

# PIC24FJ512GU410 General Purpose Plug-In Module (PIM) Information Sheet

## Americas

Atlanta - 678-957-9614  
Austin - 512-257-3370  
Boston - 774-760-0087  
Chicago - 630-285-0071  
Dallas - 972-818-7423  
Detroit - 248-848-4000  
Houston - 281-894-5983  
Indianapolis - 317-773-8323  
Los Angeles - 949-462-9523  
New York - 631-435-6000  
Phoenix - 480-792-7200  
Raleigh - 919-844-7510  
San Jose - 408-735-9110  
Toronto - 905-695-1980

## Europe

Austria - Wels - 43-7242-2244-39  
Denmark - Copenhagen - 45-4485-5910  
Finland - Espoo - 358-9-4520-820  
France - Paris - 33-1-69-53-63-20  
Germany - Garching - 49-8931-9700  
Germany - Haan - 49-2129-3766400  
Germany - Heilbronn - 49-7131-72400  
Germany - Karlsruhe - 49-721-625370  
Germany - Munich - 49-89-627-144-0  
Germany - Rosenheim - 49-8031-354-560  
Israel - Ra'anana - 972-9-744-7705  
Italy - Milan - 39-0331-742611  
Italy - Padova - 39-049-7625286  
Netherlands - Drunen - 31-416-690399  
Norway - Trondheim - 47-7288-4388  
Poland - Warsaw - 48-22-3325737  
Romania - Bucharest - 40-21-407-87-50  
Spain - Madrid - 34-91-708-08-90  
Sweden - Gothenberg - 46-31-704-60-40  
Sweden - Stockholm - 46-8-5090-4654  
UK - Wokingham - 44-118-921-5800

## Asia/Pacific

Australia - Sydney - 61-2-9868-6733  
China - Beijing - 86-10-8569-7000  
China - Chengdu - 86-28-8665-5511  
China - Chongqing - 86-23-8980-9588  
China - Dongguan - 86-769-8702-9880  
China - Guangzhou - 86-20-8755-8029  
China - Hangzhou - 86-571-8792-8115  
China - Hong Kong SAR - 852-2943-5100  
China - Nanjing - 86-25-8473-2460  
China - Qingdao - 86-532-8502-7355  
China - Shanghai - 86-21-3326-8000  
China - Shenyang - 86-24-2334-2829  
China - Shenzhen - 86-755-8864-2200  
China - Suzhou - 86-186-6233-1526  
China - Wuhan - 86-27-5980-5300  
China - Xiamen - 86-592-2388138  
China - Xian - 86-29-8833-7252  
China - Zhuhai - 86-756-3210040  
India - Bangalore - 91-80-3090-4444  
India - New Delhi - 91-11-4160-8631  
India - Pune - 91-20-4121-0141  
Japan - Osaka - 81-6-6152-7160  
Japan - Tokyo - 81-3-6880-3770  
Korea - Daegu - 82-53-744-4301  
Korea - Seoul - 82-2-554-7200  
Malaysia - Kuala Lumpur - 60-3-7651-7906  
Malaysia - Penang - 60-4-227-8870  
Philippines - Manila - 63-2-634-9065  
Singapore - 65-6334-8870  
Taiwan - Hsin Chu - 886-3-577-8366  
Taiwan - Kaohsiung - 886-7-213-7830  
Taiwan - Taipei - 886-2-2508-8600  
Thailand - Bangkok - 66-2-694-1351  
Vietnam - Ho Chi Minh - 84-28-5448-2100

## Overview

The PIC24FJ512GU410 General Purpose Plug-In Module (MA240041) is designed to demonstrate the capabilities of the PIC24FJ512GU410 family using the Explorer 16/32 Development Board. Refer to [Table 1](#) and [Table 2](#) for the mapping of the physical pins on the PIC24FJ512GU410 to the 100-pin PIM connector.

Not all predefined PIM signals found on the Explorer 16/32 are connected due to the limited number of I/O pins available.

2/28/20



Microchip Technology Inc. • 2355 West Chandler Blvd. • Chandler, AZ 85224-6199

[www.microchip.com](http://www.microchip.com)

The Microchip name and logo, the Microchip logo and dsPIC are registered trademarks of Microchip Technology Inc. in the U.S.A. and other countries. All other trademarks mentioned herein are property of their respective companies. © 2019, Microchip Technology Incorporated, Printed in the U.S.A. All Rights Reserved. 4/20

DS50002983A

**Table 1: PIC24FJ512GU410 PIM Mapping**

| PIM Pin # | Device Pin #              | PIC24FJ512GU410 I/Os                             | Function                          | Explorer 16/32 Net Name |
|-----------|---------------------------|--|-----------------------------------|-------------------------|
| 1         | 54                        | Vbus/RF7   | USB Vbus                          | P1_VBUS_RF7             |
| 2         | 2, 16, 30, 37, 46, 55, 62 | Vdd  | Vdd                               | Vdd                     |
| 3         | 7                         | SEG52/RP139/OCM2C/RC2                            | LCD D5                            | P3_LCDD5_RC2            |
| 4         | 8                         | SEG33/RP140/OCM2D/RC3                            | LCD D6                            | P4_LCDD6_RC3            |
| 5         | 9                         | SEG53/AN16/RP141/OCM3C/RC4                       | LCD D7                            | P5_LCDD7_RC4            |
| 6         | 100                       | SEG63/LVDIN/RE4                                  | General Purpose I/O               | P6_RE4                  |
| 7         | 3                         | LCDBIAS2/RP34/RE5                                | General Purpose I/O               | P7_RE5                  |
| 8         | 4                         | LCDBIAS1/RP35/SCL3/RE6                           | General Purpose I/O               | P8_RE6                  |
| 9         | 5                         | LCDBIAS0/RP36/SDA3/RE7                           | General Purpose I/O               | P9_RE7                  |
| 10        | 10                        | SEG0/AN17/C1IND/RP21/OCM1A/RG6                   | mikroBUS™ A SPI SCK               | P10_SCKA_RG6            |
| 11        | 11                        | VLCAP1/AN18/C1INC/C2INC/C3INC/RP26/OCM1B/RG7     | mikroBUS A SPI MISO               | P11_MISOA_RG7           |
| 12        | 12                        | VLCAP2/AN19/C2IND/RP19/OCM2A/RG8                 | mikroBUS A SPI MOSI               | P12_MOSIA_RG8           |
| 13        | 13                        | MCLR   | MCLR                              | P13_MCLR_MCLR           |
| 14        | 14                        | SEG1/AN20/C2INC/RP27/DAC1/OCM2B/RG9              | mikroBUS A Chip Select            | P14_CSA_RG9             |
| 15        | 15, 31, 36, 45, 65, 75    | Vss  | Vss                               | Vss                     |
| 16        | 2, 16, 30, 37, 46, 55, 62 | Vdd  | Vdd                               | Vdd                     |
| 17        | 17                        | TMS/SEG49/OCM3D/RA0                              | LED D3                            | P17_LED3_RA0            |
| 18        | 18                        | SEG34/RP147/RE8                                  | mikroBUS B Interrupt              | P18_INTB_RE8            |
| 19        | 19                        | SEG35/AN21/RP148/RE9                             | mikroBUS B Reset                  | P19_RSTB_RE9            |
| 20        | 20                        | PGEC3/SEG2/AN5/C1INA/RP18/SCL1A/OCM3A/RB5        | 10k Potentiometer                 | P20_POT_RB5             |
| 21        | 21                        | PGED3/SEG3/AN4/C1INB/RP28/SDA1A/USBOEN/OCM3B/RB4 | TC1047A Temp. Sensor              | P21_TEMP_RB4            |
| 22        | 22                        | SEG4/AN3/C2INA/RB3                               | General Purpose I/O               | P22_RB3                 |
| 23        | 83                        | SEG25/C3INB/RP32/U5RX/SS3/FSYNC3/RD6             | mikroBUS B Chip Select            | P23_CSB_RD6             |
| 24        | 24                        | PGEC1/SEG6/CVREF-/AN1/AN1-/RP1/RB1               | mikroBUS B Analog                 | P24_AN5_RB15            |
| 24        | 34                        | COM5/SEG29/CVREF+/AN10/RP144/RB10                | General Purpose I/O               | P34_RB10                |
| 25        | 25                        | PGED1/SEG7/VREF+/CVREF+/DVREF+/AN0/RP0/RB0       | mikroBUS B Analog/USB Overcurrent | P25_ANA_USBOC_RB0       |
| 26        | 26                        | PGEC2/LCDBIA3/AN6/RP6/RB6                        | ICSP™ Prog/Debug PG2              | P26_PG2C3_RB6           |
| 27        | 27                        | PGED2/AN7/RP7/T1CK/U6TX/RB7                      | ICSP Prog/Debug PG2               | P27_PG2C3_RB7           |
| 28        | 28                        | SEG36/RA9  | General Purpose I/O               | P28_RA9                 |
| 29        | 29                        | SEG37/RA10                                       | General Purpose I/O               | P29_RA10                |
| 30        | 2, 16, 30, 37, 46, 55, 62 | AVdd   | Vdd                               | Vdd                     |
| 31        | 15, 31, 35, 45, 65, 75    | AVss   | Vss                               | Vss                     |
| 31        | 33                        | COM6/SEG30/AN9/RP9/RB9                           | USB CC1                           | P31_CC1                 |
| 32        | 32                        | COM7/SEG31/AN8/P8/RB8                            | USB CC2                           | P32_CC2                 |
| 35        | 35                        | AN11/RB11  | General Purpose I/O               | P35_RB11                |
| 36        | 15, 31, 35, 45, 65, 75    | Vss  | Vss                               | Vss                     |
| 37        | 2, 16, 30, 37, 46, 55, 62 | Vdd  | Vdd                               | Vdd                     |
| 38        | 38                        | TCK/RA1  | LED D4                            | P38_LED4_RD15           |
| 39        | 39                        | SEG54/RP31/RF13                                  | General Purpose I/O               | P39_RF13                |
| 40        | 40                        | SEG55/RP146/RF12                                 | General Purpose I/O               | P40_RF12                |
| 41        | 41                        | SEG18/AN12/U6RX/RB12                             | General Purpose I/O               | P41_RB12                |
| 42        | 42                        | SEG19/AN13/RB13                                  | General Purpose I/O               | P42_RB13                |
| 43        | 43                        | SEG8/AN14/RP14/RB14                              | General Purpose I/O               | P43_RB14                |
| 44        | 44                        | SEG9/AN15/RP29/RB15                              | LCD Register Select               | P44_LCDRS_RB15          |
| 45        | 15, 31, 35, 45, 65, 75    | Vss  | Vss                               | Vss                     |
| 46        | 2, 16, 30, 37, 46, 55, 62 | Vdd  | Vdd                               | Vdd                     |
| 47        | 47                        | SEG38/RP143/RD14                                 | General Purpose I/O               | P47_RD14                |
| 48        | 48                        | SEG39/RP5/RD15                                   | General Purpose I/O               | P48_RD15                |

**Table 1: PIC24FJ512GU410 PIM Mapping (Continued)**

| PIM Pin # | Device Pin #              | PIC24FJ512GU410 I/Os              | Function                             | Explorer 16/32 Net Name |
|-----------|---------------------------|-----------------------------------|--------------------------------------|-------------------------|
| 49        | 49                        | SEG10/RP10/RF4                    | MCP2221A/mikroBUS™ B TX              | P49_RXB_RF4             |
| 50        | 50                        | SEG11/RP17/RF5                    | MCP2221A/mikroBUS B RX               | P50_TXB_RF5             |
| 51        | 51                        | SEG12/RP16/USBID/RF3              | mikroBUS A TX                        | P51_TXA_RF3             |
| 52        | 52                        | SEG40/RP30/RF2                    | mikroBUS A RX                        | P52_RXA_RF2             |
| 53        | 82                        | SEG24/RP20/SDO3/RD5               | mikroBUS B SPI MOSI                  | P53_MOSIB_RD5           |
| 54        | 81                        | SEG23/RP25/SDI3/RD4               | mikroBUS B SPI MISO                  | P54_MISOB_RD4           |
| 55        | 78                        | SEG22/RP22/SCK3/RD3               | mikroBUS B SPI SCK                   | P55_SCKB_RD3            |
| 56        | 67                        | SEG43/RP149/SDA1/RA15             | mikroBUS Shared I <sup>2</sup> C SDA | P56_SDA_RA15            |
| 57        | 66                        | SEG42/RP150/SCL1/RA14             | mikroBUS Shared I <sup>2</sup> C SCL | P57_SCL_RA14            |
| 58        | 58                        | SEC56/SCL2/RA2                    | LED D5                               | P58_LED5_RA2            |
| 59        | 59                        | SEC57/SDA2/RA3                    | LED D6                               | P59_LED6_RA3            |
| 60        | 60                        | TDI/RA4                           | LED D7                               | P60_LED7_RA4            |
| 61        | 61                        | TDO/RA5                           | LED8                                 | P61_LED8_RA5            |
| 62        | 2, 16, 30, 37, 46, 55, 62 | Vdd                               | Vdd                                  | Vdd                     |
| 63        | 63                        | OSCI/CLKI/RC12                    | Primary Oscillator In                | P63_OSCI_RC12           |
| 64        | 64                        | OSCO/CLKO/RC15                    | Primary Oscillator Out               | P64_OSOCO_RC15          |
| 65        | 15, 31, 36, 45, 65, 75    | Vss                               | Vss                                  | Vss                     |
| 66        | 86                        | RH0                               | General Purpose I/O                  | P66_RH0                 |
| 67        | 53                        | SEG41/RP15/RF8                    | mikroBUS A Interrupt                 | P67_INTA_RF8            |
| 68        | 68                        | SEG13/RP2/U6RTS/U6BCLK/RD8        | General Purpose I/O                  | P68_RD8                 |
| 69        | 69                        | SEG14/RP4/RD9                     | General Purpose I/O                  | P69_RD9                 |
| 70        | 70                        | SEG15/C3IND/RP3/RD10              | General Purpose I/O                  | P70_RD10                |
| 71        | 71                        | SEG16/C3INC/RP12/RD11             | General Purpose I/O                  | P71_RD11                |
| 72        | 72                        | SEG17/RP11/U6CTS/INT0/RD0         | mikroBUS A PWM                       | P72_PWMA_RD0            |
| 75        | 15, 31, 36, 45, 65, 75    | Vss                               | Vss                                  | Vss                     |
| 76        | 76                        | SEG20/RP24/USTX/RD1               | General Purpose I/O                  | P76_RD1                 |
| 77        | 77                        | SEG21/RP23/RD2                    | General Purpose I/O                  | P77_RD2                 |
| 78        | 23                        | SEG5/AN2/C2INB/RP13/RB2           | mikroBUS B PWM                       | P78_PWM_B_RB2           |
| 79        | 79                        | SEG44/RP142/OCM3E/RD12            | EEPROM Chip Select                   | P79_EECS_RD12           |
| 80        | 80                        | SEG45/OCM3F/RD13                  | Button 4                             | P80_S4_RD13             |
| 81        | 89                        | SEC46/RG1                         | LCD Enable                           | P81_LCDE_RG1            |
| 82        | 90                        | SEC50/RG0                         | LCD R/W (pulled low by R4)           | P82_LCDRW_RG0           |
| 83        | 1                         | SEG51/OCM1C/RG15                  | Button 3                             | P83_S3_RG15             |
| 84        | 84                        | SEG26/C3INA/RP33/U5RTS/U5BCLK/RD7 | Button 6                             | P84_S6_RD7              |
| 85        | 85                        | VCAP                              | VCAP                                 | P85_VDDCORE_VCAP        |
| 87        | 87                        | SEG27/U5CTS/RF0                   | General Purpose I/O                  | P87_RF0                 |
| 88        | 88                        | COM4/SEG48/RP145/RF1              | General Purpose I/O                  | P88_RF1                 |
| 89        | 56                        | D-/RG3                            | USB D-                               | P89_USBDN_RG3           |
| 90        | 57                        | D+/RG2                            | USB D+                               | P90_USBDP_RG2           |
| 91        | 91                        | SEG58/AN23/OCM1E/RA6              | LED9                                 | P91_LED9_RA6            |
| 92        | 92                        | SEG59/AN22/OCM1F/RA7              | Button 5/LED10                       | P92_S5_LED10_RA7        |
| 93        | 93                        | COM3/RE0                          | LCD D0                               | P93_LCDD0_RE0           |
| 94        | 94                        | COM2/RE1                          | LCD D1                               | P94_LCDD1_RE1           |
| 95        | 95                        | SEG60/RG14                        | mikroBUS A Reset                     | P95_RGA_RG14            |
| 96        | 96                        | SEG61/OCM2E/RG12                  | VbusON                               | P96_VBUSON_RG12         |
| 97        | 97                        | SEG62/OCM2F/RG13                  | General Purpose I/O                  | P97_RG13                |
| 98        | 98                        | COM1/RE2                          | LCD D2                               | P98_LCDD2_RE2           |
| 99        | 99                        | COM0/RE3                          | LCD D3                               | P99_LCDD3_RE3           |
| 100       | 6                         | SEG32/RP138/OCM1D/RC1             | LD D4                                | P100_LCDD4_RC1          |
| —         | 73                        | SOSCI/RC13                        | Secondary Oscillator In              | SOSCI                   |
| —         | 74                        | SOSCO/SCLKI/RP137/RC14            | Secondary Oscillator Out             | SOSCO                   |
| —         | 2, 16, 30, 37, 46, 55, 62 | VUSB3V3                           | USB Power                            | Vdd                     |

**Table 2: PIC24FJ512GU410 Device Mapping**

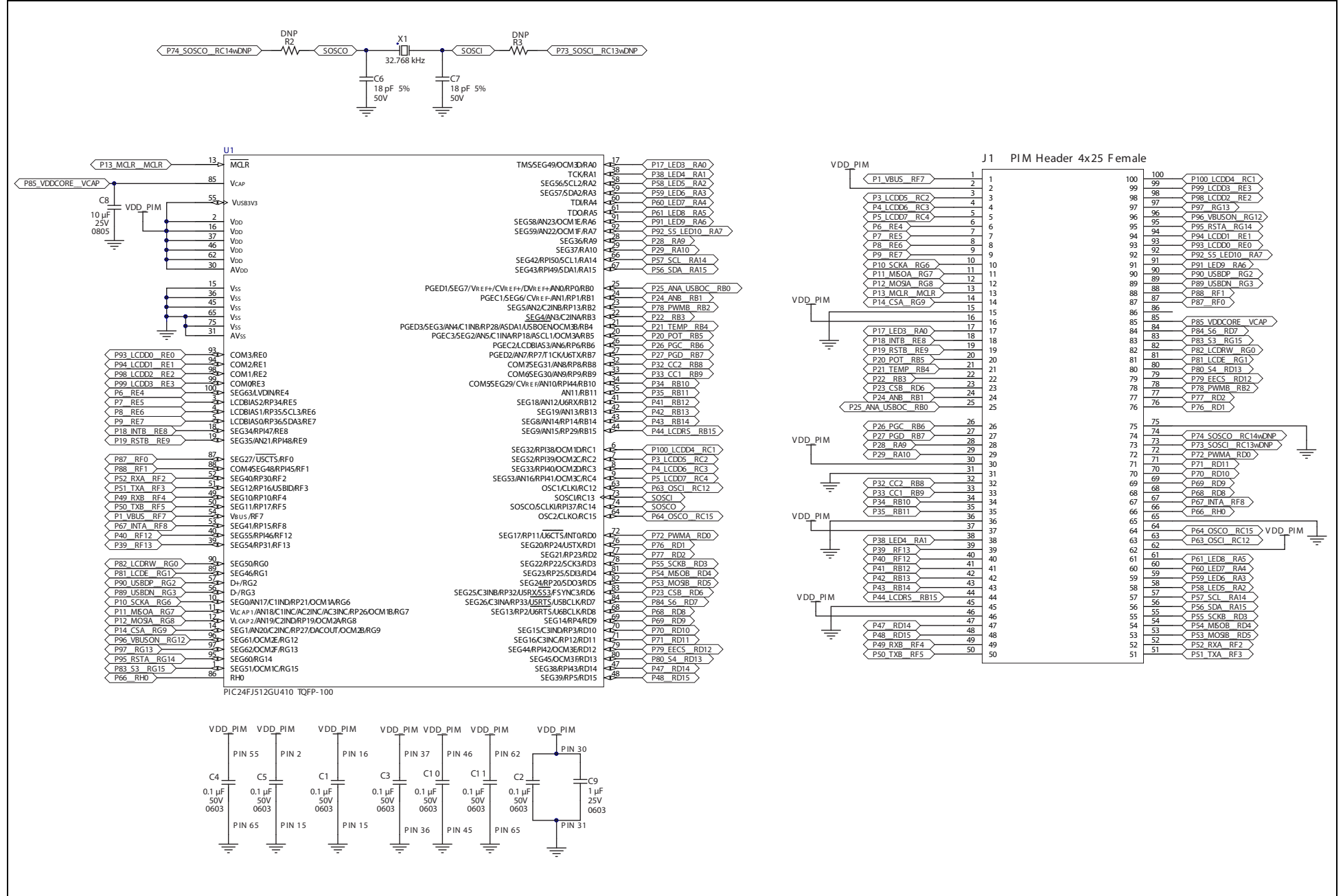
| Device Pin # | PIM Pin #              | PIC24FJ512GU410 I/Os                             | Function                          | Explorer 16/32 Net Name |
|--------------|------------------------|--|-----------------------------------|-------------------------|
| 1            | 83                     | SEG51/OCM1C/RG15                                 | Button 3                          | P83_S3_RG15             |
| 2            | 2, 16, 30, 37, 46, 62  | Vdd  | Vdd                               | Vdd                     |
| 3            | 7                      | LCDBIAS2/RP34/RE5                                | General Purpose I/O               | P7_RE5                  |
| 4            | 8                      | LCDBIAS1/RP35/SCL3/RE6                           | General Purpose I/O               | P8_RE6                  |
| 5            | 9                      | LCDBIAS0/RP36/SDA3/RE7                           | General Purpose I/O               | P9_RE7                  |
| 6            | 100                    | SEG32/RI38/OCM1D/RC1                             | LCD D4                            | P100_LCDD4_RC1          |
| 7            | 3                      | SEG52/RI39/OCM2C/RC2                             | LCD D5                            | P3_LCDD5_RC2            |
| 8            | 4                      | SEG33/RI40/OCM2D/RC3                             | LCD D6                            | P4_LCDD6_RC3            |
| 9            | 5                      | SEG53/AN16/RI41/OCM3C/RC4                        | LCD D7                            | P5_LCDD7_RC4            |
| 10           | 10                     | SEG0/AN17/C1IND/RP21/OCM1A/RG6                   | mikroBUS™ A SPI SCK               | P10_SCKA_RG6            |
| 11           | 11                     | VLCA1/AN18/C1INC/C2INC/C3INC/CP26/OCM1B/RG7      | mikroBUS A SPI MISO               | P11_MISOA_RG7           |
| 12           | 12                     | VLCA2/AN19/C2IND/RP19/OCM2A/RG8                  | mikroBUS A SPI MOSI               | P12_MOSIA_RG8           |
| 13           | 13                     | MCLR   | MCLR                              | P13_MCLR_MCLR           |
| 14           | 14                     | SEG1/AN20/C2INC/CP27/DAC1/OCM2B/RG9              | mikroBUS A Chip Select            | P14_CSA_RG9             |
| 15           | 15, 31, 36, 45, 65, 75 | Vss  | Vss                               | Vss                     |
| 16           | 2, 16, 30, 37, 46, 62  | Vdd  | Vdd                               | Vdd                     |
| 17           | 17                     | TMS/SEG49/OCM3D/RA0                              | LED D3                            | P17_LED3_RA0            |
| 18           | 18                     | SEG34/RI47/RE8                                   | mikroBUS B Interrupt              | P18_INTB_RE8            |
| 19           | 19                     | SEG35/AN21/RI48/RE9                              | mikroBUS B Reset                  | P19_RSTB_RE9            |
| 20           | 20                     | PGEC3/SEG2/AN5/C1INA/RI18/SCL1A/OCM3A/RB5        | 10k Potentiometer                 | P20_POT_RB5             |
| 21           | 21                     | PGED3/SEG3/AN4/C1INB/RI28/SDA1A/USBOEN/OCM3B/RB4 | TC1047A Temp. Sensor              | P21_TEMP_RB4            |
| 22           | 22                     | SEG4/AN3/C2INA/RB3                               | General Purpose I/O               | P22_RB3                 |
| 23           | 78                     | SEG5/AN2/C2INB/RI13/RB2                          | mikroBUS B PWM                    | P78_PWMB_RB2            |
| 24           | 24                     | PGEC1/SEG6/CVREF-/AN1/AN1-/RP1/RB1               | mikroBUS B Analog                 | P24_ANB_RB15            |
| 25           | 25                     | PGED1/SEG7/VREF+/CVREF+/DVREF+/AN0/RI0/RB0       | mikroBUS B Analog/USB Overcurrent | P25_ANA_USBOC_RB0       |
| 26           | 26                     | PGEC2/LCDBIAS3/AN6/RI6/RB6                       | ICSP™ Prog/Debug PGC2             | P26_PGC3_RB6            |
| 27           | 27                     | PGED2/AN7/RI7/IT1CK/U6TX/RB7                     | ICSP™ Prog/Debug PGD2             | P27_PGD3_RB7            |
| 28           | 28                     | SEG36/RA9  | General Purpose I/O               | P28_RA9                 |
| 29           | 29                     | SEG37/RA10                                       | General Purpose I/O               | P9_RA10                 |
| 30           | 2, 16, 30, 37, 46, 62  | AVdd   | Vdd                               | Vdd                     |
| 31           | 15, 31, 36, 45, 65, 75 | AVss   | Vss                               | Vss                     |
| 32           | 32                     | COM7/SEG31/AN8/RI8/RB8                           | USB CC2                           | P32_CC2                 |
| 33           | 31                     | COM6/SEG30/AN9/RI9/RB9                           | USB CC1                           | P31_CC1                 |
| 34           | 24                     | COM5/SEG29/CVREF-/AN10/RI44/RB10                 | General Purpose I/O               | P34_RB10                |
| 35           | 35                     | AN11/RB11  | General Purpose I/O               | P35_RB11                |
| 36           | 15, 31, 36, 45, 65, 75 | Vss  | Vss                               | Vss                     |
| 37           | 2, 16, 30, 37, 46, 62  | Vdd  | Vdd                               | Vdd                     |
| 38           | 38                     | TCK/RA1  | LED D4                            | P38_LED4_RD15           |
| 39           | 39                     | SEG54/RI31/RF13                                  | General Purpose I/O               | P39_RF13                |
| 40           | 40                     | SEG55/RI46/RF12                                  | General Purpose I/O               | P40/RF12                |
| 41           | 41                     | SEG18/AN12/U6RX/RB12                             | General Purpose I/O               | P41_RB12                |
| 42           | 42                     | SEG19/AN13/RB13                                  | General Purpose I/O               | P42_RB13                |
| 43           | 43                     | SEG8/AN14/RI14/RB14                              | General Purpose I/O               | P43_RB14                |
| 44           | 44                     | SEG9/AN15/RI29/RB15                              | LCD Register Select               | P44_LCDRS_RB15          |
| 45           | 15, 31, 36, 45, 65, 75 | Vss  | Vss                               | Vss                     |
| 46           | 2, 16, 30, 37, 46, 62  | Vdd  | Vdd                               | Vdd                     |
| 47           | 47                     | SEG38/RI43/RD14                                  | General Purpose I/O               | P47_RD14                |
| 48           | 48                     | SEG39/RI5/RD15                                   | General Purpose I/O               | P48_RD15                |

**Table 2: PIC24FJ512GU410 Device Mapping (Continued)**

| Device Pin # | PIM Pin #              | PIC24FJ512GU410 I/Os                 | Function                   | Explorer 16/32 Net Name |
|--------------|------------------------|--------------------------------------|----------------------------|-------------------------|
| 49           | 49                     | SEG10/RI10/RF4                       | MCP2221A/mikroBUS™ B TX    | P49_RXB_RF4             |
| 50           | 50                     | SEG11/RI17/RF5                       | MCP2221A/mikroBUS B RX     | P50_TXB_RF5             |
| 51           | 51                     | SEG12/RI16/USBID/RF3                 | mikroBUS A TX              | P51_TXA_RF3             |
| 52           | 52                     | SEG40/RI30/RF2                       | mikroBUS A RX              | P52_RXA_RF2             |
| 53           | 67                     | SEG41/RI15/RF8                       | mikroBUS A Interrupt       | P67_INTA_RF6            |
| 54           | 1                      | Vbus/RF7                             | USB Vbus                   | P1_VBUS_RF7             |
| 55           | 2, 16, 30, 37, 46, 62  | Vusb3v3                              | USB Power                  | Vdd                     |
| 56           | 89                     | D-/RG3                               | USB D-                     | P89_USBDN_RG3           |
| 57           | 90                     | D+/RG2                               | USB D+                     | P90_USBDP_RG2           |
| 58           | 58                     | SEG56/SCL2/RA2                       | LED D5                     | P58_LED5_RA2            |
| 59           | 59                     | SEG57/SDA2/RA3                       | LED D6                     | P59_LED6_RA3            |
| 60           | 60                     | TDI/RA4                              | LED D7                     | P60_LED7_RA4            |
| 61           | 61                     | TDO/RA5                              | LED8                       | P61_LED8_RA5            |
| 62           | 2, 16, 30, 37, 46, 62  | Vdd                                  | Vdd                        | Vdd                     |
| 63           | 63                     | OSCI/CLKI/C12                        | Primary Oscillator In      | P63_OSCI_RC12           |
| 64           | 64                     | OSCO/CLKO/RC15                       | Primary Oscillator Out     | P64_OSICO_RC15          |
| 65           | 15, 31, 36, 45, 65, 75 | Vss                                  | Vss                        | Vss                     |
| 66           | 57                     | SEG42/RI50/SCL1/RA14                 | mikroBUS Shared I2C SCL    | P57_SCL_RA14            |
| 67           | 56                     | SEG43/RI49/SDA1/RA15                 | mikroBUS Shared I2C SDA    | P56_SDA_RA15            |
| 68           | 68                     | SEG13/RI2/U6RTS/U6BCLK/RD8           | General Purpose I/O        | P68_RD8                 |
| 69           | 69                     | SEG14/RI4/RD9                        | General Purpose I/O        | P69_RD9                 |
| 70           | 70                     | SEG15/C3IND/RI3/RD10                 | General Purpose I/O        | P70_RD10                |
| 71           | 71                     | SEG16/C3INC/RI12/RD11                | General Purpose I/O        | P71_RD11                |
| 72           | 72                     | SEG17/RI11/U6CTS/INT0/RD0            | mikroBUS A PWM             | P72_PWMA_RD0            |
| 73           | —                      | SOSCI/RC13                           | Secondary Oscillator In    | SOSCI                   |
| 74           | —                      | SOSCO/SCLKI/RI37/RC14                | Secondary Oscillator Out   | SOSCO                   |
| 75           | 15, 31, 36, 45, 65, 75 | Vss                                  | Vss                        | Vss                     |
| 76           | 76                     | SEG20/RI24/U5TX/RD1                  | General Purpose I/O        | P76_RD1                 |
| 77           | 77                     | SEG21/RI23/RD2                       | General Purpose I/O        | P77_RD2                 |
| 78           | 55                     | SEG22/RI22/SCK3/RD3                  | mikroBUS B SPI SCK         | P55_SCKB_RD12           |
| 79           | 79                     | SEG44/RI42/OCM3E/RD12                | EEPROM Chip Select         | P79_EECS_RD12           |
| 80           | 80                     | SEG45/OCM3F/RD13                     | Button 4                   | P80_S4_RD13             |
| 81           | 54                     | SEG23/RI25/SDI3/RD4                  | mikroBUS B SPI MISO        | P54_MISOA_RD4           |
| 82           | 53                     | SEG24/RI20/SDO3/RD5                  | mikroBUS B SPI MOSI        | P53_MOSIA_RD5           |
| 83           | 23                     | SEG25/C3INB/RI32/U5RX/SS3/FSYNC3/RD6 | mikroBUS B Chip Select     | P23_CSB_RD6             |
| 84           | 84                     | SEG26/C3INA/RI33/U5RTS/U5BCLK/RD7    | Button 6                   | P84_S6_RD1              |
| 85           | 85                     | VCAP                                 | VCAP                       | P85_VDDCORE_VCAP        |
| 86           | 66                     | RH0                                  | General Purpose I/O        | P66_RH0                 |
| 87           | 87                     | SEG27/U5CTS/RF0                      | General Purpose I/O        | P87_RF0                 |
| 88           | 88                     | COM4/SEG48/RI45/RF1                  | General Purpose I/O        | P88_RF1                 |
| 89           | 81                     | SEG46/RI1                            | LCD Enable                 | P81_LCDE_RG1            |
| 90           | 82                     | SEG50/RI1                            | LCD R/W (pulled low by R4) | P82_LCDRM_RG0           |
| 91           | 91                     | SEG58/AN23/OCM1E/RA6                 | LED9                       | P91_LED9_RA6            |
| 92           | 92                     | SEG59/AN22/OCM1F/RA7                 | Button 5/LED10             | P92_S5_LED10_RA7        |
| 93           | 93                     | COM3/RE0                             | LCD D0                     | P93_LCDD0_RE0           |
| 94           | 94                     | COM2/RE1                             | LCD D1                     | P94_LCDD1_RE1           |
| 95           | 95                     | SEG60/RI14                           | mikroBUS A Reset           | P95_RSTA_RG14           |
| 96           | 96                     | SEG61/OCM2E/RI12                     | VBUSON                     | P96_VBUSON_RG12         |
| 97           | 97                     | SEG62/OCM2F/RI13                     | General Purpose I/O        | P97_RG13                |
| 98           | 98                     | COM1/RE2                             | LCD D2                     | P98_LCDD2_RE2           |
| 99           | 99                     | COM0/RE3                             | LCD D3                     | P99_LCDD3_RE3           |
| 100          | 6                      | SEG63/LVDIN/RE4                      | General Purpose I/O        | P6_RE4                  |

# PIC24FJ512GU410 General Purpose Plug-In Module (PIM) Information Sheet 100-Pin TQFP

## Schematic Revision 3.0



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Daughter Cards & OEM Boards](#) category:*

*Click to view products by [Microchip](#) manufacturer:*

Other Similar products are found below :

[ADZS-21262-1-EZEXT 27911](#) [MPC5777C-416DS](#) [KITMPC5744DBEVM](#) [SPC56ELADPT144S](#) [TMDXRM46CNCD](#) [EV-ADUCM350GPIOTHZ](#) [EV-ADUCM350-BIO3Z](#) [ATSTK521](#) [BATT-MAN 2 CLICK](#) [PAC1720 CLICK](#) [BAROMETER 7 CLICK](#) [CURRENT LIMIT 6 CLICK](#) [BAROMETER 5 CLICK](#) [SMART SENS CLICK](#) [H-BRIDGE DRIVER 2 CLICK](#) [LOAD CELL 6 CLICK](#) [AMBIENT 18 CLICK](#) [3D HALL 9 CLICK](#) [ACCEL 19 CLICK](#) [TERMINAL 2 CLICK](#) [MAGNETIC ROTARY 2 CLICK](#) [CURRENT 5 CLICK](#) [ADC 17 CLICK](#) [ANGLE 8 CLICK](#) [CURRENT LIMIT 7 CLICK](#) [TFMINI CLICK](#) [BAROMETER 6 CLICK](#) [THERMO 23 CLICK](#) [CLICK SHIELD FOR PI PICO](#) [OXIMETER 5 CLICK](#) [MAGNETO 12 CLICK](#) [ADC 19 CLICK](#) [CURRENT LIMIT 5 CLICK](#) [AIR QUALITY 9 CLICK](#) [HALL CURRENT 13 CLICK](#) [THERMO 22 CLICK](#) [I2C MUX 7 CLICK](#) [RTC 16 CLICK](#) [HAPTIC 3 CLICK](#) [IR 2 CLICK](#) [BATT-MON 4 CLICK](#) [BATT-MON 3 CLICK](#) [AMBIENT 17 CLICK](#) [H-BRIDGE 10 CLICK](#) [VU METER CLICK](#) [BAROMETER 8 CLICK](#) [RTC 17 CLICK](#) [10X10 RGB CLICK](#) [1130](#)