Daughter Board

PCM-3538R Rev.B

Quick Installation Guide



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Chapter 2 Quick Installation Guide

2.1 Safety Precautions



Always completely disconnect the power cord from your board whenever you are working on it. Do not make connections while the power is on, because a sudden rush of power can damage sensitive electronic components.



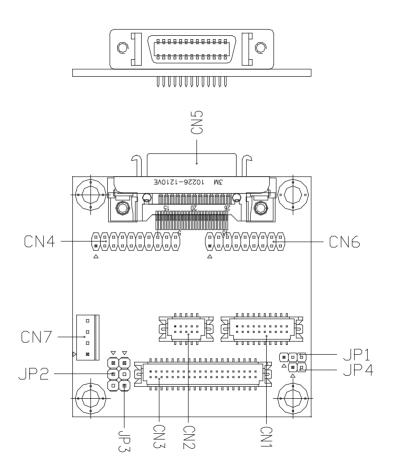
Always ground yourself to remove any static charge before touching the board. Modern electronic devices are very sensitive to static electric charges. Use a grounding wrist strap at all times. Place all electronic components on a static-dissipative surface or in a static-shielded bag when they are not in the chassis

Notice:

If PCM-3538R is incorporated with GENE-5310, the LVDS panel voltage <u>must be</u> 3.3 volt.

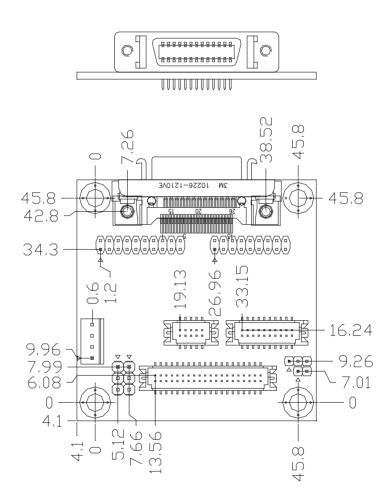
2.2 Location of Connectors and Jumpers

Locating connectors and jumpers (component side)



2.3 Mechanical Drawing

Mechanical drawing (component side)



2.4 List of Jumpers

The board has a number of jumpers that allow you to configure your system to suit your application.

The table below shows the function of each of the board's jumpers:

Label	Function
JP1	TTL-LCD Clock Selection
JP2	LCD Voltage Selection
JP3	LCD Voltage Selection
JP4	TTL-LCD clock pull high to LCD voltage selection

Jumpers

2.5 List of Connectors

The board has a number of connectors that allow you to configure your system to suit your application.

The table below shows the function of each of the board's connectors:

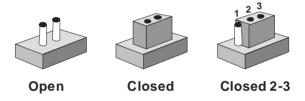
Label	Function	
CN1	TTL LCD Connector	
CN2	TTL LCD Connector	
CN3	TTL LCD connector	
CN4	Channel 1 LVDS Connector	
CN5	LVDS Connector	
CN6	Channel 2 LVDS Connector	
CN7	4P Power Connector	

Connectors

2.6 Setting Jumpers

You configure your card to match the needs of your application by setting jumpers. A jumper is the simplest kind of electric switch. It consists of two metal pins and a small metal clip (often protected by a plastic cover) that slides over the pins to connect them. To "close" a jumper you connect the pins with the clip.

To "open" a jumper you remove the clip. Sometimes a jumper will have three pins, labeled 1, 2 and 3. In this case you would connect either pins 1 and 2 or 2 and 3.



A pair of needle-nose pliers may be helpful when working with jumpers.

If you have any doubts about the best hardware configuration for your application, contact your local distributor or sales representative before you make any change.

Generally, you simply need a standard cable to make most connections.

2.7 TTL LCD Clock Selection (JP1)

JP1	Function
1-2	Reverse CLK
2-3	CLK (Default)

2.8 LCD Voltage (PPVCC) Selection (JP2 & JP3)

You can select the LCD voltage situation by setting JP2 & JP3. The following chart shows the available options.

JP2	JP3	Power Source
NC	2-3	Use LVDS source power (Default)
2-3	1-2	Use CN7 power (+5V)
1-2	1-2	Use CN7 power (+3.3V)

2.9 TTL-LCD Clock Pull High to LCD Voltage Selection(JP4)

JP4	Function	
NC	Clock doesn't pull high (Default)	
1-2	Clock pulls high to LCD voltage	

2.10 TTL LCD Connector (CN1)

Pin	Signal	Pin	Signal
1	GND	2	GND
3	O BLUE0	4	O BLUE1
5	O GREEN0	6	O GREEN1
7	O RED0	8	O RED1
9	GND	10	GND

2.11 TTL LCD Connector (CN2)

Pin	Signal	Pin	Signal
1	GND	2	GND
3	O BLUE2	4	O BLUE3
5	O BLUE4	6	O BLUE5
7	O BLUE6	8	O BLUE7
9	O GREEN2	10	O GREEN3
11	O GREEN4	12	O GREEN5
13	O GREEN6	14	O GREEN7

2.12 TTL LCD Connector (CN3)

Pin	Signal	Pin	Signal
1	PPVCC	2	PPVCC
3	GND	4	GND
5	PPVCC	6	PPVCC
7	ENBKL	8	GND
9	E BLUE0	10	E BLUE1
11	E BLUE2	12	E BLUE3
13	E BLUE4	14	E BLUE5
15	E BLUE6	16	E BLUE7
17	E GREEN0	18	E GREEN1
19	E GREEN2	20	E GREEN3
21	E GREEN4	22	E GREEN5
23	E GREEN6	24	E GREEN7
25	E RED0	26	E RED1
27	E RED2	28	E RED3
29	E RED4	30	E RED5
31	E RED6	32	E RED7
33	GND	34	GND

35	DOT CLOCK	36	VSYNC	
37	DE	38	HSYNC	
39	N.C.	40	ENBLK	

2.13 Channel 1 LVDS Connector (CN4)

Pin	Signal	Pin	Signal
1	LVDS1 TX1+	2	LVDS1 TX-
3	GND	4	GND
5	LVDS1 TXCLK+	6	LVDS1 TXCLK-
7	GND	8	LVDSVCC
9	LVDSVCC	10	LVDSVCC
11	LVDS1 TX2+	12	LVDS1 TX2-
13	GND	14	GND
15	LVDS1 TX0+	16	LVDS1 TX0-
17	LVDS1 TX3+	18	LVDS1 TX3-
19	ENBKL	20	N.C.

2.14 Channel2 LVDS Connector (CN5)

Pin	Signal	Pin	Signal
1	LVDS1 TX0-	14	LVDS1 TX0+
2	LVDS1 TX3-	15	LVDS1 TX-
3	LVDS1 TX1+	16	LVDS1 TX3+
4	LVDS1 TX2-	17	LVDS1 TX2+
5	GND	18	LVDS1 TXCLK-
6	LVDS1 TXCLK+	19	GND
7	LVDSVCC	20	LVDSVCC
8	GND	21	LVDS2 TX0-
9	LVDS2 TX0+	22	GND
10	LVDS2 TX1-	23	LVDS2 TX1+

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11	LVDS2 TX3-	24	LVDS2 TX2-	
12	LVDS2 TX2+	25	LVDS2 TX3+	
13	LVDS2 TXCLK-	26	LVDS1 TXCLK+	
-				

2.15 Channel 2 LVDS Connector (CN6)

Pin	Signal	Pin	Signal
1	LVDS2 TX1+	2	LVDS2 TX1-
3	GND	4	GND
5	LVDS2 TXCLK+	6	LVDS2 TXCLK-
7	GND	8	LVDSVCC
9	LVDSVCC	10	LVDSVCC
11	LVDS2 TX2+	12	LVDS2 TX2-
13	GND	14	GND
15	LVDS2 TX0+	16	LVDS2 TX0-
17	LVDS3 TX3+	18	LVDS2 TX3-

2.16 4P Power Connector (CN7)

Pin	Signal	Pin	Signal
1	+12V	2	GND
3	GND	4	+ 5V