dsPIC33AK128MC106 General Purpose Dual In-Line Module (DIM) Information Sheet

Overview

The dsPIC33AK128MC106 General Purpose DIM (EV02G02A) is designed to demonstrate the capabilities of the dsPIC33AK128MC106 family using the dsPIC33A Curiosity Platform Development Board (EV74H48A). Refer to Table 1 and Table 2 for the mapping of the physical pins on the dsPIC33AK128MC106 to the 120 pins on the DIM connector.

Not all predefined DIM signals found on the dsPIC33A Curiosity Platform Development Board are connected due to the limited amount of I/O pins available.

Information for dsPIC33AK128MC106 General Purpose DIM is available through the website at: https://www.microchip.com/EV02G02A.

Information for dsPIC33A Curiosity Platform Development Board is available through the website at: https://www.microchip.com/en-us/development-tool/EV74H48A.

TABLE 1: dsPIC33AK128MC106 DIM Mappings

DIM Pin #	Device Pin #	dsPIC33AK128MC106 I/Os	DIM Net Name / Function	Curiosity Platform Board Net Name	Platform Board Function
1	21	TMS/OA2IN-/AD1AN4/AD2ANN1/RP18/RB1	P1_AD1AN4_RB1	P1_XPRO1_9	XPLAINED PRO Extension 1 pin 9
2	20	OA2OUT/AD2AN1/CMP2A/RP17/INT0/RB0	P2_AD2AN1_RB0	P2_XPRO1_10	XPLAINED PRO Extension 1 pin 10
3	22	OA2IN+/AD2AN4/CMP2B/RP19/RB2	P3_AD2AN4_RB2	P3_XPRO1_8	XPLAINED PRO Extension 1 pin 8
4	56	RP55/ASDA1/RD6	P4_ASDA1_RD6	P4_mkB_B_XPRO1_SDA	mikroBUS B pin 11 SDA multiplexed with XPLAINED PRO Extension 1 pin 11 SDA
5	23	AD1AN11/RP25/RB8	P5_AD1AN11_RB8	P5_XPRO1_7	XPLAINED PRO Extension 1 pin 7
6	55	RP54/ASCL1/RD5	P6_ASCL1_RD5	P6_mkB_B_SPRO1_SCL	mikroBUS B pin 12 SCL multiplexed with XPLAINED PRO Extension 1 pin 12 SCL
7	36	RP40/RC7	P7_P36_RC7	P7_XPRO1_6	XPLAINED PRO Extension 1 pin 6
8			NC	P8_XPRO1_13	XPLAINED PRO Extension 1 pin 13
9	33	RP41/IOMD11/IOMF11/PCI20/RC8	P9_P50_RC8	P9_XPRO1_5	XPLAINED PRO Extension 1 pin 5
10			NC	P10_XPRO1_14	XPLAINED PRO Extension 1 pin 14
11	24	AD2AN10/RP26/RB9	P11_AD2AN10_RB9	P11_XPRO1_4	XPLAINED PRO Extension 1 pin 4
12	42	RP38/PWM4L/RC5	P12_P32_RC5	P12_XPRO1_15	XPLAINED PRO Extension 1 pin 15
13	27	PGD1/AD1AN5/CMP1C/ISRC0/IBIAS0/RP20/SDA1/RB3	P13_AD1AN5_RB3	P13_XPRO1_3	XPLAINED PRO Extension 1 pin 3
14	35	RP39/RC6	P14_P34_RC6	P14_XPRO1_16	XPLAINED PRO Extension 1 pin 16
15			NC	P15_XPRO1_1	XPLAINED PRO Extension 1 pin 1
16	43	PGD3/RP36/PWM3H/IOMD0/RC3	P16_P28_RC3	P16_XPRO1_17	XPLAINED PRO Extension 1 pin 17
17			NC	NC	NC
18	44	RP37/PWM3L/IOMD1/RC4	P18_P30_RC4	P18_XPRO1_18	XPLAINED PRO Extension 1 pin 18
19			NC	NC	NC
20			NC	P20_XPRO2_3	XPLAINED PRO Extension 1 pin 3
21			NC	P21_mkB_B_TX	mikroBUS B pin 13 UART TX
22			NC	P22_XPRO2_4	XPLAINED PRO Extentsion 2 pin 4
23			NC	P23_mkB_B_RX	mikroBUS B pin 14 UART RX
24			NC	P24_XPRO2_5	XPLAINED PRO Extension 2 pin 5
25			NC	P25_mkB_B_INT	mikroBUS B pin 15 INT
26			NC	P26_XPRO2_6	XPLAINED PRO Extension 2 pin 6
27			NC	P27_mkB_B_PWM	mikroBUS B pin 16 PWM
28	43	PGD3/RP36/PWM3H/IOMD0/RC3	P16_P28_RC3	P28_LED_0	General purpose LED 0
29			NC	P29_mkB_B_AN	mikroBUS B pin 1 AN
30	44	RP37/PWM3L/IOMD1/RC4	P18_P30_RC4	P30_LED_1	General purpose LED 1
31			NC	P31_mkB_B_RST	mikroBUS B pin 2 RST
32	42	RP38/PWM4L/RC5	P12_P32_RC5	P32_LED_2	General purpose LED 2
33			NC	P33_mkB_B_CS	mikroBUS B pin 3 CS
34	35	RP39/RC6	P14_P34_RC6	P34_LED_3	General purpose LED 3
35			NC	P35_mkB_B_SCK	mikroBUS B pin 4 SCK
36	36	RP40/RC7	P7_P36_RC7	P36_LED_4	General purpose LED 4
37			NC	P37_mkB_B_MISO	mikroBUS B pin 5 MISO
38	14	OA1IN+/AD1AN1/CMP1B/RP5/RA4	P38_AD1AN1_RA4	P38_Cap_Touch_3R	Capacitive touch pad 3 redundant
39			NC	P39_mkB_B_MOSI	mikroBUS B pin 6 MOSI
40	13	OA1IN-/AD1ANN1/AD2AN0/RP4/RA3	P40_AD2AN0_RA3	P40_Cap_Touch_3	Capacitive touch pad 3
41	16	OA3IN-/AD1AN2/RP7/RA6	P41_RA6	P41_S3	Push button switch 3
42	12	OA1OUT/AD1AN0/CMP1A/RP3/RA2	P42_AD1AN0_RA2	P42_Cap_Touch_2R	Capacitive touch pad 2 redundant
43	28	PGC1/AD2AN5/CMP2C/ISRC1/IBIAS1/RP21/SCL1/RB4	P43_RB4	P43_S2	Push button switch 2
44	9	AD2ANN3/AD2AN7/RP11/RA10	P44_AD2AN7_RA10	P44_Cap_Touch_2	Capacitive touch pad 2
45	17	OA3IN+/AD2AN2/CMP3B/RP22/RB5	P45_RB5	P45_S1	Push button switch 1

TABLE 1: dsPIC33AK128MC106 DIM Mappings (CONTINUED)

DIM Pin #	Device Pin #	dsPIC33AK128MC106 I/Os	DIM Net Name / Function	Curiosity Platform Board Net Name	Platform Board Function
46	8	AD1ANN3/AD1AN9/RP10/RA9	P46_AD1AN9_RA9	P46_Cap_Touch_1R	Capacitive touch pad 1 redundant
47	64	MCLR	P47_MCLR	P47_MCLR	Device Master clear and MCLR switch
48	7	AD2AN9/ISRC3/RP9/RA8	P48_AD2AN9_RA8	P48_Cap_Touch_1	Capacitive touch pad 1
49	1	PGD2/AD2AN6/CMP3C/ISRC2/IBIAS2/RP1/SDA2/IOMF2/RA0	P49_PGD	P49_PGD	ISCP Programming Data
50	33	RP41/IOMD11/IOMF11/PCI20/RC8	P9_P50_RC8	P50_LED_5	General purpose LED 5
51	3	PGC2/DACOUT1/AD1AN7/AD2AN3/CMP1D/CMP2D/CMP3D/RP2/SCL2/RA1	P51_PGC	P51_PGC	ISCP Programming Clock
52	34	RP42/IOMD10/SDO2/IOMF10/PCI19/RC9	P52_RC9	P52_LED_6	General purpose LED 6
53			NC	NC	NC
54	45	RP43/IOMD9/IOMF9/RC10	P54_RC10	P54_LED_7	General purpose LED 7
55			NC	P55_Board_VDD_Select	Voltage Select pin. On 3.3V devices pin is not connected as 3.3V is default.
56	63	RP61/PCI21/RD12	P56_RD12	P56_Cap_Touch_DS	Capacitive touch pad driven shield IO
57	5, 11, 19, 26, 40, 48, 60	VDD	Board_VDD	DIM_VDD	Supply voltage of attached DIM
58	5, 11, 19, 26, 40, 48, 60	VDD	Board_VDD	DIM_VDD	Supply voltage of attached DIM
59	5, 11,19, 26, 40, 48, 60	VDD	Board_VDD	DIM_VDD	Supply voltage of attached DIM
60	5, 11, 19, 26, 40, 48, 60	VDD	Board_VDD	DIM_VDD	Supply voltage of attached DIM
61	4, 10, 18, 25, 39, 47, 59	VSS	GND	GND	Ground
62	4, 10, 18, 25, 39, 47, 59	VSS	GND	GND	Ground
63	4, 10, 18, 25, 39, 47, 59	VSS	GND	GND	Ground
64	4, 10, 18, 25, 39, 47, 59	VSS	GND	GND	Ground
65	58	RP57/ASDA2/IOMD6/IOMF3/RD8	P65_ASDA2_RD8	P65_mkB_A_USB_SDA	mikroBUS A pin 11 SDA multiplexed with I2C to USB Converter pin 8 SDA
66	2	AD1AN6/RP8/IOMF1/RA7	P66_AD1AN6_RA7	P66_POT	10kOhm Potentiometer
67	57	RP56/ASCL2/IOMD7/IOMF4/RD7	P67_ASCL2_RD7	P67_mkB_A_USB_SCL	mikroBUS A pin 12 SCL multiplexed with I2C to USB Converter pin 9 SCL
68	41	PGC3/RP35/PWM4H/RC2	P75_P68_PWM4H_RC2	P68_LED_R	Red LED control for RGB LED
69	31	RP27/SCK2/RB10	P69_RP27_RB10	P69_mkB_A_TX	mikroBUS A pin 13 TX
70	51	RP49/PWM2H/IOMD2/RD0	P70_PWM2H_RD0	P70_LED_G	Green LED control for RGB LED
71	32	RP28_SDI2_RB11	P71_RP28_RB11	P71_mkB_A_RX	mikroBUS A pin 14 RX
72	53	TDO/RP51/PWM1H/IOMD4/RD2	P72_PWM1H_RD2	P72_LED_B	Blue LED Control for RGB LED
73	15	OA3OUT/AD1AN3/CMP3A/RP6/RA5	P73_RP6_RA5	P73_mkB_A_INT	mikroBUS A pin 15 INT
74	46	RP44/IOMD8/IOMF8/RC11	P87_P74_RP44_RC11	P74_QSPI_MOSI	Quad SPI Flash pin 5 MOSI
75	41	PGC3/RP35/PWM4H/RC2	P75_P68_PWM4H_RC2	P75_mkB_A_PWM	mikroBUS A pin 16 PWM
76	37	OSCO/CLKO/RP33/IOMF5/RC0	P83_P76_RP33_RC0	P76_QSPI_SCK	Quad SPI Flash pin 6 SCK
77	6	AD1AN10/RP12/RA11	P77_AD1AN10_RA11	P77_mkB_A_AN	mikroBUS A pin 1 AN
78			1k pull up	P78_QSPI_HOLD	Quad SPI Flash pin 7 HOLD
79	29	AD1ANN2/AD1AN8/RP23/RB6	P79_RP39_RB6	P79_mkB_A_RST	mikroBUS A pin 2 RST
80			1k pull up	P80_QSPI_WP	Quad SPI Flash pin 3 WP
81	30	AD2ANN2/AD2AN8/RP24/IOMF0/RB7	P81_RP40_RB7	P81_mkB_A_CS	mikroBUS A pin 3 CS
82	62	RP60/RD11	P85_P82_RD11	P82_QSPI_MISO	Quad SPI Flash pin 2 MISO
83	37	OSCO/CLKO/RP33/IOMF5/RC0	P83_P76_RP33_RC0	P83_mkB_A_SCK	mikroBUS A pin 4 SCK
84	61	RP53/PCI22/RD4	P84_RD4	P84_QPSI_CS	Quad SPI Flash pin 1 CS
85	62	RP60/RD11	P85_P82_RD11	P85_mkB_A_MISO	mikroBUS A pin 5 MISO
86			NC	P86_CAN_STBY	CAN FD Transceiver pin 8 STBY
87	46	RP44/IOMD8/IOMF8/RC11	P87_P74_RP44_RC11	P87_mkB_A_MOSI	mikroBUS A pin 6 MOSI
88			NC	P88_CAN_TXD	CAN FD Transceiver pin 1 TXD
89			NC	P89_RMII_NRST	Ethernet RMII J20 pin 10 NRST
90			NC	P90_CAN_RXD	CAN FD Transceiver pin 4 RXD
91			NC	P91_RMII_IRQ	Ethernet RMII J20 pin 9 IRQ
92			NC	P92_GPIO	General purpose IO header
93			NC	P93_RMII_MDIO	Ethernet RMII J20 pin 8 MDIO

TABLE 1: dsPIC33AK128MC106 DIM Mappings (CONTINUED)

DIM Pin #	Device Pin #	dsPIC33AK128MC106 I/Os	DIM Net Name / Function	Curiosity Platform Board Net Name	Platform Board Function
94			NC	P94_GPIO	General purpose IO header
95			NC	P95_RMII_MDC	Ethernet RMII J20 pin 7 MDC
96	54	TDI/RP52/PWM1L/IOMD5/RD3	P96_RP52_RD3	P96_UART_USB_RX	USB to UART Converter pin 5 RX
97			NC	P97_RMII_CRS_DV	Ethernet RMII J20 pin 6 CRS_DV
98	52	TCK/RP50/PWM2L/IOMD3/RD1	P98_RP50_RD1	P98_UART_USB_TX	USB to UART Converter pin 4 TX
99			NC	P99_RMII_RXER	Ethernet RMII J20 pin 5 RXER
100	50	RP59/RD10	P100_RP59_RD10	P100_UART_PKoB_RX	UART to USB back-channel through PKOB RX
101			NC	P101_RMII_RXD0	Ethernet RMII J20 pin 4 RXD0
102	49	RP58/IOMF7/RD9	P102_RP58_RD9	P102_UART_PKoB_TX	UART to USB back-channel through PKOB TX
103			NC	P103_RMII_RXD1	Ethernet RMII J20 pin 3 RXD1
104			NC	P104_TRCLK	Trace pin 1 Clock line
105			NC	P105_RMII_TXEN	Ethernet RMII J19 pin 1 TXEN
106			NC	P106_TRDAT0	Trace pin 3 Data line 0
107			NC	P107_RMII_TXD0	Ethernet RMII J19 pin 2 TXD0
108			NC	P108_TRDAT1	Trace pin 5 Data line 1
109			NC	P109_RMII_TXD1	Ethernet RMII J19 pin 3 TXD1
110			NC	P110_TRDAT2	Trace pin 7 Data line 2
111			NC	P111_RMII_CLK_IN	Ethernet RMII J19 pin 8 CLK_IN
112			NC	P112_TRDAT3	Trace pin 9 Data line 3
113	5, 11, 19, 26, 40, 48, 60	V_{DD}	Board_VDD	DIM_VDD	Supply voltage of attached DIM
114	5, 11, 19, 26, 40, 48, 60	V_{DD}	Board_VDD	DIM_VDD	Supply voltage of attached DIM
115	5, 11, 19, 26, 40, 48, 60	V_{DD}	Board_VDD	DIM_VDD	Supply voltage of attached DIM
116	5, 11, 19, 26, 40, 48, 60	V_{DD}	Board_VDD	DIM_VDD	Supply voltage of attached DIM
117	4, 10, 18, 25, 39, 47, 59	V_{SS}	GND	GND	Ground
118	4, 10, 18, 25, 39, 47, 59	V_{SS}	GND	GND	Ground
119	4, 10, 18, 25, 39, 47, 59	V_{SS}	GND	GND	Ground
120	4, 10, 18, 25, 39, 47, 59	V_{SS}	GND	GND	Ground

TABLE 2: dsPIC33AK128MC106 MCU Mappings

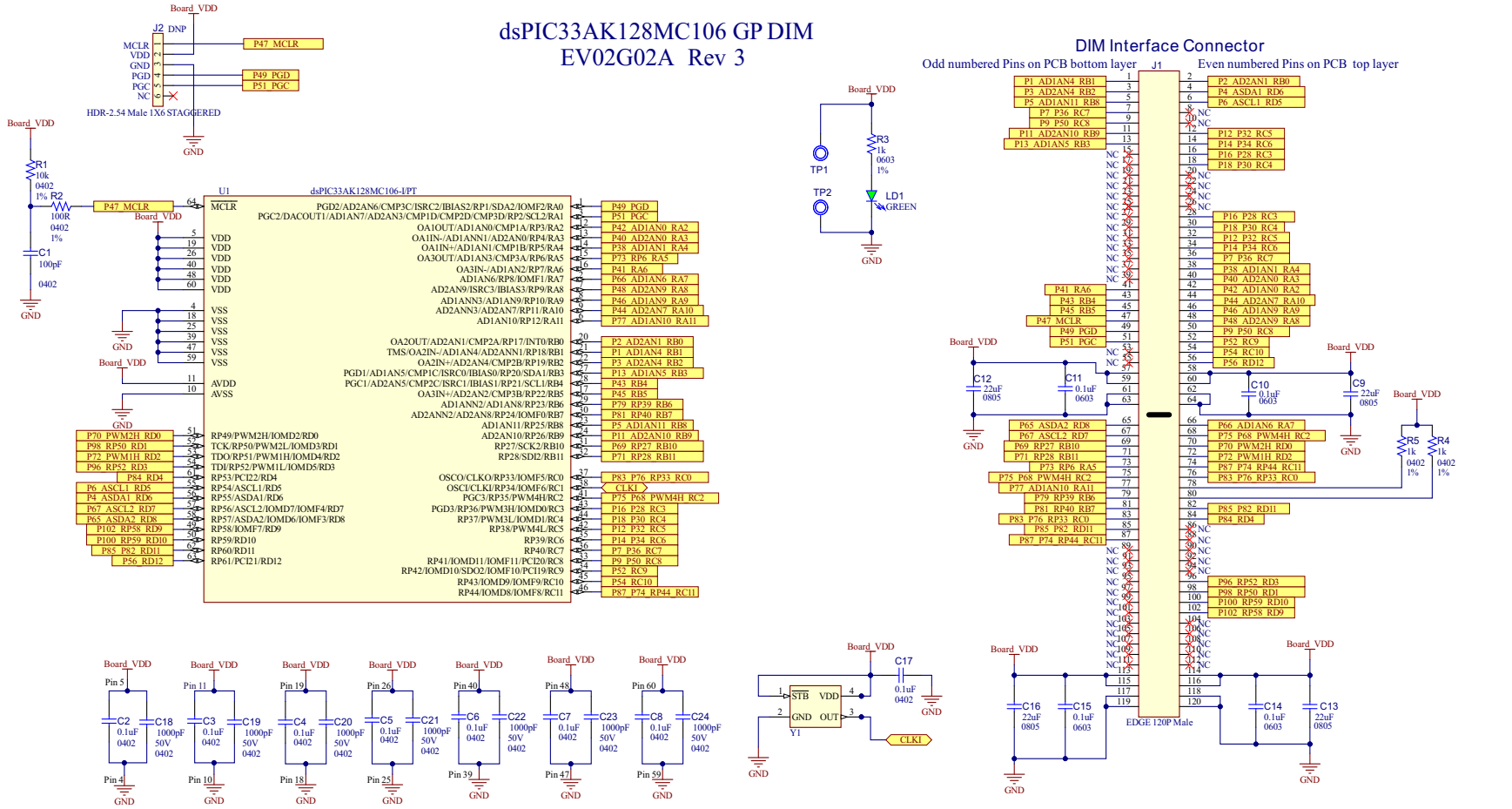
Device Pin #	DIM Pin #	dsPIC33AK128MC106 I/Os	DIM Net Name	Curiosity Platform Board Net Name	Platform Board Function
1	49	PGD2/AD2AN6/CMP3C/ISRC2/IBIAS2/RP1/SDA2/IOMF2/RA0	P49_PGD	P49_PGD	ISCP Programming Data
2	66	AD1AN6/RP8/IOMF1/RA7	P66_AD1AN6_RA7	P66_POT	10kOhm Potentiometer
3	51	PGC2/DACOUT1/AD1AN7/AD2AN3/CMP1D/CMP2D/CMP3D/RP2/SCL2/RA1	P51_PGC	P51_PGC	ISCP Programming Clock
4	61 62,63,64,117,118,119,120	VSS	GND	GND	Ground
5	57,58,59,60,113,114,115,116	VDD	Board_VDD	DIM_VDD	Supply voltage of attached DIM
6	77	AD1AN10/RP12/RA11	P77_AD1AN10_RA11	P77_mkB_A_AN	mikroBUS A pin 1 AN
7	48	AD2AN9/ISRC3/RP9/RA8	P48_AD2AN9_RA8	P48_Cap_Touch_1	Capacitive touch pad 1
8	46	AD1ANN3/AD1AN9/RP10/RA9	P46_AD1AN9_RA9	P46_Cap_Touch_1R	Capacitive touch pad 1 redundant
9	44	AD2ANN3/AD2AN7/RP11/RA10	P44_AD2AN7_RA10	P44_Cap_Touch_2	Capacitive touch pad 2
10	61 62,63,64,117,118,119,120	VSS	GND	GND	Ground
11	57,58,59,60,113,114,115,116	VDD	Board_VDD	DIM_VDD	Supply voltage of attached DIM
12	42	OA1OUT/AD1AN0/CMP1A/RP3/RA2	P42_AD1AN0_RA2	P42_Cap_Touch_2R	Capacitive touch pad 2 redundant
13	40	OA1IN-/AD1ANN1/AD2AN0/RP4/RA3	P40_AD2AN0_RA3	P40_Cap_Touch_3	Capacitive touch pad 3
14	38	OA1IN+/AD1AN1/CMP1B/RP5/RA4	P38_AD1AN1_RA4	P38_Cap_Touch_3R	Capacitive touch pad 3 redundant
15	73	OA3OUT/AD1AN3/CMP3A/RP6/RA5	P73_RP6_RA5	P73_mkB_A_INT	mikroBUS A pin 15 INT
16	41	OA3IN-/AD1AN2/RP7/RA6	P41_RA6	P41_S3	Push button switch 3
17	45	OA3IN+/AD2AN2/CMP3B/RP22/RB5	P45_RB5	P45_S1	Push button switch 1
18	61 62,63,64,117,118,119,120	VSS	GND	GND	Ground
19	57,58,59,60,113,114,115,116	VDD	Board_VDD	DIM_VDD	Supply voltage of attached DIM
20	2	OA2OUT/AD2AN1/CMP2A/RP17/INT0/RB0	P2_AD2AN1_RB0	P2_XPRO1_10	XPLAINED PRO Extension 1 pin 10
21	1	TMS/OA2IN-/AD1AN4/AD2ANN1/RP18/RB1	P1_AD1AN4_RB1	P1_XPRO1_9	XPLAINED PRO Extension 1 pin 9
22	3	OA2IN+/AD2AN4/CMP2B/RP19/RB2	P3_AD2AN4_RB2	P3_XPRO1_8	XPLAINED PRO Extension 1 pin 8
23	5	AD1AN11/RP25/RB8	P5_AD1AN11_RB8	P5_XPRO1_7	XPLAINED PRO Extension 1 pin 7
24	11	AD2AN10/RP26/RB9	P11_AD2AN10_RB9	P11_XPRO1_4	XPLAINED PRO Extension 1 pin 4
25	61 62,63,64,117,118,119,120	VSS	GND	GND	Ground
26	57,58,59,60,113,114,115,116	VDD	Board_VDD	DIM_VDD	Supply voltage of attached DIM
27	13	PGD1/AD1AN5/CMP1C/ISRC0/IBIAS0/RP20/SDA1/RB3	P13_AD1AN5_RB3	P13_XPRO1_3	XPLAINED PRO Extension 1 pin 3
28	43	PGC1/AD2AN5/CMP2C/ISRC1/IBIAS1/RP21/SCL1/RB4	P43_RB4	P43_S2	Push button switch 2
29	79	AD1ANN2/AD1AN8/RP23/RB6	P79_RP39_RB6	P79_mkB_A_RST	mikroBUS A pin 2 RST
30	81	AD2ANN2/AD2AN8/RP24/IOMF0/RB7	P81_RP40_RB7	P81_mkB_A_CS	mikroBUS A pin 3 CS
31	69	RP27/SCK2/RB10	P69_RP27_RB10	P69_mkB_A_TX	mikroBUS A pin 13 TX
32	71	RP28/SDI2/RB11	P71_RP28_RB11	P71_mkB_A_RX	mikroBUS A pin 14 RX
33	50	RP41/IOMD11/IOMF11/PCI20/RC8	P9_P50_RC8	P50_LED_5	General purpose LED 5
33	9	RP41/IOMD11/IOMF11/PCI20/RC8	P9_P50_RC8	P9_XPRO1_5	XPLAINED PRO Extension 1 pin 5
34	52	RP42/IOMD10/SDO2/IOMF10/PCI19/RC9	P52_RC9	P52_LED_6	General purpose LED 6
35	14	RP39/RC6	P14_P34_RC6	P14_XPRO1_16	XPLAINED PRO Extension 1 pin 16
35	34	RP39/RC6	P14_P34_RC6	P34_LED_3	General purpose LED 3
36	7	RP40/RC7	P7_P36_RC7	P7_XPRO1_6	XPLAINED PRO Extension 1 pin 6
36	36	RP40/RC7	P7_P36_RC7	P36_LED_4	General purpose LED 4
37	76	OSCO/CLKO/RP33/IOMF5/RC0	P83_P76_RP33_RC0	P76_QSPI_SCK	Quad SPI Flash pin 6 SCK
37	76	OSCO/CLKO/RP33/IOMF5/RC0	P83_P76_RP33_RC0	P83_mkB_A_SCK	mikroBUS A pin 4 SCK
38	NC	OSCI/CLKI/RP34/IOMF6/RC1	CLKI	NC	NC
39	61, 62,63,64,117,118,119,120	VSS	GND	GND	Ground
40	57,58,59,60,113,114,115,116	VDD	Board_VDD	DIM_VDD	Supply voltage of attached DIM
41	68	PGC3/RP35/PWM4H/RC2	P75_P68_PWM4H_RC2	P68_LED_R	Red LED control for RGB LED
41	75	PGC3/RP35/PWM4H/RC2	P75_P68_PWM4H_RC2	P75_mkB_A_PWM	mikroBUS A pin 16 PWM

TABLE 2: dsPIC33AK128MC106 MCU Mappings (CONTINUED)

Device Pin #	DIM Pin #	dsPIC33AK128MC106 I/Os	DIM Net Name	Curiosity Platform Board Net Name	Platform Board Function
42	12	RP38/PWM4L/RC5	P12_P32_RC5	P12_XPRO1_15	XPLAINED PRO Extension 1 pin 15
42	32	RP38/PWM4L/RC5	P12_P32_RC5	P32_LED_2	General purpose LED 2
43	16	PGD3/RP36/PWM3H/IOMD0/RC3	P16_P28_RC3	P16_XPRO1_17	XPLAINED PRO Extension 1 pin 17
43	28	PGD3/RP36/PWM3H/IOMD0/RC3	P16_P28_RC3	P28_LED_0	General purpose LED 0
44	18	RP37/PWM3L/IOMD1/RC4	P18_P30_RC4	P18_XPRO1_18	XPLAINED PRO Extension 1 pin 18
44	30	RP37/PWM3L/IOMD1/RC4	P18_P30_RC4	P30_LED_1	General purpose LED 1
45	54	RP43/IOMD9/IOMF9/RC10	P54_RC10	P54_LED_7	General purpose LED 7
46	74	RP44/IOMD8/IOMF8/RC11	P87_P74_RP44_RC11	P74_QSPI_MOSI	Quad SPI Flash pin 5 MOSI
46	87	RP44/IOMD8/IOMF8/RC11	P87_P74_RP44_RC11	P87_mkB_A_MOSI	mikroBUS A pin 6 MOSI
47	61 62,63,64,117,118,119,120	VSS	GND	GND	Ground
48	57,58,59,60,113,114,115,116	VDD	Board_VDD	DIM_VDD	Supply voltage of attached DIM
49	102	RP58/IOMF7/RD9	P102_RP58_RD9	P102_UART_PKoB_TX	UART to USB back-channel through PKOB TX
50	100	RP59/RD10	P100_RP59_RD10	P100_UART_PKoB_RX	UART to USB back-channel through PKOB RX
51	70	RP49/PWM2H/IOMD2/RD0	P70_PWM2H_RD0	P70_LED_G	Green LED control for RGB LED
52	98	TCK/RP50/PWM2L/IOMD3/RD1	P98_RP50_RD1	P98_UART_USB_TX	USB to UART Converter pin 4 TX
53	72	TDO/RP51/PWM1H/IOMD4/RD2	P72_PWM1H_RD2	P72_LED_B	Blue LED Control for RGB LED
54	96	TDI/RP52/PWM1L/IOMD5/RD3	P96_RP52_RD3	P96_UART_USB_RX	USB to UART Converter pin 5 RX
55	6	RP54/ASCL1/RD5	P6_ASCL1_RD6	P6_mkB_B_SPRO1_SCL	mikroBUS B pin 12 SCL multiplexed with XPLAINED PRO Extension 1 pin 12 SCL
56	4	RP55/ASDA1/RD6	P4_ASDA1_RD6	P4_mkB_B_XPRO1_SDA	mikroBUS B pin 11 SDA multiplexed with XPLAINED PRO Extension 1 pin 11 SDA
57	67	RP56/ASCL2/IOMD7/IOMF4/RD7	P67_ASCL2_RD7	P67_mkB_A_USB_SCL	mikroBUS A pin 12 SCL multiplexed with I2C to USB Converter pin 9 SCL
58	65	RP57/ASDA2/IOMD6/IOMF3/RD8	P65_ASDA2_RD8	P65_mkB_A_USB_SDA	mikroBUS A pin 11 SDA multiplexed with I2C to USB Converter pin 8 SDA
59	61, 62, 63, 64, 117, 118, 119, 120	VSS	GND	GND	Ground
60	57, 58, 59, 60, 113, 114, 115, 116	VDD	Board_VDD	DIM_VDD	Supply voltage of attached DIM
61	84	RP53/PCI22/RD4	P84_RD4	P84_QPSI_CS	Quad SPI Flash pin 1 CS
62	82	RP60/RD11	P85_P82_RD11	P82_QSPI_MISO	Quad SPI Flash pin 2 MISO
62	85	RP60/RD11	P85_P82_RD11	P85_mkB_A_MISO	mikroBUS A pin 5 MISO
63	56	RP61/PCI21/RD12	P56_RD12	P56_Cap_Touch_DS	Capacitive touch pad driven shield IO
64	47	MCLR	P47_MCLR	P47_MCLR	Device Master clear and MCLR switch

dsPIC33AK128MC106 General Purpose Dual In-Line Module (DIM) Information Sheet

FIGURE 1: Schematic Revision 3.0



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