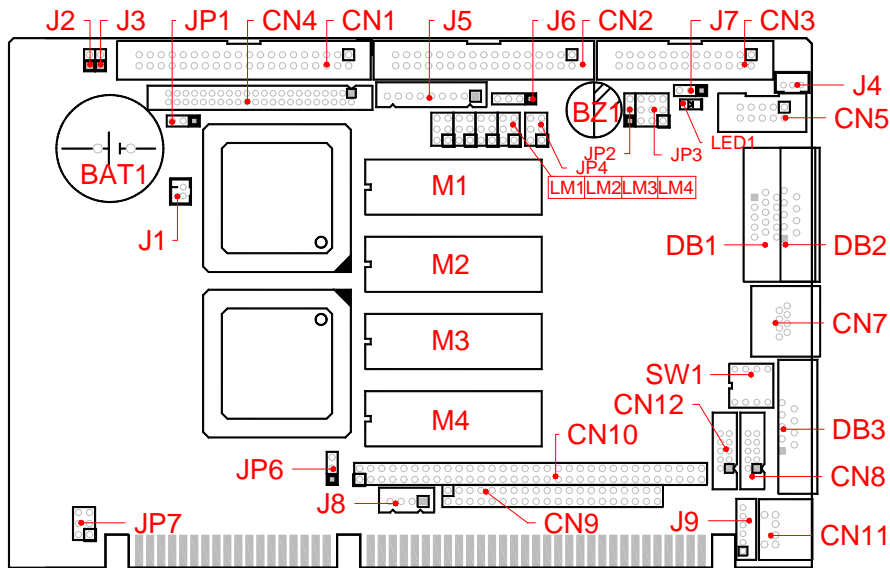


1. Brief

The FB2300 series is All-In-One, half-size 386SX CPU card. This user's quick setting provides the jumper setting, connector location, and their pin assignment.

2. Board Placement



3. Packing List

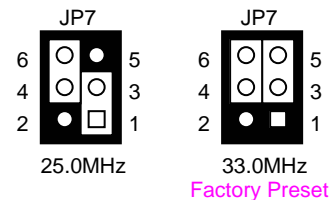
- 1 FB2300 or FB2300x all-in-one CPU card.
- 1 40-pin hard disk drive interface cable.
- 1 34-pin floppy drive interface cable.
- 1 parallel port and serial port interface cable with bracket.
- 1 PS/2 mouse adapter cable with bracket. (Option)
- 1 Compact Disc including necessary utilities and drivers.
- 1 hard copies of this quick setup manual.

4. Features

- * Up to 33 MHz 386SX single board computer.
- * ISA and PC/104 expansion bus.
- * 2 MB EDO RAM on-board & 6 MB space for expansion.
- * 10Base-T NE2000 compatible network. (FB2300 only)
- * Provides CRT and LCD interface with 512KB VRAM. (1MB VRAM is optional)
- * Parallel port, floppy and IDE Interface.
- * 1 RS-232C and 1 RS-232C/RS485.
- * PS/2 compatible keyboard and mouse interface.
- * Provides 4 sockets for up to 4MB/2MB/2MB EPROM/SRAM/Flash disk - Or -
- 3 sockets for up to 3MB/1.5MB/1.5MB SSD and 1 socket for DiskOnChip.
- * 4 TTL inputs and 4 TTL outputs.
- * E2KEY function for safe CMOS data keeping. (Option)
- * On-board buzzer and LED indicator.
- * On-board Lithium battery for SRAM disk.
- * Flash BIOS with easy upgrade utility.
- * Software programmable watchdog timer.
- * Low power consumption, +5V only, 2.0A maximum.
- * EMI Considered on every output signals.
- * Compact size, 185 mm x 122 mm.

5. Connectors and Their Relative Jumpers

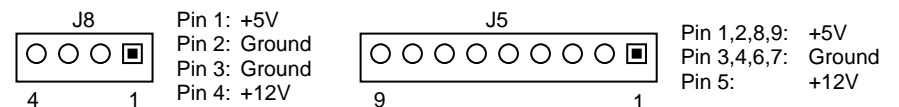
A. CPU Base Clock Select Jumper (JP7)



B. Reset Header (J3)

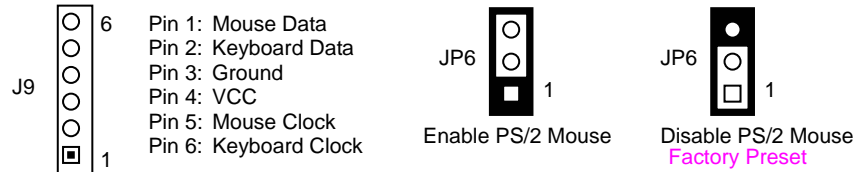
J3 is a 2-pin header for connecting to system reset bottom. Close these 2 pins to reset FB2300 and restart system booting.

C. Auxiliary Power Connectors (J8 & J5, J5 is optional)



D. Keyboard and Mouse Connector (CN11, J9, and JP6)

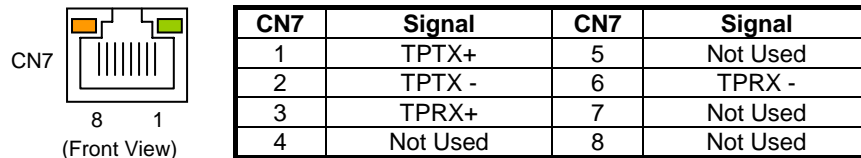
CN11 is a standard PS/2 type keyboard connector, so any PS/2 type keyboard can plug into CN11 directly without extra adapter cable. J9 provides PS/2 mouse interface and JP6 is used to enable or to disable it. Use the included mouse adapter cable (optional) to connect between J9 and standard PS/2 mouse.



Note: In fact, CN11 and J9 all support PS/2 keyboard and mouse signals and have to order 3-head cable from your supplier.

E. LAN Connector (CN7: RJ45)

CN7 is a RJ45 connector with 2 LEDs. The left side LED (orange) indicates data is accessing and the right side LED (green) indicates power is OK and/or watchdog status. (When watchdog is enabled, this LED will be blinking.) The following table lists the pin assignment of CN7:

**F. Floppy Connector (CN2: 34-pin 2.54mm IDC)**

Note that the included floppy cable supports only 720KB, 1.44MB, and 2.88MB floppy disk drives, not for 360KB and 1.2MB disk drives.

G. IDE Hard Disk Connector (CN1: 40-pin 2.54mm IDC)

Use the included hard disk cable, you can attach up to two 3.5" hard disk drives.

H. Parallel Port Connector (CN3: 26-pin 2.54mm IDC)

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

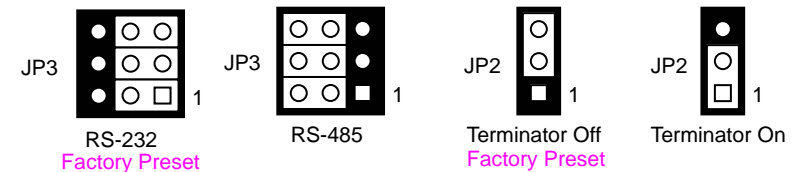
I. Serial Port Connectors & Jumpers (DB3, CN5, JP2, JP3, & J4)**(1) RS-232 Pin Definitions (DB3 and CN5)**

DB3 is standard DB9 serial port connector for serial port 1 (COM1) and CN5 is 10-pin 2.54mm IDC connector for serial port 2 (COM2). The included serial port adapter cables are used to transfer CN5 connector into standard DB9 connector. The following table shows the signal connections of DB3 (left) and the included cable (right):

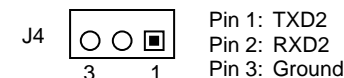
Signal	DB3	CN5	Signal (RS-232)	Signal (RS-485)	DB9
-DCD1	1	1	-DCD2	-	1
-DSR1	6	2	-DSR2	-	6
RXD1	2	3	RXD2	485-	2
-RTS1	7	4	-RTS2	-	7
TXD1	3	5	TXD2	485+	3
-CTS1	8	6	-CTS2	-	8
-DTR1	4	7	-DTR2	-	4
-RI1	9	8	-RI2	-	9
Ground	5	9	Ground	-	5
-	-	10	Case Ground	Case Ground	-

(2) RS-485 Jumper Select and Pin Definitions (JP3 & JP2)

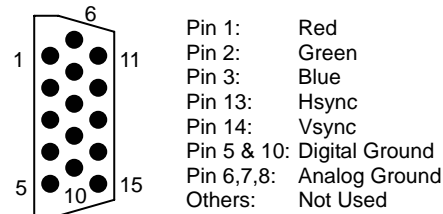
Serial port 2 (COM2) provides RS-485 function by selecting JP3 jumper. When RS-485 mode is selected, the RS-485 signals use the same connector as RS-232. (Refer to last table please) JP2 is the terminator on/off jumper only when using RS-485 mode. The following figure will guide you how to setup the RS-485 serial port.

**(3) Extra RS-232 Header (J4: 3-pin 2.0mm JST)**

Header J4 provides basic RS-232 signals of serial port 2. It is used to interface with touch screen module or other internal connection usage.



J. CRT Connector (DB1)



DB1 (Female, Front View)

K. LCD Connector & Jumper (CN4, JP5 & JP1)

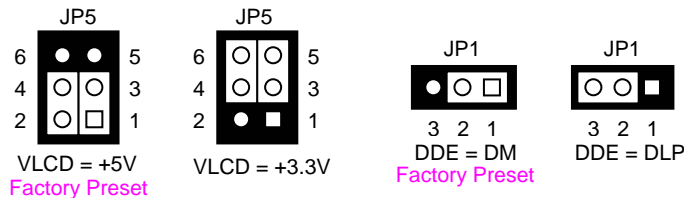
CN4 is a 2.0mm 44-pin connector that provides 24-bit LCD interface signals. And JP5 is used to select 5V or 3.3V power source of LCD panel.

CN4	Signal	CN4	Signal	CN4	Signal	CN4	Signal
1	Ground	23	DP15	2	SHFCLK	24	Ground
3	FLM	25	DP16	4	DLP	26	DP17
5	DDE	27	DP18	6	Ground	28	DP19
7	DP0	29	DP20	8	DP1	30	DP21
9	DP2	31	DP22	10	DP3	32	DP23
11	DP4	33	Ground	12	DP5	34	GPO0 (*1)
13	DP6	35	GPO1 (*1)	14	DP7	36	Ground
15	Ground	37	Ground	16	DP8	38	Ground
17	DP9	39	+12V	18	DP10	40	+12V
19	DP11	41	VLCD (*2)	20	DP12	42	VLCD (*2)
21	DP13	43	ENABLK	22	DP14	44	ENAVEE

Note *1: GPO0 and GPO1 pins are TTL outputs. They could use as LCD back light controls.

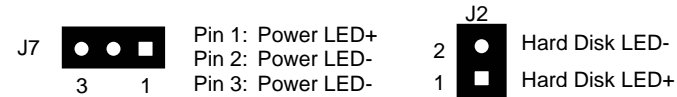
Note *2: VLCD signal is the power source for LCD panel. Be sure to select JP5 properly or will damage your LCD panel.

Note *3: Different LCD panel use different BIOS and pin connections. If any trouble when connecting FB2300 with LCD panels, you can contact technical support division of FabiaTech Corporation.

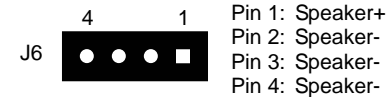


L. Power LED and Hard Disk LED Headers (J7 & J2)

J7 (3-pin header) is used to connect an external power LED. J2 is the hard disk LED header.

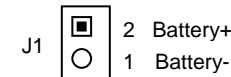


M. External Speaker Header (J6)

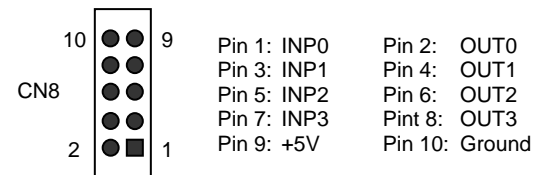


N. External Battery Connector for SRAM Disk (J1)

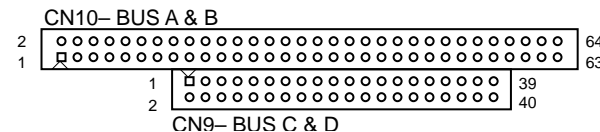
J1 is needed to connect an external battery when SRAM disk is using and on-board battery is empty.



O. TTL I/O Connector (CN8)



P. PC/104 Connectors (CN10 64-pin IDC & CN9: 40-pin IDC)



Q. Feature Connector for LAN BNC Interface (CN12, Optional)

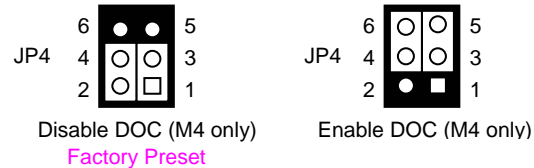
It is necessary to use the BNC adapter board (FB4616) and cable for attaching to CN12 connector.

6. Others (SSD and DOC Setting)

A. SSD and DOC Mapping Address Settings (SW1-1, SW1-2 & JP4)

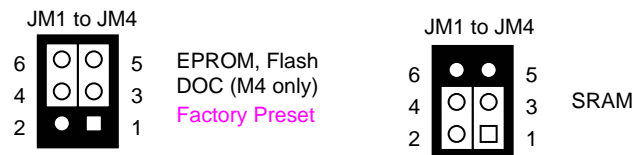
SW1-1	SW1-2	JP4	SSD Mapping	DOC Mapping	Remark
Off	Off	Disable	C800:0 (8KBytes)	Disabled	Preset
On	Off	Disable	CC00:0 (8KBytes)	Disabled	
Off	On	Disable	D000:0 (8KBytes)	Disabled	
On	On	Disable	D800:0 (8KBytes)	Disabled	
Off	Off	Enable	C800:0 (8KBytes)	CA00:0 (8KBytes)	
On	Off	Enable	CC00:0 (8KBytes)	CE00:0 (8KBytes)	
Off	On	Enable	D000:0 (8KBytes)	D200:0 (8KBytes)	
On	On	Enable	D800:0 (8KBytes)	DA00:0 (8KBytes)	

Note: If DOC is enabled, please set JM4 as Flash setting and M4 (U5) is ready for serving DiskOnChip.



B. SSD Memory Type Select (SW1-4 and JM1 to JM4)

JM1, JM2, JM3, and JM4 are use to select memory type of M1 (U21), M2 (U16), M3 (U10), and M4 (U5) respectively. When ROM memory is selected, SW1-4 is use to select EPROM or Flash were installed.



SW1-4	Memory Type	Remark
Off	EPROM	Preset
On	FLASH	

Socket	Package	ROM/RAM	DiskOnChip	Relative Jumpers
U21 (M1)	DIP32	Yes	No	JM1
U16 (M2)	DIP32	Yes	No	JM2
U10 (M3)	DIP32	Yes	No	JM3
U5 (M4)	DIP32	Yes	Yes (If enabled)	JM4 & JP4

C. SSD Drive Select (SW1-3, Simulate as Floppy Disk Drive Only)

The SW1-3 switch will function only when the **SSD simulated as floppy disk drive**. To simulate as hard disk drive or floppy disk drive is configured by the BIOS setup program. The default setting of SW1-3 is OFF.

- (1) ROM (EPROM or Flash) or RAM Only (Installed start from M1)
(Note: EPROM and Flash can not exist simultaneously.)

SW1-3	ROM/RAM Disk (w/DOS)	ROM/RAM Disk (w/o DOS)
Off	Drive A: (Disk #0)	Drive B: (Disk #1)
On	Drive A: (Disk #0)	Disk #2

- (2) ROM and SRAM Exist Simultaneously (ROM was installed start from M1)

SW1-3	ROM Disk (w/DOS)	ROM Disk (w/o DOS)	RAM Disk
Off	Drive A: (Disk #0)	Drive B: (Disk #1)	Disk #2
On	Drive A: (Disk #0)	Disk #2	Drive B: (Disk #1)

Note: The mapping disk drive of Disk #2 will always follow the exist logical hard disk drives and simulated hard disk drives besides the drive installing DOS device driver after system is boot up.

D. SSD Simulates as Hard Disk Drive

Use the BIOS setup program to select hard disk drive or floppy disk drive to be simulated. When SSD (ROM disk or RAM disk) simulates as hard disk drive, The mapping disk drive of Disk #2 will always follow the exist logical hard disk drives and simulated hard disk drives those which connect to the IDE connectors. The following table illustrates the drive mapping priority of hard disk drives and floppy drives:

Mapping Priority	Device Type
The First	IDE hard disk or DiskOnModule
The Second	On-Board ROM disk (Simulates as hard disk drive)
The Third	On-Board RAM disk (Simulates as hard disk drive)
The Fourth	On-Board DiskOnChip
The Fifth	Disk #2
The Sixth	Disk #3
The Last	Device Driver

Note: The first mapping drive is drive C:.