

Chapter 8 on Programming Examples includes an example illustrating the use of RST 7.5 interrupt. In a similar way, user can make use of the other interrupts.

TRAP input is connected to Timer 0 output for single step implementation.

MPS 85-3 does not make use of HOLD signal. It is grounded through a 4.7K ohm resistor. An off-board signal can drive this line via the connector J3. This can be done by opening the jumper connection JP4 A- B and shorting JP4 B-C. As already noted in section 5.2, HOLDA from CPU disables on-board buffers. Hence user can implement multiprocessor designs (for eg. DMA systems ) without any problems.

## 5.11 BUS EXPANSION

MPS 85-3 permits easy expansion of the system by providing all the necessary signals on two connectors, J3 and J4. The signals are STD bus compatible and thus user can easily expand the capabilities of MPS 85-3.

## 5.12 CONNECTOR DETAILS

There are six connectors on MPS 85-3 in addition to the power connector J5. Four of them (J1,J2,J3,J4) are 26 pin ribbon cable connectors. J1 and J2 are connected to parallel I/O lines from two 8255s. J3 and J4 are used mainly for CPU expansion. 9-pin, female D-type connector J6 provides the signals for RS-232C compatible serial interface.

The signal definitions on all these connectors are listed below. (This information is available in Appendix B also).

**CONNECTORS J1&J2**

<b>PIN NO ON J1/J2</b>	<b>8255 PIN</b>	<b>FUNCTION</b>	<b>PIN NO ON J1/J2</b>	<b>8255 PIN</b>	<b>FUNCTION</b>
1	13	PC4	14	19	PB1
2	12	PC5	15	38	PA6
3	16	PC2	16	37	PA7
4	17	PC3	17	40	PA4
5	14	PC0	18	39	PA5
6	15	PC1	19	2	PA2
7	24	PB6	20	1	PA3
8	25	PB7	21	4	PA0
9	22	PB4	22	3	PA1
10	23	PB5	23	11	PC6



11	20	PB2	24	10	PC7
12	21	PB3	25	26	+5V
13	18	PB0	26	7	GND

## CONNECTOR J3

PIN NO.	SIGNAL	PIN NO.	SIGNAL
1	BS0	2	BS1
3	RST 6.5	4	KBRST IN
5	INTR	6	RDY
7	MOD IO/M*	8	BHOLD
9	BA15	10	BA14
11	BA13	12	BA12
13	BA11	14	BA10
15	BA9	16	BA8
17	VCC	18	VCC
19	BA7	20	BA6
21	BA5	22	BA4
23	BA3	24	BA2
25	BA1	26	BA0

## CONNECTOR J4

PIN NO.	SIGNAL	PIN NO.	SIGNAL
1	CLK1	2	GATE1
3	OUT2	4	GATE2
5	CLK2	6	OUT1
7	RST 5.5	8	GND
9	BIO/M*	10	BCLK OUT
11	ALE	12	BRST OUT
13	BWR*	14	BHLDA
15	BRD*	16	BINTA*
17	GND	18	GND
19	BD1	20	BD0
21	BD3	22	BD2
23	BD5	24	BD4
25	BD7	26	BD6

