of the available pins on the Explorer 16 Development Board. This capability enables easier and faster design times.

Table 1 shows the mapping between the Explorer 16 functions and the device pins.

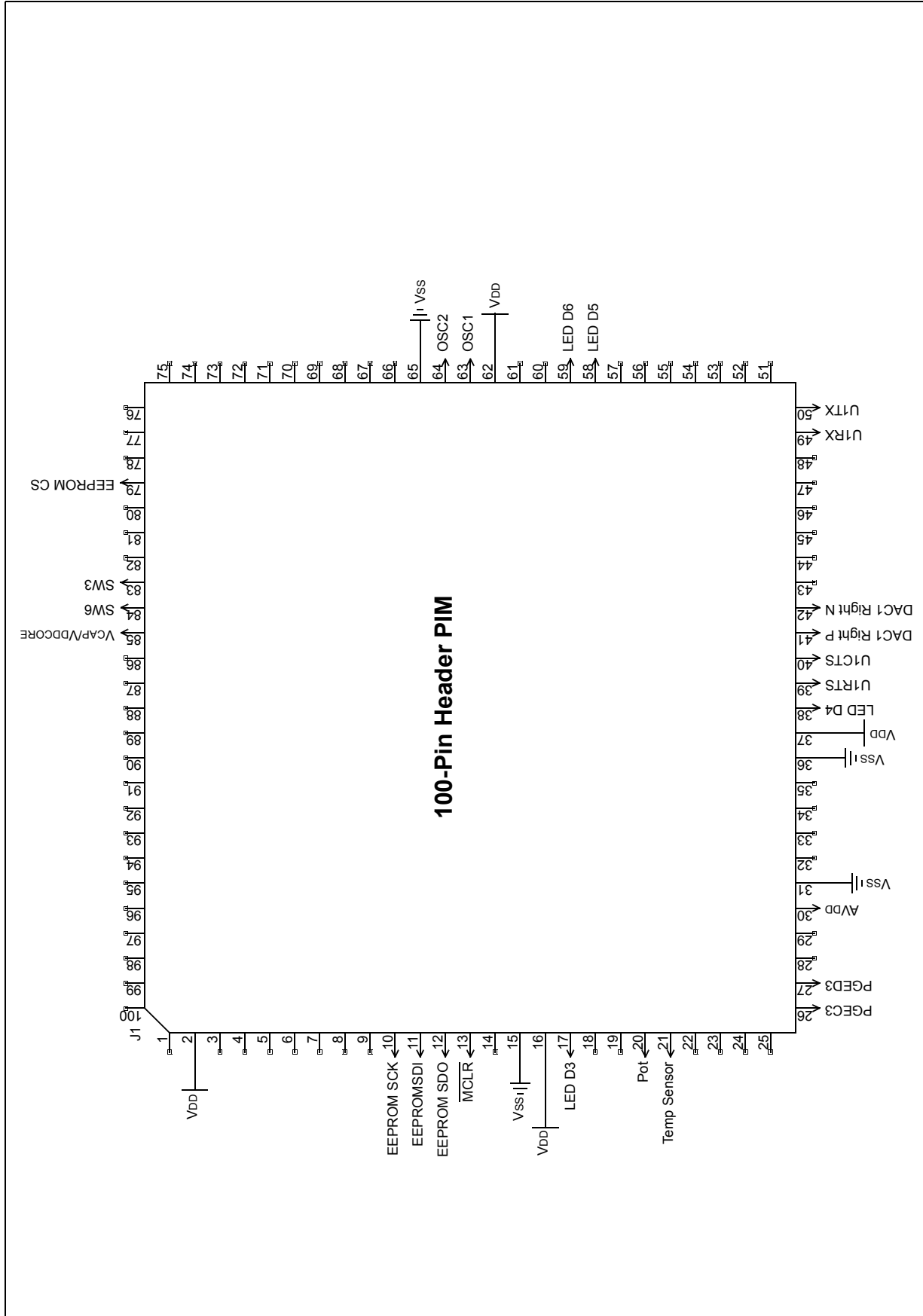
**TABLE 1: 44-PIN TO 100-PIN PINOUT**

Device Pin Number	dsPIC33FJ32GP204	PIM Pin Number	Functional Description
1	SDA1/RP9/CN21/RB9	87	RF 0
2	RP22/CN18/RC6	88	RF 1
3	RP23/CN17/RC7		
4	RP24/CN20/RC8		
5	RP25/CN19/RC9		
6	Vss	15	
7	VCAP/VDDCORE	85	
8	PGED2/RP10/CN16/RB10		
9	PGEC2/RP11/CN15/RB11		
10	AN12/RP12/CN14/RB12	41	DAC1 Right P
11	AN11/RP13/CN13/RB13	42	DAC1 Right N
12	TMS/RA10	59	LED D6
13	TCK/RA7	17	LED D3
14	AN10/RP14/CN12/RB14		
15	AN9/RP15/CN11/RB15		
16	AVss	36	
17	AVDD	30	
18	MCLR	13	
19	AN0/VREF+/CN2/RA0	25	ADC
20	AN1/VREF-/CN3/RA1	20	POT
21	PGED1/AN2/C2IN-/RP0/CN4/RB0	21	Temp Sensor
22	PGEC1/AN3/C2IN+/RP1/CN5/RB1		

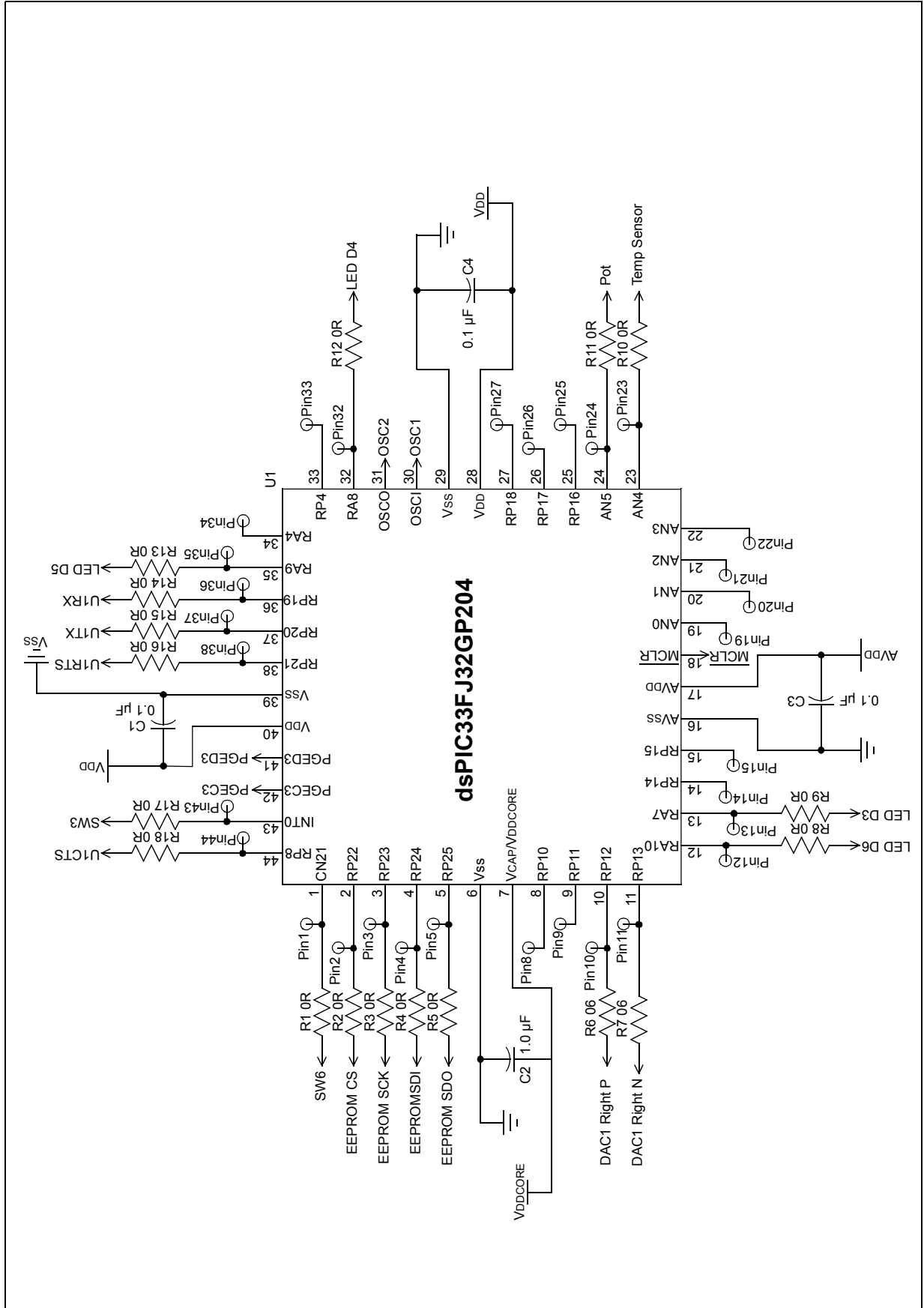
Device Pin Number	dsPIC33FJ32GP204	PIM Pin Number	Functional Description
23	AN4/RP2/CN6/RB2		
24	AN5/RP3/CN7/RB3		
25	AN6/RP16/CN8/RC0		
26	AN7/RP17/CN9/RC1		
27	AN8/RP18/CN10/RC2		
28	VDD	62	
29	Vss	65	
30	OSCI/CLKI/CN30/RA2	63	OSC1
31	OSCO/CLKO/CN29/RA3	64	OSC2
32	TDO/RA8	38	LED D4
33	SOSCI/RP4/CN1/RB4	74	SOSC1
34	SOSCO/T1CK/CN0/RA4	73	SOSC2
35	TDI/RA9	58	LED D5
36	RP19/CN28/RC3	49	U1RX
37	RP20/CN25/RC4	50	U1TX
38	RP21/CN26/RC5	39	U1RTS
39	Vss	31	
40	Vss	2	
41	PGED3/ASDA1/RP5/CN27/RB5	27	Debug
42	PGEC3/ASCL1/RP6/CN24/RB6	26	Debug
43	INT0/RP7/CN23/RB7	83	Switch 3
44	SCL1/RP8/CN22/RB8	40	U1CTS

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FIGURE 1: 100-PIN HEADER SCHEMATIC



**FIGURE 2: 44-PIN DEVICE SCHEMATIC**



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NOTES:

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