

TC-200 User's Guide

Hi-Speed

Turbo Serial Card

- * Two Serial Ports**
 - Each with 16 bytes FIFO (16550), or 32 bytes FIFO (16650)**
- * Individually Configurable Interrupts**
 - IRQ 3, 4, 5, 7, 9, 10, 11, 12, 14, 15**
- * Selectable Clock Frequency to Support Fast Data Rate**
 - 115.2K (1.8432MHz)**
 - 230K (3.6864MHz)**
 - 460K (7.3728MHz)**
- * COM1 to COM7 Independently Selectable**
- * Maximum 460K BPS Transmit/Receive Operation**

TC-200 Turbo Serial Card
Two Turbo Serial Ports

INTRODUCTION:

The TC-200 supports two serial (RS-232) ports with FIFO. The transmit/receive FIFO allows greater latency time in interrupt servicing when using in a multitasking environment, or high speed data transfer.

This TURBO SERIAL CARD supports three frequency. It provides the choices of 1.8432 MHz, 3.6864 MHz and 7.3728 MHz on each port to support 115.2K/230.4K/460.8K Bps respectively. The following table shows the Baud Rate Generator Programming table.

16 * CLOCK DIVISOR "Decimal"	1.8432MHz Baud Rate	3.6864MHz Baud Rate	7.3728MHz Baud Rate
2304	50	100	200
1536	75	150	300
768	150	300	600
384	300	600	1200
192	600	1200	2400
96	1200	2400	4800
48	2400	4800	9600
24	4800	9600	19.2K
16	7200	14.4K	28.8K
12	9600	19.2K	38.4K
6	19.2K	38.4K	76.8K
3	38.4K	76.8K	153.6K
2	57.6K	115.2K	230.4K
1	115.2K	230.4K	460.8K

This card also provides ten levels extended interrupts. (IRQ3 to IRQ5, IRQ7, IRQ9 to IRQ12 and IRQ14 to IRQ15).

FEATURES:

- * 16 bytes transmit FIFO and 16 bytes receive FIFO with error flags on two serial ports. The 16 bytes FIFO allow greater latency time in interrupt servicing when using in a multitasking environment. (16650 with 32 byte FIFO).
- * Two programmable serial input/output channel, software compatible with 16C550.
- * Supports MODEM control signals, (CTS*, RTS*, DSR*, DTR*, RI*, CD*).
- * Independent configurable COM1 to COM7 on two serial ports [port address at 3F8H (COM1), 2F8H (COM2), 3E8H (COM3) 2E8H (COM4), 2F0H (COM5), 3E0H (COM6), 2E0H (COM7)].
- * Ten independent IRQ levels for two serial ports (IRQ3, 4, 5, 7, 9, 10, 11, 12, 14, 15)
- * Provide three frequency of 1.8432MHz, 3.6864MHz and 7.3728 MHz for each port to generate baud rate.
- * Serial data transfer rate up to 460,800 Buad.
- * All functions can be disabled by jumpers.
- * Host interface: AT-BUS interface.
- * Form factor: 145mm * 63mm.

CONFIGURATION - JUMPER SETTING:**SERIAL PORT COM-A JUMPER SETTING:****(A) Address setting (JP1)**

COM-A	PORT ADDRESS	JUMPER SETTING
COM 1	3F8H - 3FFH	COM 1 1=C 2
* COM 2	2F8H - 2FFH	COM 2 1=C 2
COM 3	3E8H - 3EFH	COM 3 1=C 2
COM 4	2E8H - 2EFH	COM 4 1=C 2
COM 5	2F0H - 2F7H	COM 5 1=C 2
COM 6	3E0H - 3E7H	COM 6 1=C 2
COM 7	2E0H - 2E7H	COM 7 1=C 2
DISABLE	X	1 C 2

(B) IRQ setting (JP2)

COM-A IRQ	JUMPER SETTING JP2
* IRQ 3	IRQ 3 1=C 2
IRQ 4	IRQ 4 1=C 2
IRQ 5	IRQ 5 1=C 2
IRQ 7	IRQ 7 1=C 2
# IRQ 9	IRQ 9 1=C 2
IRQ 10	IRQ 10 1=C 2
IRQ 11	IRQ 11 1=C 2
IRQ 12	IRQ 12 1=C 2
IRQ 14	IRQ 14 1=C 2
IRQ 15	IRQ 15 1=C 2

SERIAL PORT COM-B JUMPER SETTING:**(A) Address setting (JP1)**

COM-B	PORT ADDRESS	ADDRESS SETTING
* COM 1	3F8H - 3FFH	COM 1 1 C=2
COM 2	2F8H - 2FFH	COM 2 1 C=2
COM 3	3E8H - 3EFH	COM 3 1 C=2
COM 4	2E8H - 2EFH	COM 4 1 C=2
COM 5	2F0H - 2F7H	COM 5 1 C=2
COM 6	3E0H - 3E7H	COM 6 1 C=2
COM 7	2E0H - 2E7H	COM 7 1 C=2
DISABLE	X	1 C 2

(B) IRQ setting (JP2)

COM-B IRQ	JUMPER SETTING JP2
* IRQ 3	IRQ 3 1 C=2
IRQ 4	IRQ 4 1 C=2
IRQ 5	IRQ 5 1 C=2
IRQ 7	IRQ 7 1 C=2
# IRQ 9	IRQ 9 1 C=2
IRQ 10	IRQ 10 1 C=2
IRQ 11	IRQ 11 1 C=2
IRQ 12	IRQ 12 1 C=2
IRQ 14	IRQ 14 1 C=2
IRQ 15	IRQ 15 1 C=2

FREQUENCY SELECT (JP3)

(A)COM-A Frequency select:

JP3	FREQUENCY
7.3 1==2	7.3728 MHz
3.6 3==4	3.6864 MHz
1.8 5==6	1.8432 MHz

(B)COM-B Frequency select:

JP3	FREQUENCY
7.3 1==2	7.3728 MHz
3.6 3==4	3.6864 MHz
1.8 5==6	1.8432 MHz

NOTES:

== : SHORT.

X : DON'T CARE.

* : FACTORY DEFAULT.

: IRQ 9 FOR PC/AT . IRQ 2 FOR PC/XT
SYSTEM.

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