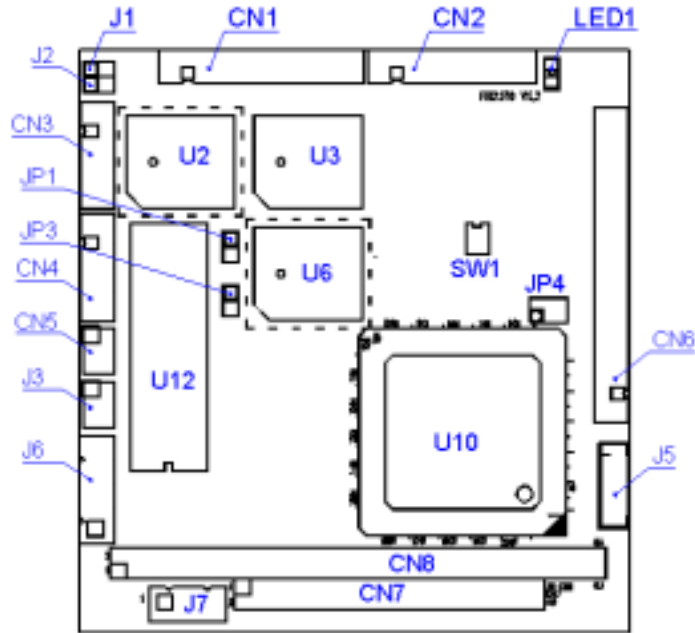


1. Brief

The FB2310 series is an All-In-One, PC/104 386SX CPU board. This user's quick setting provides the jumper setting, connector location, and their pin assignment.

2. Board Placement



3. Packing List

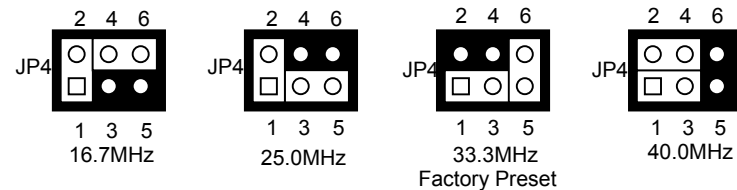
- 1 FB2310 or FB2310A all-in-one CPU board.
- 1 44-pin hard disk drive interface cable.
- 1 20-pin to 34-pin floppy drive interface cable.
- 1 parallel port interface cable.
- 2 serial port adapter cables. (10-pin IDC to DB-9)
- 1 LAN adapter board (FB4605) and cable. (JST to RJ45, FB2310 only)
- 1 PS2 keyboard/mouse adapter cable.
- 1 power adapter cable.
- 1 Compact Disc includes necessary utilities and drivers.
- 1 hard copies of this quick setup manual.

4. Features

- * Up to 40 MHz 386SX single board computer.
- * Stack through PC/104 expansion bus.
- * 2 MB EDO RAM on-board & 2 MB space for expansion.
- * 10Base-T NE2000 compatible network. (FB2310 only)
- * Parallel port, floppy and IDE Interface.
- * 2 RS-232C/RS-485 serial ports. (RS-485 is optional)
- * PS/2 compatible keyboard interface.
- * E2KEY function for safe CMOS data keeping. (Option)
- * On-board LED indicator and speaker header.
- * Flash BIOS with easy upgrade utility.
- * Software programmable watchdog timer.
- * 3 sockets for 1.5MB flash disk
- Or -
2 sockets for 1MB flash disk and 1 DIP socket for up to 288MB DiskOnChip.
- * Low power consumption, +5V only, 1.2A maximum.
- * EMI Considered on every output signals.
- * PC/104 form factor, 90.2 mm x 95.9 mm. (3.55" x 3.775")

5. Connectors and Their Relative Jumpers

A. CPU Base Clock Select Jumper (JP4)



B. Keyboard Connector (J5: 6-pin 2.0mm JST)

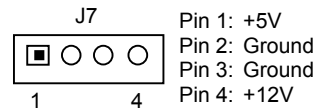
J5 provides PS/2 keyboard and mouse interface, use the included keyboard adapter cable to connect between J5 and standard PS/2 keyboard.



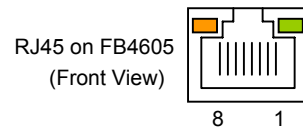
Note: If you need to use PS/2 mouse then you have to order 3-head cable from your supplier.

C. Reset Header (J1)

J1 is a 2-pin header for connecting to system reset bottom. Close these 2 pins to reset FB2310 and restart system booting.

D. Power Connector (J7)**E. LAN Connector (J6: 6-pin 2.5mm JST)**

J6 contains LAN twist pair signals and LAN accesses indicator signal. The included LAN adapter cable & transfer board (FB4605) is used to transfer to standard RJ45 connector and embedded with 2 LEDs. The left side LED (orange) indicates data is accessing and the right side LED (green) is not used. The following table lists the relative pin assignment between J6 and the RJ45 connector:



J6	Signal	RJ45	J6	Signal	RJ45
1	TPTX+	1	-	Not Used	5
2	TPTX -	2	-	Not Used	6
3	TPRX+	3	-	Not Used	7
4	TPRX -	6	-	Not Used	8
5	Access LED+	-	6	Access LED-	-

F. Floppy Connector (CN2: 20-pin 2.0mm IDC)

The included floppy drive interface cable is used to transfer 20-pin connector into standard 34-pin connector. Note that the included floppy cable supports only 720KB, 1.44MB, and 2.88MB floppy disk drives, not for 360KB and 1.2MB.

G. IDE Hard Disk Connector (CN6: 44-pin 2.0mm IDC)

Use the included hard disk cable, you can attach up to two 2.5" hard disk drives or DiskOnModule.

H. Parallel Port Connectors (CN1: 26-pin 2.0mm IDC)

The included printer interface cable is used to transfer 26-pin connector into standard DB25 connector.

I. Serial Port Connectors & Jumpers (CN3, CN4, CN5, JP1, JP3, & SW1)**(1) RS-232C Pin Definitions (CN3 & CN4: 10-pin 2.0mm IDC)**

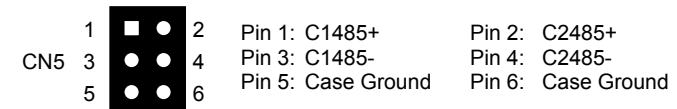
The included serial port adapter cables are used to transfer 10-pin IDC connector into standard DB9 connector. The following table shows signal connections of the adapter cable:

CN3 (COM1)	Signal	DB9	CN4 (COM2)	Signal	DB9
1	-DCD1	1	1	-DCD2	1
2	-DSR1	2	2	-DSR2	6
3	RXD1	3	3	RXD2	2
4	-RTS1	4	4	-RTS2	7
5	TXD1	5	5	TXD2	3
6	-CTS1	6	6	-CTS2	8
7	-DTR1	7	7	-DTR2	4
8	-RI1	8	8	-RI2	9
9	Ground	9	9	Ground	5
10	Case Ground	-	10	Case Ground	-

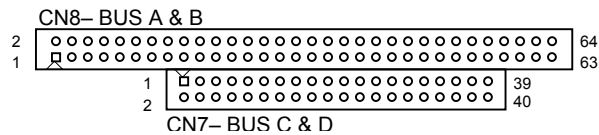
(2) RS-485 Pin Definition and Switch/Jumper Select (CN5, SW1, JP1 & JP3)

The on-board two serial ports can be configured as RS-485 mode by selecting SW1-3 and SW-4. CN5 is the RS-485 connector; JP1 and JP3 is the terminator jumper of COM1 and COM2 respectively.

SW1-3	COM1	SW1-4	COM2
Off	RS-232C	Off	RS-232C
On	RS-485	On	RS-485

**J. External Speaker Header (J2)**

K. PC/104 Connectors (CN8: 64-pin IDC & CN7: 40-pin IDC)

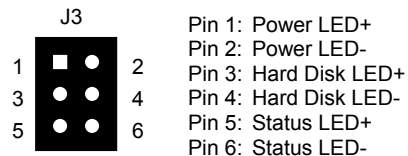


CN8	Signal	CN8	Signal	CN8	Signal	CN8	Signal
1	-IOCHK	33	SA14	2	Ground	34	-DACK1
3	SD7	35	SA13	4	RSTDRV	36	DRQ1
5	SD6	37	SA12	6	+5V	38	-REFSH
7	SD5	39	SA11	8	IRQ9	40	BUSCLK
9	SD4	41	SA10	10	-5V (*1)	42	IRQ7
11	SD3	43	SA9	12	DRQ2	44	IRQ6
13	SD2	45	SA8	14	-12V (*1)	46	IRQ5
15	SD1	47	SA7	16	-ZWS	48	IRQ4
17	SD0	49	SA6	18	+12V	50	IRQ3
19	IORDY	51	SA5	20	Key1	52	-DACK2
21	AEN	53	SA4	22	-MEMW	54	TC
23	SA19	55	SA3	24	-MEMR	56	ALE
25	SA18	57	SA2	26	-IOW	58	+5V
27	SA17	59	SA1	28	-IOR	60	OSC
29	SA16	61	SA0	30	-DACK3	62	Ground
31	SA15	63	Ground	32	DRQ3	64	Ground

Note *1: These power pins are left no connection.

CN7	Signal	CN7	Signal	CN7	Signal	CN7	Signal
1	Ground	21	-MEMWR16	2	Ground	22	-DACK5
3	-SBHE	23	SD8	4	-MEM16	24	DRQ5
5	LA23	25	SD9	6	-IO16	26	-DACK6
7	LA22	27	SD10	8	IRQ10	28	DRQ6
9	LA21	29	SD11	10	IRQ11	30	-DACK7
11	LA20	31	SD12	12	IRQ12	32	DRQ7
13	LA19	33	SD13	14	IRQ15	34	+5V
15	LA18	35	SD14	16	IRQ14	36	-MASTER
17	LA17	37	SD15	18	-DACK0	38	Ground
19	-MEMRD16	39	Key2	20	DRQ0	40	Ground

L. External LED Header (J3)



6. Others

A. Flash Disk and DOC Mapping Address Settings (SW1-1 & SW1-2)

SW1-1	SW1-2	Flash Disk Mapping	DiskOnChip Mapping	Remark
Off	Off	C800:0 (8KBytes)	Disabled	Default
On	Off	D800:0 (8KBytes)	Disabled	
Off	On	C800:0 (8KBytes)	CA00:0 (8KBytes)	
On	On	D800:0 (8KBytes)	DA00:0 (8KBytes)	

Note 1: SW1-2 is use to enable or disable DiskOnChip function. If the DiskOnChip is disabled, it will not occupy any memory address.

Note 2: Please uses the BIOS setup program to enable or disable Flash Disk function. If the Flash Disk is disabled, it will not occupy any memory address too.

The following table shows what memory type and package the sockets supported.

Socket	Package	Flash Disk	DiskOnChip
U2 (M1)	PLCC32	Yes	No
U3 (M2)	PLCC32	Yes	No
U12(M3)	DIP32	Yes	Yes (If enabled)