

**AT MULTI I/O
PLUS
IDE & FDD CONTROLLER**

MODEL : CA8962

User's Manual

The Super I/O card is the most advanced controller card built-in with both AT I/O and IDE /FDD functions. It offers enhanced performance and compact in size while retaining a high degree of compatibility with your IBM PC/AT and compatible systems.

The Super I/O card is equipped with 2 serial ports, a parallel port, a bus mouse port, game port, an IDE hard disk controller and a floppy disk controller. All of the ports can be enabled or disabled according to your system requirements.

With Super I/O card you can save a slot and shorten the installation time for setting up of your system.

FEATURES

AT I/O PORTION

- Two asynchronous serial ports JP3 & JP4 which can be configured as COM1 / COM3 and COM2 / COM4 respectively.
- One parallel printer port CN2 which can be selected as LPT1 (378) or LPT2 (278)
- One bus mouse port JP10
- One game port CN1

IDE / FDD PORTION

- Supports up to two "AT BUS" (IDE) hard disk drives with 16 bits data transfer interface.
- Supports up to two floppy disk drives of any combination of 360K, 1.2M - 5.25" and 720K, 1.44M - 3.5"

CHECKLIST

Your Super I/O card controller card contains the following:

- The Super I/O card
- User's Manual
- Two 10 to 9/25 ways interface cables for CA8392:COM1 & COM2
- 34 ways flat cable for FDD
- 40 ways flat cable for IDE

INSTALLATION PROCEDURE

- Switch off all power of your system including any connected peripheral devices.
- Remove the cover of your system and the screw of a bracket from 16 bits empty slot.
- Carefully set the jumper of Super I/O card according to your system requirements.
- Plug the Super I/O card into the empty slot as mentioned at above line up the adapter with the screw hole in the rear plate of your system.
- Screw the bracket to fix the Super I/O card and connect the signal cables with the adapter and the external devices to be connected.
- Replace your system cover and the installation procedure is completed.

JP6 - I/O SETTING**Select**

- A LPT1 (378) for printer port
 B LPT2 (278) for printer port

- A Select COM2 for JP4
 B Select COM4 for JP4

- A Enable the printer port
 B Disable the printer port

- A Enable COM2/COM4
 B Disable COM2/COM4

- A Enable COM1/COM3
 B Disable COM1/COM3

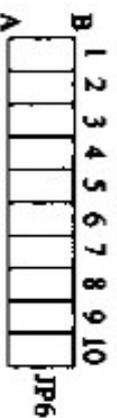
- A Select COM1 for JP3
 B Select COM3 for JP3

- A Enable FDD controller
 B Disable FDD controller

- A Enable IDE controller
 B Disable IDE controller

- A Enable game port
 B Disable game port

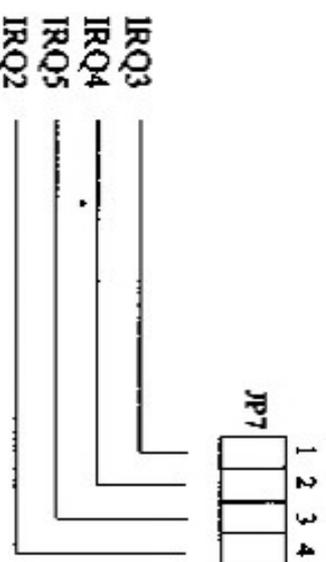
- A Enable bus mouse port
 B Disable bus mouse port

**JP7 - INTERRUPT LEVEL FOR PRINTER PORT****Select**

- 2 - 3 IRQ7 for printer port (default for LPT1)
 1 - 2 IRQ5 for printer port (default for LPT2)

JP8 - INTERRUPT LEVEL FOR SERIAL PORTS

- A SIDE Select interrupt level for COM1/COM3 (default IRQ4)
 B SIDE Select interrupt level for COM2/COM4 (default IRQ3)

**JP7 - INTERRUPT LEVEL FOR BUS MOUSE**

IN ASSIGNMENT OF PORTS

PARALLEL PRINTER PORT (CN2)

| LINE NAME | DB-25 (FEMALE) CONNECTOR PIN | IBM MATRIX PRINTER |
|-------------|------------------------------|--------------------|
| STROBE (-) | 1 | 1 |
| D0 | 2 | 2 |
| D1 | 3 | 3 |
| D2 | 4 | 4 |
| D3 | 5 | 5 |
| D4 | 6 | 6 |
| D5 | 7 | 7 |
| D6 | 8 | 8 |
| D7 | 9 | 9 |
| ACK (-) | 10 | 10 |
| BUSY | 11 | 11 |
| PE | 12 | 12 |
| SLCT | 13 | 13 |
| AUTOFD (-) | 14 | 14 |
| ERROR (-) | 15 | 32 |
| INIT (-) | 16 | 31 |
| SLCT IN (-) | 17 | 36 |
| GROUND | 18-25 | 16, 19-30, 33 |
| NC | | 15, 18, 34 |

SERIAL PORT (JP3 & JP4)

| SIGNAL NAME | PIN NUMBER | RS-232C INTER-FACE PIN NUMBER |
|-------------|------------|-------------------------------|
| CN (IN) | 1 | 8 |
| RX (IN) | 2 | 3 |
| TX (OUT) | 3 | 2 |
| DTR (OUT) | 4 | 20 |
| SG | 5 | 7 |
| DSR (IN) | 6 | 6 |
| RTS (OUT) | 7 | 4 |
| CTS (IN) | 8 | 5 |
| RI (IN) | 9 | 22 |

GAME PORT (CN1)

| PIN NUMBER | LINE NAME |
|----------------|------------|
| 2 | BUTTON 4 |
| 3 | POSITION 0 |
| 6 | POSITION 1 |
| 7 | BUTTON 5 |
| 1, 8, 9, 15 | VCC |
| 4, 5, 12 | GROUND |
| 10, 11, 13, 14 | NC |

BUS MOUSE PORT (PP10)

| PIN NUMBER | LINE NAME |
|------------|-----------|
| 1 | XDA |
| 2 | VCC |
| 3 | XDB |
| 4 | YDA |
| 5 | YDB |
| 6 | LB |
| 7 | MB |
| 8 | RB |
| 9 | GROUND |
| 10 | NC |

| PIN | SIGNAL NAME |
|----------------|------------------|
| 2 | REDUCED WRITE |
| 4 | UNUSED |
| 6 | UNUSED |
| 8 | INDEX |
| 10 | MOTOR ENABLE 1 |
| 12 | DRIVE SELECT 0 |
| 14 | DRIVE SELECT 1 |
| 16 | MOTOR ENABLE 0 |
| 18 | DIRECTION SELECT |
| 20 | STEP |
| 22 | WRITE DATA |
| 24 | WRITE ENABLE |
| 26 | TRACK 0 |
| 28 | WRITE PROTECT |
| 30 | READ DATA |
| 32 | HEAD 1 SELECT |
| 34 | DISKETTE CHANGE |
| 1, 3, 5 ... 33 | GROUND |

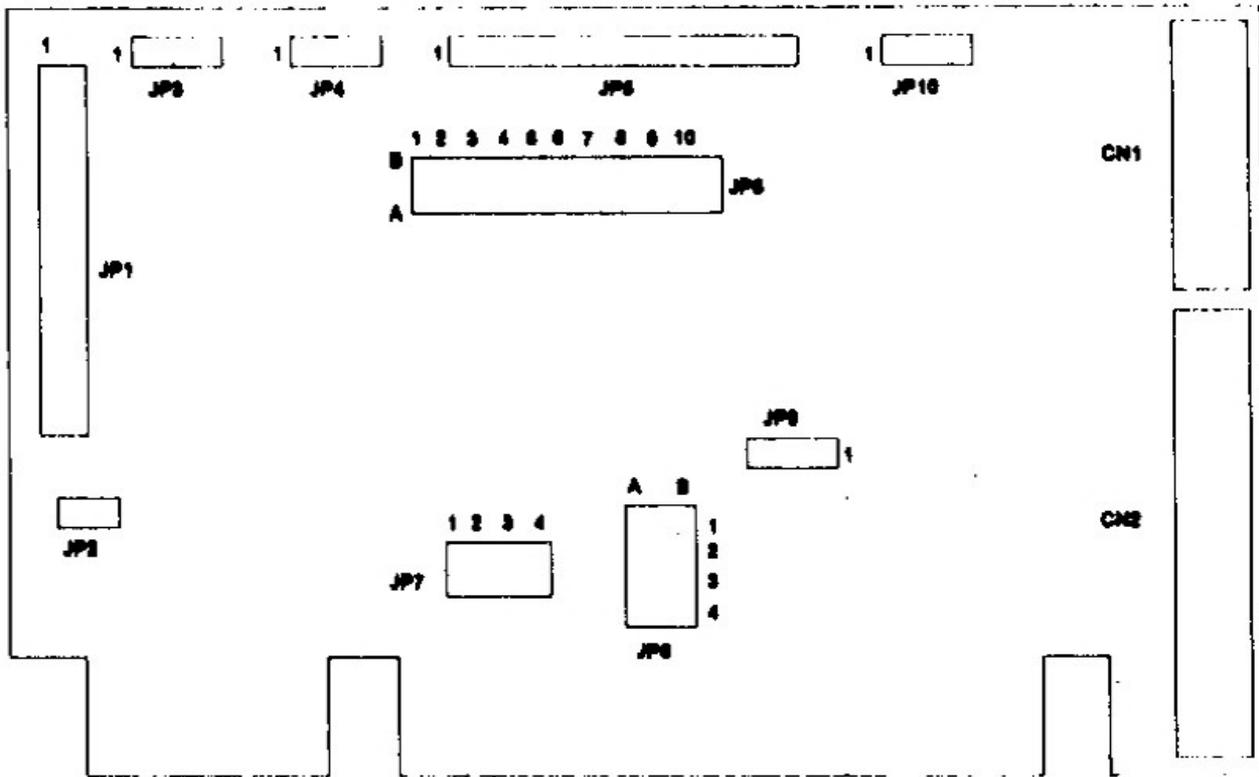
| PIN | SIGNAL NAME |
|----------------|-------------|
| 1 | RESET |
| 17 | HD0 |
| 15 | HD1 |
| 13 | HD2 |
| 11 | HD3 |
| 9 | HD4 |
| 7 | HD5 |
| 5 | HD6 |
| 3 | HD7 |
| 4 | HD8 |
| 6 | HD9 |
| 8 | HD10 |
| 10 | HD11 |
| 12 | HD12 |
| 14 | HD13 |
| 16 | HD14 |
| 18 | HD15 |
| 23 | HD16 |
| 25 | HD17 |
| 27 | HD18 |
| 28 | HD19 |
| 31 | HD20 |
| 32 | HD21 |
| 35 | HD22 |
| 33 | HD23 |
| 36 | HD24 |
| 37 | HD25 |
| 38 | HD26 |
| 39 | HD27 |
| 20, 29, 34 | HD28 |
| 2, 19, 21, 22, | HD29 |
| 24, 26, 30, 40 | HD30 |



JP2 is the hard disk select LED.

The IDE (AT BUS) hard disk controller can only interface to the IDE type hard disk. Connecting the ST412/506 hard disk to the IDE hard disk controller could result in damage to the hard disk or system. Check your system manual to ensure the system has an IDE hard disk drive before using the IDE hard disk controller.

BLOCK DIAGRAM OF SUPER I/O CARD



Remark:

IBM PC/AT is registered trademark of International Business Machines Corporation

The above information represents the best of our knowledge. We may have erroneous information and we reserve the right to change the specification without prior notice