

PM-1054
DUAL PCMCIA SLOT
PC/104-Plus SBC

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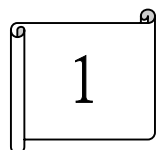
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Introduction

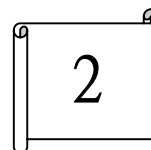
The PM-1054 is PC/104-Plus interface card with standard industrial mechanical dimension. It is equipped with a high performance 32-bit PCI bus Interface to CardBus interface chipset (Ricoh R5C476II), which can support the 32-bit CardBus (Card-32), and the 16-bit CardBus (Card-16). It supports dual PCMCIA slots. The upper slot is slot one; the lower is slot two.

1.1 Chipset

The R5C476II is a PC card control offering a single chip solution as a bridge between PCI bus and CardBus. Concerning the card control interface, the R5C476II's register set is compatible with the Intel 82365SL and Ricoh's RF5C396/366 in order to maintain backward compatibility with a existing 16-bit PC Card compliant with PCMCIA2.1/JEIDA4.2 so that the existing PC card are available.

1.2 Features

- ◆ 2 PCMCIA PC-Card 95/97 sockets. (Two type I & type II cards or one type III card)
- ◆ CardBus (Card-32) Card and 16-bit (PCMCIA2.1/JEIDA4.2) Card are available simultaneously.
- ◆ PCI Bus Interface.
- ◆ PCI signals -- Interrupt, IDSEL, Clock, REQ, GNT are selectable.
- ◆ Socket voltage control. (5.0V, 3.3V auto-detect)



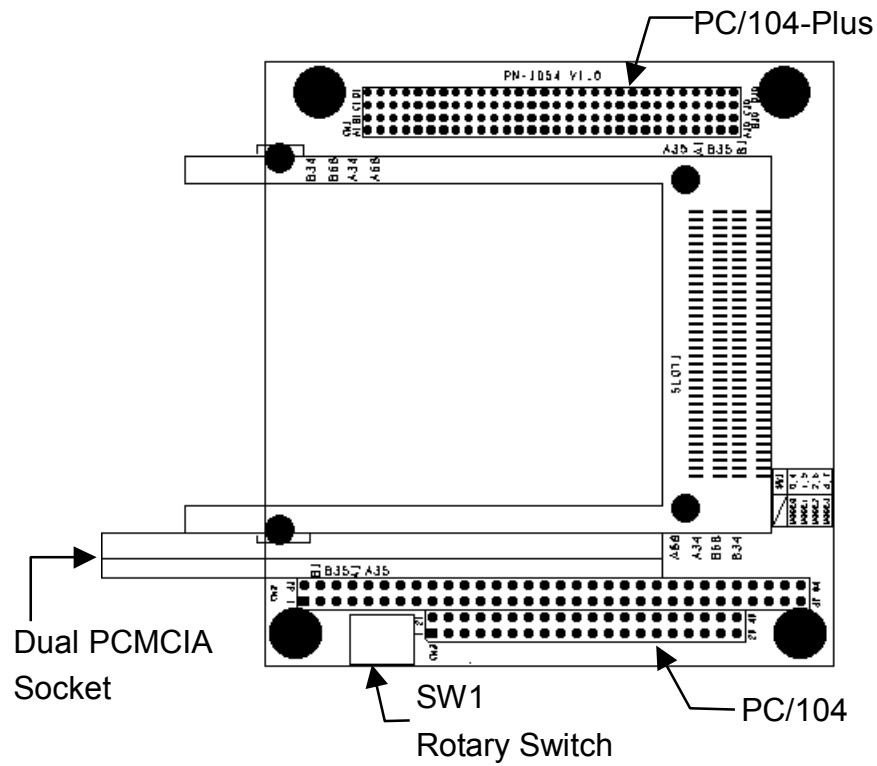
Installation

2.1 Hardware Installation

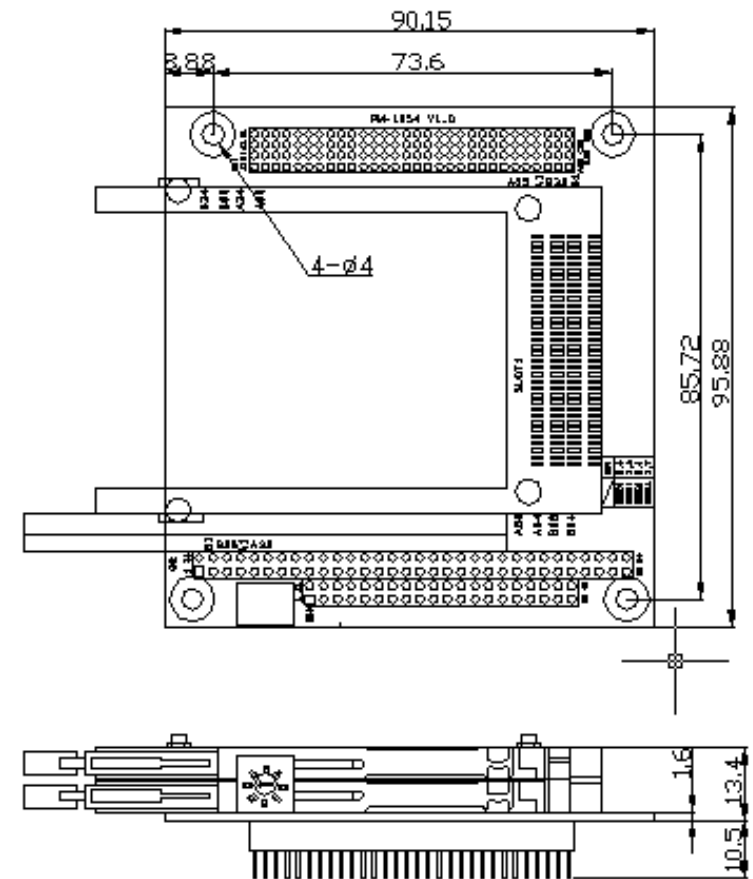
Installation of the PC104-Plus modules on CPU card is quick and simple. The following steps describe how to mount the PC/104-Plus modules:

1. Do any jumper setting or cable connection before the modules is mounted onto the CPU card. Once the PC/104-Plus module is mounted, you may have difficulty in accessing them.
 2. Plug in the PC/104-Plus module to the connectors carefully.
 3. Using the four mounting spacers and screws to secure the PC/104-Plus module
- ✓ Note: Ground yourself to remove any static charge before touching your PM-1054. You can do it by using a grounded wrist strap at all times or by frequently touching any conducting materials that is connected to the ground.

2.2 PM-1054 Board Layout



PM-1054 Board Layout



PM-1054 Board Dimension

2.3 Operation Mode Selection

- SW1: Rotary Switch Setting

SW1	Position
Mode0	0, 4
Mode1	1, 5
Mode2	2, 6
Mode3	3, 7

- Operation Mode Description

	PCICLK	IDSEL	INT0	INT1	REQ	GNT
Mode0	PCICLK0	IDSEL0	INTA	INTB	REQ0	GNT0
Mode1	PCICLK1	IDSEL1	INTB	INTC	REQ1	GNT1
Mode2	PCICLK2	IDSEL2	INTC	INTD	REQ2	GNT2
Mode3	PCICLK3	IDSEL3	INTD	INTA	REQ3*	GNT3*

Note* REQ3# and GNT#3 are not signals defined in PC104-plus.

Do not use MODE3 if your card does not have these signals on PC104-plus connector.

2.4 OS. Support

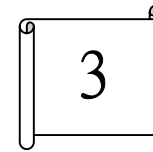
PM-1054 is fully supported by following OS. The drivers are naturally included in these OS.

[WINDOWS 98 SE]

[WINDOWS ME]

[WINDPWS 2000]

[WINDOWS XP]



Connection

3.1 CardBus Connector

The PM-1054 provides a CardBus interface for CardBus devices and PCMCIA devices.

- CardBus Connector

PIN NO.	FUNCTION	PIN NO.	FUNCTION
1	GND	2	D3
3	D4	4	D5
5	D6	6	D7
7	CE1#	8	A10
9	OE#	10	A11
11	A9	12	A8
13	A13	14	A14
15	WE#	16	READY
17	VCC	18	VCC
19	A16	20	A15
21	A12	22	A7
23	A6	24	A5
25	A4	26	A3
27	A2	28	A1
29	A0	30	D0
31	D1	32	D2
33	WP	34	GND
35	GND	36	CD1#
37	D11	38	D12
39	D13	40	D14
41	D15	42	CE2#
43	VS1#	44	IORD#
45	IOWR#	46	A17
47	A18	48	A19
49	A20	50	A21
51	VCC	52	VCC
53	A22	54	A23

55	A24	56	A25
57	VS2#	58	RESET
59	WAIT#	60	INPACK#
61	REG#	62	BVD2
63	BVD1	64	D8
65	D9	66	D10
67	CD2#	68	GND
69	GND	70	GND

3.2 PCI Bus Connector

- CN1 :PCI Bus Connector

PIN	DEFINE	PIN	DEFINE	PIN	DEFINE	PIN	DEFINE
A1	GND	B1	SIRQ *	C1	+5V	D1	AD00
A2	VIO	B2	AD02	C2	AD01	D2	+5V
A3	AD05	B3	GND	C3	AD04	D3	AD03
A4	CBE0#	B4	AD07	C4	GND	D4	AD06
A5	GND	B5	AD09	C5	AD08	D5	GND
A6	AD11	B6	VIO	C6	AD10	D6	M66EN
A7	AD14	B7	AD13	C7	GND	D7	AD12
A8	+3.3V	B8	CBE1#	C8	AD15	D8	+3.3V
A9	SERR#	B9	GND	C9	SB0	D9	PAR
A10	GND	B10	PERR#	C10	+3.3V	D10	SDONE
A11	STOP#	B11	+3.3V	C11	LOCK#	D11	GND
A12	+3.3V	B12	TRDY#	C12	GND	D12	DEVDEL#
A13	FRAME#	B13	GND	C13	IRDY#	D13	+3.3V
A14	GND	B14	AD16	C14	+3.3V	D14	CBE2#
A15	AD18	B15	+3.3V	C15	AD17	D15	GND
A16	AD21	B16	AD20	C16	GND	D16	AD19
A17	+3.3V	B17	AD23	C17	AD22	D17	+3.3V
A18	IDSEL0	B18	GND	C18	IDSEL1	D18	IDSEL2
A19	AD24	B19	CBE3#	C19	VIO	D19	IDSEL3
A20	GND	B20	AD26	C20	AD25	D20	GND
A21	AD29	B21	+5V	C21	AD28	D21	AD27
A22	+5V	B22	AD30	C22	GND	D22	AD31
A23	REQ0#	B23	GND	C23	REQ1#	D23	VIO
A24	GND	B24	REQ2#	C24	+5V	D24	GNT0#
A25	GNT1#	B25	VIO	C25	GNT2#	D25	GND
A26	+5V	B26	PCICLK0	C26	GND	D26	PCICLK1
A27	PCICLK2	B27	+5V	C27	PCICLK3	D27	GND
A28	GND	B28	INTD#	C28	+5V	D28	RST#
A29	+12V	B29	INTA#	C29	INTB#	D29	INTC#
A30	-12V	B30	REQ3#	C30	GNT3#	D30	GND

*<Note> SIRQ: Serial IRQ. PM-1054 can only work properly if mainboard supports Serial IRQ signal.