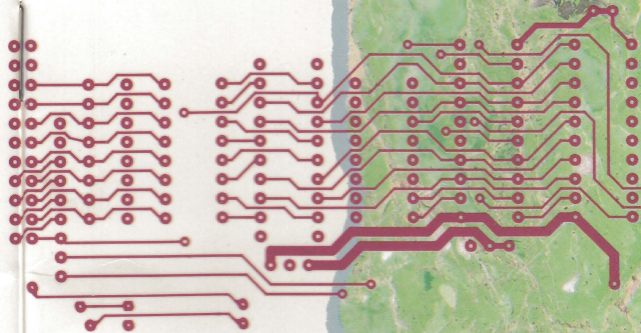


BABY I/O CARD
COMPATIBLE WITH PC/XT



GW202
USER'S MANUAL

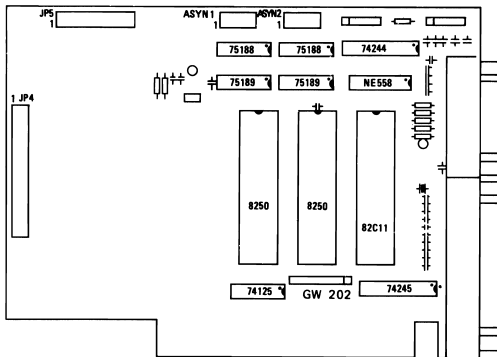
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HOW TO INSTALL THE BABY I/O CARD

- Turn your system OFF.
- Use a flat screwdriver to loose the screw which is used to hold the card in place.-Turn the screw counterclockwise (COW).
- Plug the card into the expansion slot.
-
- Notice, there are 31 golden fingers which allow you to connect the mainboard with the BABY I/O card. When you install your BABY I/O card, make sure if the golden fingers are in contact with the corresponding connector properly.

HOW TO PLUG THE CARD

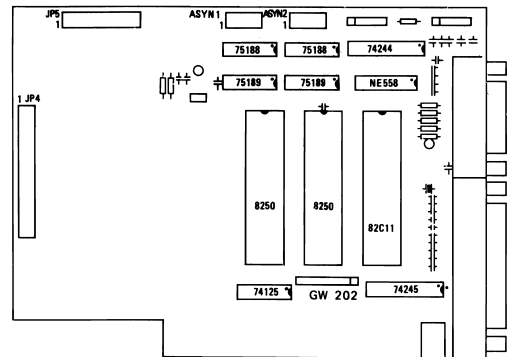


BABY I/O CARD USER GUIDE

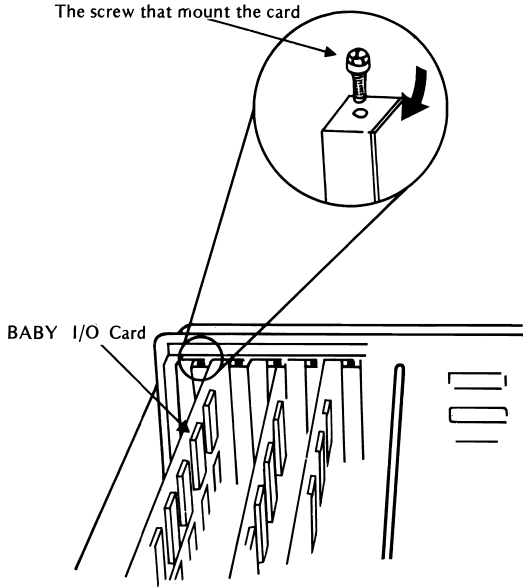
INTRODUCTION

BABY I/O card is ckt board produced by the PERIPHERALS ENTERPRISE COMPANY, it can used by all personal computer which are in compatible with 16 BIT personal computer or PC/XT It provides your system 5 majors function:

1. FLOPPY DISK ADAPTER: two DS/DD floppy disk can be drive.
2. PARALLEL PRINTER PORT.
3. 2 SERIAL I/O PORT (RS-232-1, RS-232-2).
4. BATTERY BACKUP CLOCK/CALENDAR.
5. GAME ADAPTER.

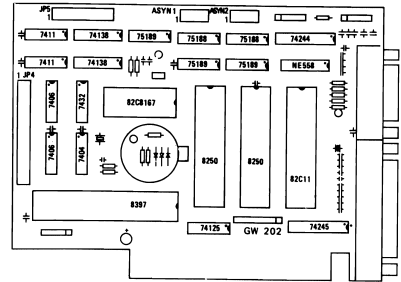


- Use the flat screwdriver to fix the card. Turn the screw clockwise (CW).



A BRIEF DESCRIPTION ABOUT BABY I/O CARD

Consider the following figure of BABY I/O card:



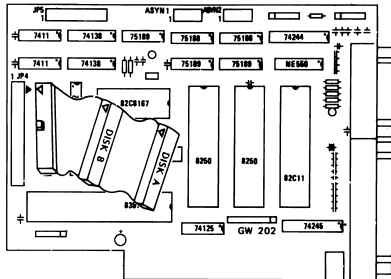
- DISK ADAPTER: Allow you to plug flag cable driver two FDD.
- RS-232-2 (ASYN 2): Allow you connect standard RS-232 interface to transmit and receive data in serial mode.
- RS-232-1 (ASYN 1): Allow you connect standard RS-232 interface.
- INTERRUPT LEVEL SELECTIVE AREA.
- PRINTER PORT: Allows you to connect the parallel printer.
- GAME PORT: Allows joy-stick connect there.

Configuration Jumper		ASYN 1		ASYN. 2		
TIMER		IRQ3	IRQ4	IRQ3	IRQ4	Horizontal Close
TIM1		IRQ3	IRQ4	IRQ3	IRQ4	Vertical Close
GAME	2 4 6 8	10 12 14	16 18 20			
ENABLE	1 3 5 7	9 11 13	15 17 19			
	LPT1	COM1	COM2			Horizontal Close
	LPT2	COM3	COM4			Vertical Close

HOW TO USE THE BABY I/O CARD

1. FLOPPY DISK

Use flag disk cable please check pin 1 make correct to connect disk port golden pin. Cable other hand have two 34 pin female disk connector distance cable longer connector is DRIVER A.



2. PARALLEL PRINTER INTERFACE

The parallel printer interface is designed to connect printer. Parallel printer supports the graphics function by driver software. User device jumper to enable/disable enable or disable your printer.

INTERRUPT SELECT JUMPER

Printer: $\begin{matrix} 8 \\ | \\ 7 \end{matrix}$ = LPT1 : is enable.

$\begin{matrix} 8 \\ | \\ 5-7 \end{matrix}$ = LPT2 : is enable.

$\begin{matrix} 8 \\ | \\ 5 \ 7 \end{matrix}$ all open is disable.

- PIN DEFINE:

1 -STROBE	10 -ACK
2 DATA 0	11 +BUSY
3 DATA 1	12 +PE
4 DATA 2	13 -SELECT
5 DATA 3	14 -AUTO FD XT
6 DATA 4	15 -ERROR
7 DATA 5	16 -INT
8 DATA 6	17 -SELECT INPUT
9 DATA 7	18-26 GROUND

3. SERIAL INTERFACE RS-232 CONNECTOR

The serial interface is standard EIA RS-232 interface that is fully programmable and support PC/XT asynchronous. The BAUD rate (bit/sec) can be set from 50 to 9600.

- There are 2 serial port (RS-232-1 and RS-232-2), normal the card provides you all component for RS-232-1; but RS-232-2 is optional. You must provide all support ICs by yourself (8250 etc.)
- Use DEVICE SELECT JUMPER to define either RS-232-1 or RS-232-2 as COM 1 or COM 2. But you can't define RS-232-1 and RS-232-2 at the same device. COM 1 is assigned to port 3F8H, COM2 is assign to port 2F8H.
- Use INTERRUPT SELECT JUMPER to assign the interrupt level to COM function.
- Normally, COM 1, data terminal equipment node, level 4 interrupt is selected.

— PIN ASSIGNMENTS OF ASYN. PORT

ASYN. PORT

PIN 1: CARRIER DET.	PIN 6: EIA DSR
PIN 2: RX DATA	PIN 7: EIA RTS
PIN 3: TX DATA	PIN 8: EIA CTS
PIN 4: EIA DTR	PIN 9: RING IDC
PIN 5: GROUND	PIN10: N.C.

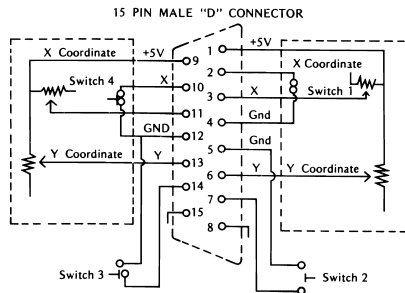
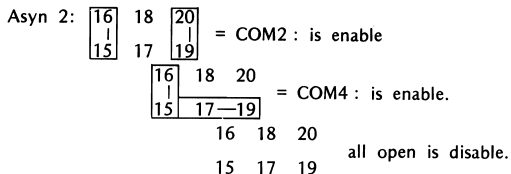
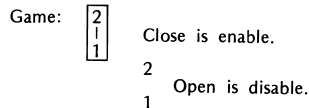
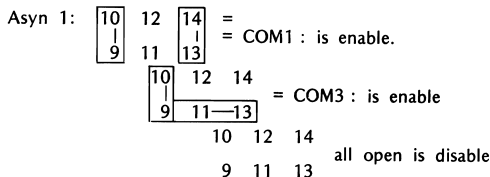
GAME CONTROL ADAPTER

The game adapter allows you to attach two JOY-STICK to PC, the paddles must have range of 0 to 100k ohms. Experience has show lot of variation even in PC/XT compatible JOY-STICK, so you should in JOY-STICK with a centering mechanism so that you adjust your JOY-STICK to the program.

GAME CONTROL ADAPTER PIN ASSIGNMENTS

The BABY I/O card uses a 15 pin female "D" connector for the game control adapter.

THE PIN ASSIGNMENT FOR GAME CONTROL ADAPTER



LOCATION OF PORT

GAME ADAPTER : &H200
PRINTER PORT : LPT1 : = &H378 , INT = IRQ7
 LPT2 : = &H278 , INT = IRQ5
ASYN 1 PORT : COM1 : = &H3F8 , INT = IRQ4
 COM2 : = &H3E8 , INT = IRQ4
ASYN 2 PORT : COM2 : = &H2F8 , INT = IRQ3
 COM4 : = &H2E8 , INT = IRQ3
TIMER : TIM1 : = &H240
 TIM2 : = &H340

PC TIMER 1.3 USER GUIDE

INTRODUCTION

Consider the hardware configuration of the multifunction card, you can see a battery powered CLOCK/CALENDAR. You may ask what is its function and how to use it? The answer can be found in this section. You can use the TIMER.COM program to operate it.

THE FUNCTION OF TIMER.COM PROGRAM

- Allows you to initialize the date and time in the CLOCK/CALENDAR device. A rechargeable battery provides the power to the CLOCK/CALENDAR still works and the time and date that you set in last time are still maintained.
- Allows you to set the date and time in the system.
- Reports you the current status of the CLOCK/CALENDAR.

Timer:

4
1
3

 6 = TIM1 : is enable.

4-6

3 = TIM2 : is enable.
4 6
3 all open is disable.

GETTING START

There are 2 ways to start the timer program:

- 1) Type in TIMER command and option.

- 2) Create an AUTOEXEC.BAT file, this file will auto execute once you reboot your system.
- a) If you haven't an AUTOEXEC.BAT file on your diskette, create it; first type in

```
COPY CON: AUTOEXEC.BAT
```

Press ENTER key

Then type in

```
TIMER/S [Ctrl]+ Z (or Key in the F6 function key)
```

Press ENTER key

The A > prompt redisplay again and you have created an AUTOEXEC.BAT file.

The screen's displaying:

```
A > COPY CON: AUTOEXEC.BAT
      TIMER/S  Z
           1 File(s) Copied
A >
```

In the above commands, the first command line tells DOS to copy the information entered on the keyboard into the AUTOEXEC.BAT file. The second command line enter the TIMER/S program so that once you run the AUTOEXEC.BAT file the TIMER/S will execute automatically. The [Ctrl + Z] or F6 means that you can press the Ctrl key and Z key together or you only press F6 key. This causes the system that additional keyboard information is not into the file and causes the information to be written into the file.

Once you have created the AUTOEXEC.BAT file, when you reset your system, the TIMER/S in the AUTOEXEC.BAT file will transfer the time in the CLOCK/CALENDAR into the system. The screen will display:

```
A > TIME/S
** PC TIMER 1.3 **
Current time is XX:XX:XX:XX
Current date is XXX XX - XX - XX
```

- b) If the AUTOEXEC.BAT file already exists on your diskette, you will need to add one line to the file. You must have the line editor EDLIN program on your diskette.

Type in

```
EDLIN AUTOEXEC.BAT
```

Press ENTER key

Type in

```
li
```

Press ENTER key

Type in

```
TIMER/S
```

Press ENTER key

Type in

```
E
```

Press ENTER key

The A > prompt redisplay again. You have created an AUTOEXEC.BAT file with the TIMER/S program in it.

The screen displays as follow:


```
A > EDLIN AUTOEXEC.BAT
*li
i : *TIMER/S
2: * C
*E
A >
```

TIME'S COMMAND

TIMER/? Help menu, provides you a listing of TIMER'S command.
The TIME HELP MUNU is displayed as follow:

```
** PC TIMER 13 **
Time Help Menu:
TIMER          Read current time & date.
TIMER/I       Initial setting current time & date to
              system clock.
TIMER/S       Set current time & date to system clock.
TIME/?       Help menu.
TIMER FORMAT  HOUR: MINUTE: SECOND (Every item
              have two digits)
DATE FORMAT   MONTH - DAY - YEAR (Every item
              have two digits)
```

Let us discuss the commands shown in the HELP menu

TIMER Reads current time and date and displays the date and time. The screen displays as follow:

```
** PC TIME 13 **
Current time is XX:XX:XX:XX
Current date is XXX XX - XX - XX
```

TIMER/I Initializes the CLOCK/CALENDAR device on the BABY I/O card. It will first display the time and date currently exist and ask you to enter the new time and date. After you have entered the time and date, the program will check whether their formats are correct. If

they are correct, the TIMER program set them onto the CLOCK/CALENDAR device, otherwise an error message is displayed and you have to try again. If you don't want make any change, just press the ENTER key. The screen's displaying are shown in the following figures:

```
** PC TIMER 1.3 **
Current time is XX:XX:XX:XX:
Enter new time:
```

After entered the date correctly and press ENTER key the screen display:

```
** PC TIMER 1.3 **
Current time is XX:XX:XX:XX
Current date is XXX XX - XX - XX
```

TIME FORMAT:XX:XX:XX

hour minute second

NOTE: The TIMER program only accepts 8 characters

2 digits for each item.
2 characters to separate the digits, you can use any characters to separate the items. But the standard form is use''

HOURL range from 0-23
MINUTE range from 0-59
SECOND range from 0-59

DATE FORMAT: MONTH – DATE – YEAR

MONTH range from 1–12

DATE range from 1–31

YEAR range from 0–99 (When you type in 0–79, the program considers it as year 2000–2079; when you type in 80–99, the program considers it as 1980–1999.)

NOTE: Don't use alphabet.

The TIMER program only accepts 8 characters:

6 digits (2 for each item).

2 characters that separate each item.

If you had entered the invalid format of time or date the screen will display the following message.

Invalid time
Enter new time:

Invalid date
Enter new date:

You have to try again or just press the ENTER key to skip it. you just press the ENTER key to skip it, the original time and date remain unchange.

TIMER/S This command displays the time and date and sets the system time and date. It is convenient to insert it into the AUTOEXEC.BAT file to automatically display and set the system time when the system is booted or reset.