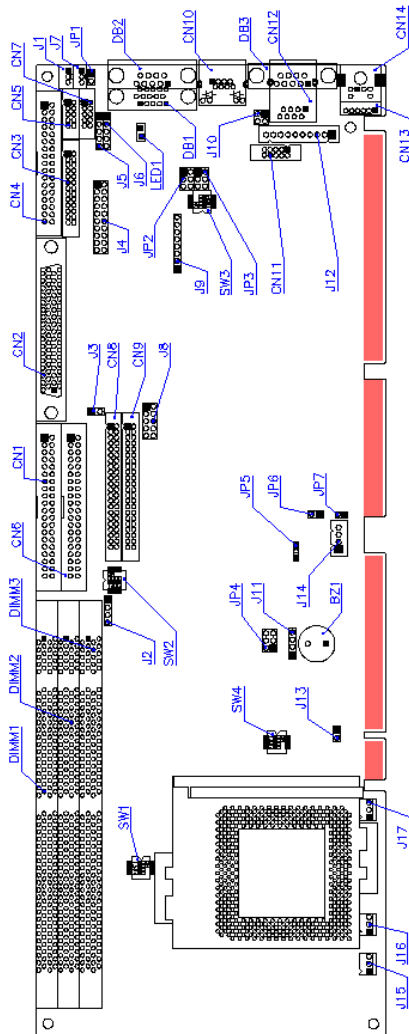


1. Brief

The FB2680x is a PII/P!!! Grade, all in one, PICMG socket-370 CPU card. This user's quick setting provides the jumper and switch settings, connector location, and their pin assignment.

2. Board Placement



3. Packing List

- 1 FB2680x all-in-one CPU board.
- 1 40-pin hard disk drive interface cable.
- 1 34-pin floppy drive interface cable.
- 1 serial port and parallel port interface cable with bracket.
- 1 mouse port adapter cable with bracket.
- 1 2-port USB adapter cable with bracket. (Optional item)
- 1 LAN adapter cable with FB4605 transfer board. (FB2680 only)
- 1 68-pin Ultra-wide SCSI adapter cable. (FB2680 only)
- 1 compact disc includes software utility.
- 1 hard copies of this quick setup manual.

4. Features

- * Supports 300~850 MHz Celeron/Coppermine CPUs. (Socket 370)
- * PICMG PCI-ISA bus slot card.
- * Intel 440BX chipset and 128KB or above L2 cache inside the CPUs.
- * Supports three 168-pin DIMM socket (PC-100 SDRAM), 768 MB maximum.
- * 100M/10M Ethernet with RJ-45 connector. (Dual LAN is optional item)
- * SMI SM712 chipset provides CRT and LCD (dual display) with 4MB VRAM.
- * SYM 53C895 Ultra-Wide SCSI chipset supports up to 80MB/s transfer rate.
- * 1 Parallel port, 1 floppy and 2 PCI IDE Interface.
- * 1 RS-232 and 1 RS-232/RS-485/IrDA.
- * PS/2 compatible keyboard and mouse interface.
- * E2KEY function for safe CMOS data keeping. (Optional item)
- * 2 TTL input lines and 2 TTL output lines. (Optional item)
- * On-board buzzer and LED indicator.
- * Flash BIOS with easy upgrade utility.
- * Software programmable watchdog timer.
- * Provides 1 socket for up to 288MB DiskOnChip.
- * 2 USB ports and hardware monitoring functions.
- * Provides 3 (CPU & case) cooling fan connectors with speed monitoring.
- * EMI Considered on every output signals.
- * Full-length size, 338 mm x 122 mm.

5. Connectors and Their Relative Jumpers

A. CPU Base Clock and PCI Clock Select (SW1)

SW1-4	SW1-3	SW1-2	SW1-1	CPU Base Clock	PCI Clock	Remark
Off	Off	On	Off	66.7 MHz	33.3 MHz	
Off	Off	Off	Off	100.0 MHz	33.3 MHz	Factory Preset
Others				Reserved	Reserved	Reserved

B. CPU Internal Clock Multiplier Select (SW4)

SW4-4	SW4-3	SW4-2	SW4-1	Multiplier	Remark
On	On	On	On	2.0	
On	On	Off	On	3.0	
On	On	On	Off	4.0	
On	On	Off	Off	5.0	Factory Preset
On	Off	On	On	2.5	
On	Off	Off	On	3.5	
Others				Reserved	Reserved

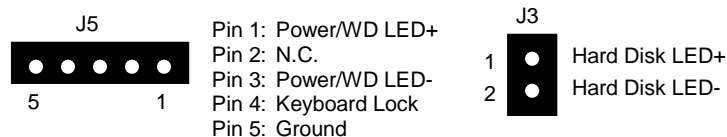
Note: The latest CPUs fix their clock multiplier internally, so it is no need to select SW4 any more.

C. Reset Header (JP1)

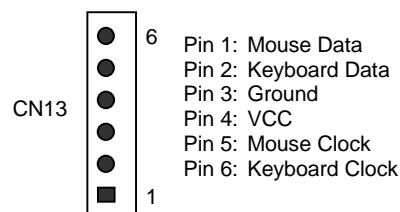
JP1 is a 2-pin header for connecting to system reset bottom. Close these 2 pins to hardware reset FB2680 and restart system booting.

D. Keyboard Lock and Power/WD and HDD LED Indicators (J5, J3 and LED1)

LED1 is the on-board power/WD LED and J5 (5-pin header) is used to connect keyboard lock switch and external power/WD LED. J3 is the hard disk LED header.

**E. Keyboard and Mouse Connector (CN14 & CN13)**

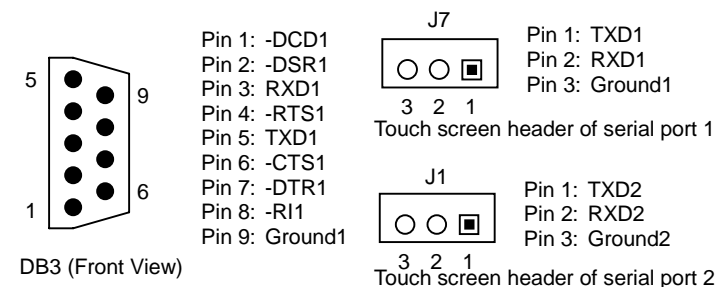
CN14 is a standard PS/2 type keyboard connector, so any PS/2 type keyboard can plug into CN14 directly without any extra adapter cable. CN13 provides PS/2 mouse interface, use the included mouse adapter cable to connect between CN13 and standard PS/2 type mouse.



Note: In fact, CN14 and CN13 all support PS/2 keyboard and mouse signals and have to order 3-head cable from your supplier.

F. Serial Port Connectors & Jumpers**(1) Serial Port 1 (DB3 and J7)**

The DB3 connector on bracket is 9-pin D-type male connector and J7 supports basic signals for touch screen controller internally instead of connecting from DB3 or CN5 connector. The following figure shows the pin definition of DB3 and J7:

**(2) Serial Port 2 (CN5, JP2, JP3, J1, and J6)**

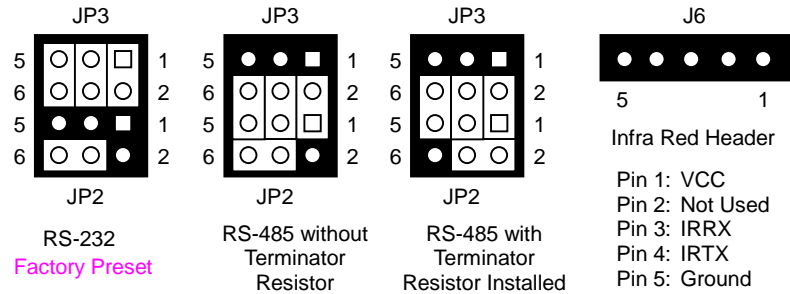
Serial port 2 is designed for multiple proposes. It could be RS-232 or RS-485 by selecting JP2 and JP3. Serial port 2 also could be configured as infrared (IrDA) interface by changing the setting in BIOS setup program. J6 is use to interface with Infrared module. The serial port 2 also provides basic signal header J1 for touch screen controller internally instead of connecting from DB3 or CN5 connector (see previous figure for pin list). The included serial port cable is use to transfer CN5 into standard 9-pin D-type male connector. The following tables and figures show the pin definitions and its usage:

CN5	Signal	DB9
1	-DCD2	1
2	-DSR2	6
3	RXD2	2
4	-RTS2	7
5	TXD2	3
6	-CTS2	8
7	-DTR2	4
8	-RI2	9
9	Ground2	5
10	Case Ground	-

Note: RS-232 mode

CN5	Signal	DB9
1	-	1
2	-	6
3	485-	2
4	-	7
5	485+	3
6	-	8
7	-	4
8	-	9
9	Ground2	5
10	Case Ground	-

Note: RS-485 mode



G. Parallel Port Connector (CN3: 26-pin 2.0mm IDC)

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

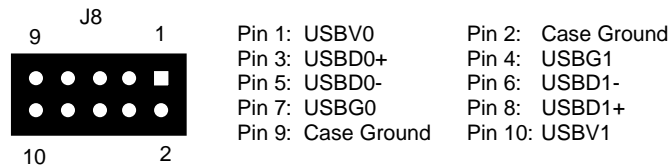
H. Floppy Connector (CN4: 34-pin 2.54mm IDC)

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

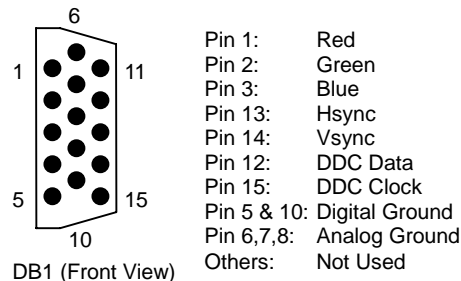
I. IDE Hard Disk Connector (CN1 and CN6: both are 40-pin 2.54mm IDC)

Use the included hard disk cables, you can attach up to four IDE devices, such as 3.5" hard disk drives, CDROM drives, and DVDROM drives.

J. USB Connector (J8)



K. CRT Connector (DB1)



L. LCD Connectors & Jumper (CN8, CN9, JP4 & SW2)

CN8 (primary) and CN9 (secondary) both are 24-bit LCD interface connector for single or dual display applications. JP4 is used to select 5V or 3.3V power source of LCD panel and SW2 is used to select the LCD panel type that LCD BIOS supported.

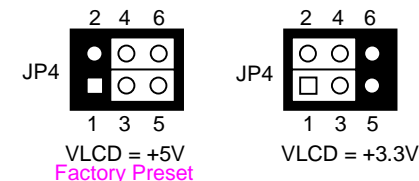
CN8	Signal	CN8	Signal	CN8	Signal	CN8	Signal
1	Ground	23	FP15	2	SHFCLK	24	Ground
3	FP	25	FP16	4	DLP	26	FP17
5	DDE	27	FP18	6	Ground	28	FP19
7	FP0	29	FP20	8	FP1	30	FP21
9	FP2	31	FP22	10	FP3	32	FP23
11	FP4	33	Ground	12	FP5	34	GPO0 (*1)
13	FP6	35	GPO1 (*1)	14	FP7	36	GPO2 (*1)
15	Ground	37	GPO3 (*1)	16	FP8	38	Ground
17	FP9	39	+12V	18	FP10	40	+12V
19	FP11	41	VLCD (*2)	20	FP12	42	VLCD (*2)
21	FP13	43	ENBLK	22	FP14	44	FPEN1

CN9	Signal	CN9	Signal	CN9	Signal	CN9	Signal
1	Ground	23	FP39	2	FP14	24	Ground
3	FP23	25	FP40	4	FP22	26	FP41
5	FP15	27	FP42	6	Ground	28	FP43
7	FP24	29	FP44	8	FP25	30	FP45
9	FP26	31	FP46	10	FP27	32	FP47
11	FP28	33	Ground	12	FP29	34	GPO0 (*1)
13	FP30	35	GPO1 (*1)	14	FP31	36	GPO2 (*1)
15	Ground	37	GPO3 (*1)	16	FP32	38	Ground
17	FP33	39	+12V	18	FP34	40	+12V
19	FP35	41	VLCD (*2)	20	FP36	42	VLCD (*2)
21	FP37	43	ENBLK	22	FP38	44	FPEN2

Note *1: GPO0 to GPO3 pins are TTL outputs. They could use as LCD back light control signals.

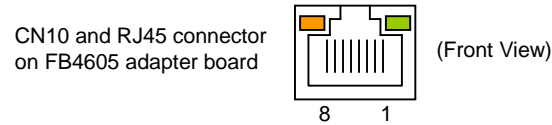
Note *2: VLCD signal is the power source for LCD panel. Be sure to select JP4 properly or will damage your LCD panel.

Note *3: If any trouble when connecting FB2680 with LCD panels, you could contact technical support division of FabiaTech Corporation.



M. LAN Connector and LED Indicators (CN10: RJ45, J12: 10-pin 2.5mm JST)

CN10 is a RJ45 connector with 2 LEDs for LAN port 1. The up side LED (orange) indicates data is accessing and the down side LED (green) indicates on-line status. (When lighted indicates on-line and off indicates off-line) J12 provides twist-pair signals of LAN port 2 if you got dual LAN version and 1 additional adapter board (FB4605) with cable. The following figure and table list the pin assignment of CN10 and RJ45 connector on the FB4605 LAN adapter board:

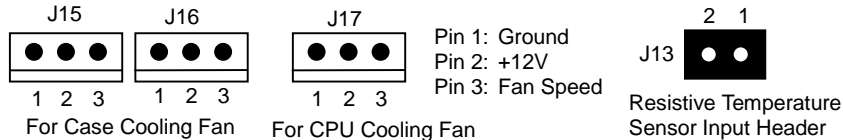


CN10	Signal	CN10	Signal
1	TPTX1+	5	FBG11
2	TPTX 1-	6	TPRX 1-
3	TPRX1+	7	FBG21
4	FBG11	8	FBG21

FB4605	Signal	FB4605	Signal
1	TPTX2+	5	FBG12
2	TPTX 2-	6	TPRX 2-
3	TPRX2+	7	FBG22
4	FBG12	8	FBG22

N. Cooling Fan Connectors and Temperature Sensor (J15, J16, J17 & J13)

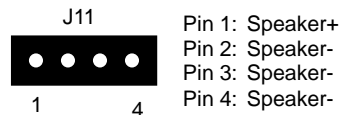
J15, J16, and J17 are all 3-pin Molex connectors, which are use to drive 2 case cooling fans and CPU cooling fan respectively. FB2680 provides 1 CPU temperature sensor inside the CPU socket and one 2-pin header (J13) for connecting a temperature sensor anywhere the system case.



O. Ultra-Wide SCSI Connector (CN2)

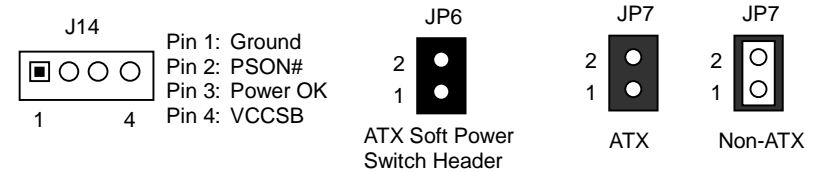
Use the included Ultra-Wide SCSI cable, you could attach 2 ultra-wide SCSI devices (15 devices maximum by using special cables). The ID of on-board SCSI controller is setting to 7.

P. External Speaker Header (J11)



Q. Soft Start Connector (J14, JP6 & JP7) – for ATX Power Supply Only

When ATX power supply is used, you can connect J14 to ATX control signals from the back plane, and connect JP6 to a push bottom switch as soft power switch. If non-ATX power supply is used, please short JP7 with jumper and you don't need to connect J14 and JP6. Note that Non-ATX setting is the default setting for FB2680.



6. Others

A. Clear CMOS Data (JP5)



B. DiskOnChip (DOC) Mapping Segment Select (SW3-3 & SW3-4)

SW3-3	SW3-4	Mapping Segment	Remark
On	On	Reserved	
Off	On	D000:0 (8K bytes)	
On	Off	D400:0 (8K bytes)	
Off	Off	D800:0 (8K bytes)	Factory Preset