

Introduction

The ADAM-3952/JS2 terminal board provides convenient and reliable signal wiring for PCI-1240/PCM-3240. Its 20 pin SCSI ribbon type connectors give you the quick and easy way to connect to the Mitsubishi MR-J2S series motors.

Features

- Low-cost terminal board for PCI-1240/PCM-3240 with 100-pin SCSI-II connector.
- 20 pin SCSI ribbon type connectors for easy connection to Panasonic Minus A motors
- Selectable onboard power source
- Onboard LED indicator
- Industrial-grade screw-clamp terminal blocks for heavy-duty and reliable connections.
- DIN-rail mounting case for easy mounting.
- Dimensions (W x L x H):121 x 202 x 45mm

(4.76" x 7.95" x 1.77")

Declaration of Conformity

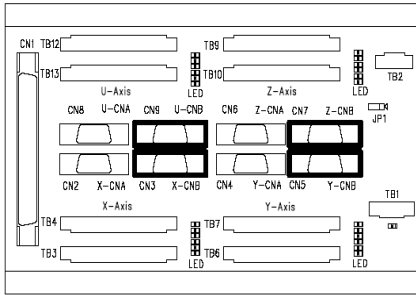
FCC Class A

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CE

This equipment is CE certified.

Board Components



ADAM-3952/JS2

Slot	Description
CN1:	100-pin SCSI-II connector for connection with PCI-1240U/PCM-3240
JP1:	Jumper for ADAM-3952/JS2 power source selection
TB1:	Detachable screw terminal for emergency signal
TB2:	Detachable screw terminal for ADAM-3952/JS2 power source
TB3~TB4:	Detachable screw terminal for X-axis wiring
TB6~TB7:	Detachable screw terminal for Y-axis wiring
TB9~TB10:	Detachable screw terminal for Z-axis wiring
TB12~TB13:	Detachable screw terminal for U-axis wiring
n-CNA:	20 pins SCSI ribbon type connector for n-axis (n=X, Y, Z, U)
n-CNB:	20 pins SCSI ribbon type connector for n-axis (n=X, Y, Z, U)
LED:	LED status display

Optional Cables

- PCL-101100M-1: SCSI-100 Shielded Cable, 1m
- PCL-101100M-3: SCSI-100 Shielded Cable, 3m
- PCL-10120M-2: SCSI-20 Ribbon-Type Cable, 2m

Notes

For more information on this and other Advantech products, please visit our websites at:

<http://www.advantech.com>

<http://www.advantech.com/eAutomation>

For technical support and service:

<http://www.advantech.com.tw/eservice>

This manual is for ADAM-3952/JS2.

Part No: 2003395220 (1st Ed) October 2006

Component Descriptions and Settings

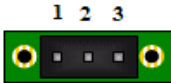
JP1 Jumper Setting



Power by external source (Default)

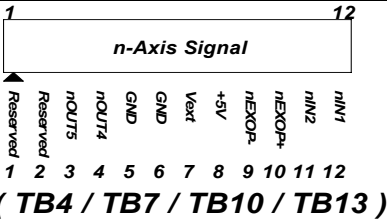
Vext Vp Vint

TB1 Emergency Stop Input Connector



Pin	Label	Description
1	Vext	24V±10%
2	EMG	Emergency Input
3	GND	GND

Detachable Screw Terminal



Note: Do not use any reserved signal.

Pin	Label	Direction	Description
1	Reserved	-	-
2	Reserved	-	-
3	nOUT5	Output	General Output at n axis
4	nOUT4	Output	General Output at n axis
5	GND	-	Ground
6	GND	-	Ground
7	Vext	Input	External Power (12~24V _{DC})
8	+5V	Output	+5V Output
9	nEXOP-	Input	Jog at the + Direction of n axis
10	nEXOP+	Input	Jog at the - Direction of n axis
11	nIN2	Input	Deceleration/Instant Stop at n axis
12	nIN1	Input	Deceleration/Instant Stop at n axis

Note: n=X, Y, Z, U

JP1 Jumper Setting



Power by internal source

Vext Vp Vint

Note: The internal source is from servo driver.

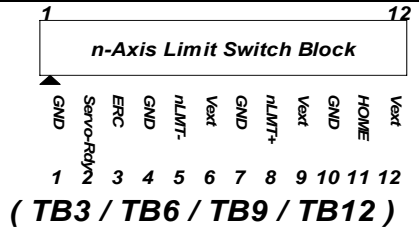
When ADAM-3952/J2S connects more than one servo driver, it will automatically select the largest driver voltage as its power.

TB2 External Power Input Connector



Pin	Label	Description
1	Vext	24V±10%
2	GND	GND

Detachable Screw Terminal



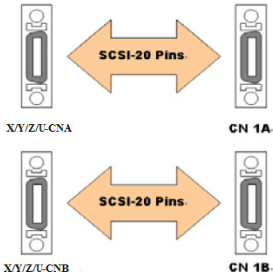
Pin	Label	Direction	Description
1	GND	-	Ground
2	Servo-Rdy	Output	Servo Ready
3	ERC	Output	Driver Error Counter Clear
4	GND	-	Ground
5	nLMT-	Input	-Direction Limit at n axis
6	Vext	Input	External Power (12~24V _{DC})
7	GND	-	Ground
8	nLMT+	Input	+Direction Limit at n axis
9	Vext	Input	External Power (12~24V _{DC})
10	GND	-	Ground
11	HOME	Input	Home
12	Vext	Input	External Power (12~24V _{DC})

Note: n=X, Y, Z, U

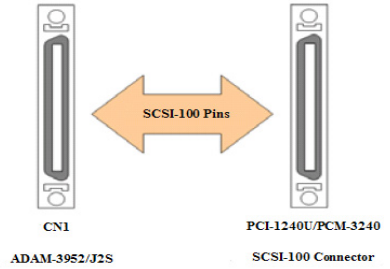
Servo-Rdy: This output(transistor) turns on, when the main power is on(for both the driver and motor) and no alarm is active

ERC: Clears the position error counter. Connect this signal to nOUT4 or nOUT5 to control this signal.

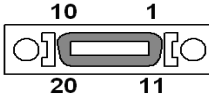
X/Y/Z/U-CNA & X/Y/Z/U-CNB Connector to Servo Driver



CN1 Connector to PCI-1240U/PCM-3240



X/Y/Z/U-CNA & X/Y/Z/U-CNB Pin Descriptions



CN1A and CN2A			CN1B and CN2B		
PIN	Label	Used	PIN	Label	Used
1	LG	No	1	LG	No
2	NP	Yes	2		No
3	PP	Yes	3	VDD	No
4	P15R	No	4	DO1	No
5	LZ	Yes	5	SON	Yes
6	LA	Yes	6	TLC	No
7	LB	Yes	7		No
8	CR	Yes	8	PC	No
9	COM	Yes	9	TL	No
10	SG	Yes	10	SG	Yes
11	OPC	No	11	P15R	No
12	NG	Yes	12	TLA	No
13	PG	Yes	13	COM	Yes
14	OP	No	14	RES	Yes
15	LZR	Yes	15	EMG	Yes
16	LAR	Yes	16	LSP	Yes
17	LBR	Yes	17	LSN	Yes
18	INP	Yes	18	ALM	Yes
19	RD	Yes	19	ZSP	Yes
20	SG	Yes	20	SG	Yes

Note:

SON (Servo-on) is connected to PCI-1240U's OUT6.

RES (Reset-Alarm) is connected to PCI-1240U's OUT7.

LED Status Display

Label	Description
INPOS	Servo In Position
SVON	Servo On
ALARM	Servo Alarm
HOME	Home Signal Input
LMT+	Plus End Limit
LMT-	Minus End Limit
PWR	Power
EMG	Emergency

CN1 Pin Descriptions

YP-N	50	100	UP-N
YP-P	49	99	UP-P
YP+N	48	98	UP+N
YP+P	47	97	UP+P
YOUT7	46	96	UOUT7
YOUT6	48	95	UOUT6
YOUT5	44	94	UOUT5
YOUT4	43	93	UOUT4
GND	42	92	GND
XP-N	41	91	ZP-N
XP-P	40	90	ZP-P
XP+N	39	89	ZP+N
XP+P	38	88	ZP+P
XOUT7	37	87	ZOUT7
XOUT6	36	86	ZOUT6
XOUT5	35	85	ZOUT5
XOUT4	34	84	ZOUT4
GND	33	83	GND
YEXOP-	32	82	UEXOP-
YEXOP+	31	81	UEXOP+
XEXOP-	30	80	ZEXOP-
XEXOP+	29	79	ZEXOP+
YINON	28	78	UINON
YINOP	27	77	UINOP
YECBN	26	76	UECBN
YECBP	25	75	UECBP
YECAN	24	74	UECAN
YECAP	23	73	UECAP
Y_ALARM	22	72	U_ALARM
Y_INPOS	21	71	U_INPOS
XINON	20	70	ZINON
XINOP	19	69	ZINOP
XECBN	18	68	ZECBN
XECBP	17	67	ZECBP
XECAN	16	66	ZECAN
XECAP	15	65	ZECAP
X_ALARM	14	64	Z_ALARM
X_INPOS	13	63	Z_INPOS
Y_IN3	12	62	U_IN3
Y_IN2	11	61	U_IN2
Y_IN1	10	60	U_IN1
YLMT-	9	59	ULMT-
YLMT+	8	58	ULMT+
X_IN3	7	57	Z_IN3
X_IN2	6	56	Z_IN2
X_IN1	5	55	Z_IN1
XLMT-	4	54	ZLMT-
XLMT+	3	53	ZLMT+
EMG	2	52	NC
VEX	1	51	VEX