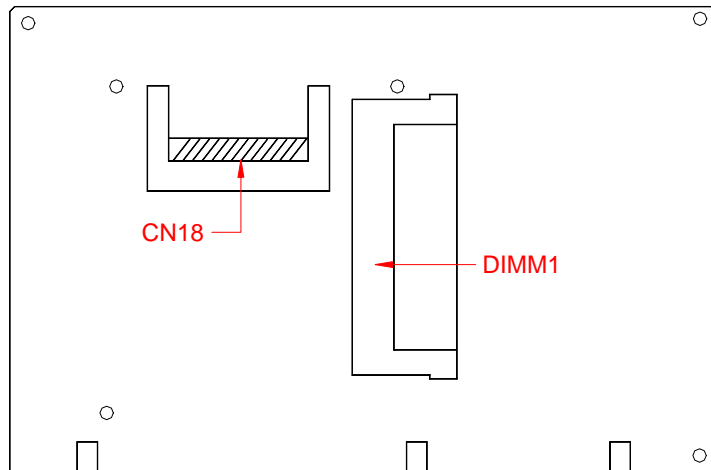
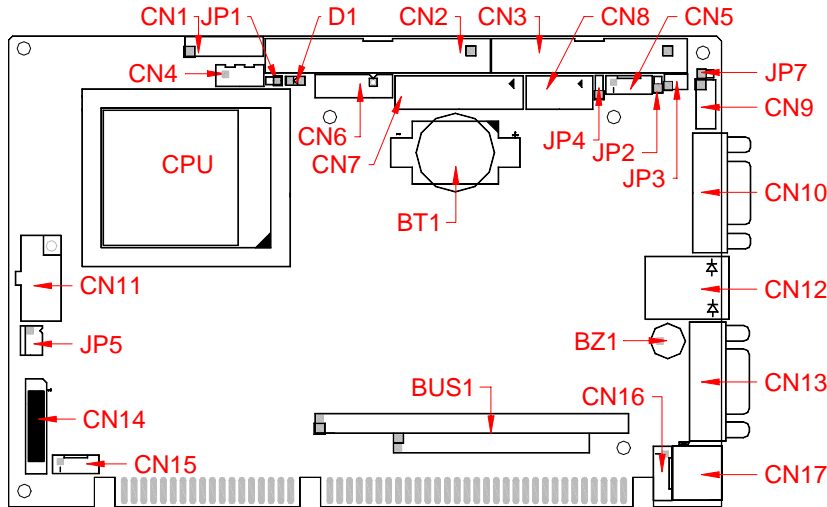


## 1. Brief

The FB2602 series is a Low power Pentium-M/Celeron-M grade, all in one, half-size 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 FB2602(x) all-in-one CPU board.
  - 1 40-pin hard disk drive interface cable.
  - 1 serial port and parallel port interface cable with bracket.
  - 1 Y-type keyboard and mouse port adapter cable.
  - 1 compact disc includes software utility.
  - 1 hard copies of this quick setup manual.
- Note: For USB and Audio functions, 1 USB and Audio adapter board with cables are optional

## 4. Features

- \* On-board low power Intel Celeron-M CPU (Pentium-M is optional) with heat sink only for fanless operation
- \* Compact size slot card with ISA and PC/104 expansion buses.
- \* Intel 852GM+ICH4 chipset and 512KB or above L2 cache inside the CPUs.
- \* Supports 1 SoDIMM socket for up to 1GB DDR-266 RAM.
- \* 10/100 base-TX Ethernet with RJ-45 connector.
- \* Onboard VGA port (852GM embedded) supports CRT and LVDS interface.
- \* 1 PCI IDE and 1 CompactFlash socket for 3.3V CompactFlash and MicroDrive.
- \* 2 USB (V2.0), 1 parallel, 1 RS-232 and 1 RS-232/422/485 ports.
- \* PS/2 compatible keyboard and mouse interface.
- \* On-board 1 low power, battery backup SRAM for frequency data accessing. (Optional)
- \* 4-line TTL I/O, On-board buzzer, and power LED indicator.
- \* Hardware monitoring functions and 1 CPU cooling fan connector for monitoring.
- \* Provides AC97 Audio function and software programmable watchdog timer.
- \* Flash BIOS with easy upgrade utility.
- \* Compact size, 185 mm x 122 mm.

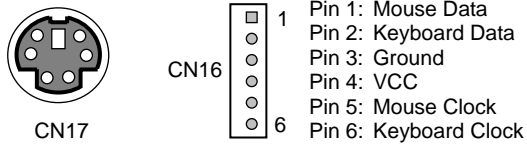
## 5. Connectors and Jumpers List

Name	Function	Name	Function
CN1	Integrated Signals Connector (J2*8)	CN16	KB/MS Connector (6-pin JST)
CN2	40-pin IDE Connector (40-pin IDC)	CN17	KB/MS Connector (6-pin mini-Din)
CN3	Floppy Connector (34-pin IDC)	CN18	CompactFlash Socket (50-pin)
CN4	ATX Signals Connector (4-pin JST)	JP1	PS2/ATX Power Select Jumper (J1*2))
CN5	TTL I/O Connector (5-pin JST)	JP2	Clear CMOS data Header (J1*2))
CN6	AC97 Audio Connector (12-pin IDC)	JP3	Serial Port 2 Mode Select (J2*3)
CN7	Parallel Port Connector (26-pin IDC)	JP4	SRAM Mapping Address Select (J1*3)
CN8	COM2 Connector (10-pin IDC)	JP5	CPU Cooling Fan Connector (3-pin)
CN9	USB #1 & #2 Connector (J2*5)	JP6	Reserved Header (J1*8)
CN10	CRT Connector (15-pin D-sub)	JP7	RS485 Terminator Select Jumper (J1*2)
CN11	Mini ATX Connector (10-pin)	BUS1	PC/104 Connector (64 and 40 pin)
CN12	LAN Connector (RJ45 w/LEDs)	BZ1	On-board Buzzer
CN13	COM1 Connector (9-pin D-sub)	DIMM1	SoDIMM Socket (200-pin)
CN14	LVDS Connector (30-pin DF13)	LED1	On-board Power/Watchdog LED
CN15	LCD Power Connector (5-pin JST)	-	-

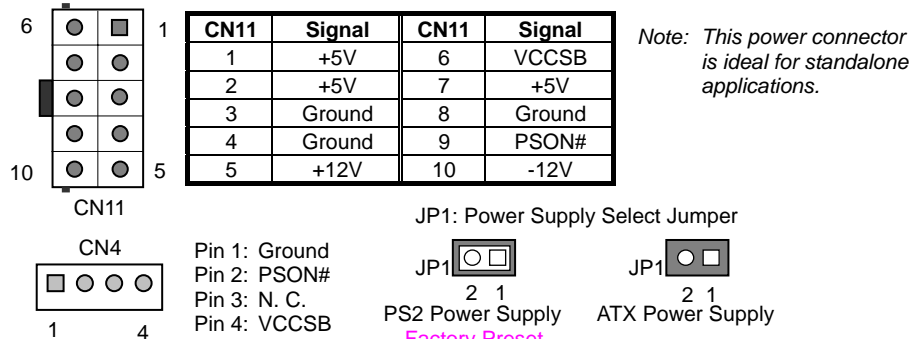
## 6. Connectors and Their Relative Jumpers

### A. Keyboard and Mouse Connectors (CN16 and CN17)

CN17 is a standard PS/2 type keyboard connector and any PS/2 type keyboard can plug into CN17 directly without extra adapter cable. Use the included keyboard+mouse adapter cable, you can connect keyboard and mouse simultaneously. CN16 is another way to attach keyboard and mouse with optional adapter cable.



### B. Auxiliary Power Connectors and Jumper (CN11, CN4, and JP1, they are all optional items)



### C. Parallel Port Connector (CN7: 26-pin 2.0mm IDC)

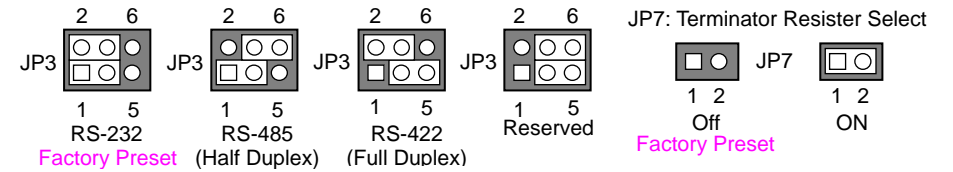
The included printer interface cable is used to transfer 26-pin connector into standard parallel port connector (D-sub 25-pin).

### D. Serial Port Connectors & Selector (CN13, CN8, JP3, and JP7)

There are 2 connectors and 2 jumpers that served for onboard 2 serial ports. The following table and figure list the combination and pin definition of them:

Functional connector, header, and jumper of serial ports	Serial Port 1	Serial Port 2
RS-232 Signals	CN13	CN8
RS-422 Signals	-	CN8
RS-485 Signals	-	CN8
Mode Select	-	JP3
422/485 Terminator Select	-	JP7

CN13	Signals	CN8	D-sub 9	RS-232	RS-422	RS-485
1	-DCD1	1	1	-DCD2		-
6	-DSR1	2	6	-DSR2		-
2	RXD1	3	2	RXD2	RX-	485-
7	-RTS1	4	7	-RTS2	TX-	-
3	TXD1	5	3	TXD2	RX+	485+
8	-CTS1	6	8	-CTS2	TX+	-
4	-DTR1	7	4	-DTR2		-
9	-RI1	8	9	-RI2		-
5	Ground1	9	5	Ground2		
Metal	Case Ground	10	Metal	Case Ground		



### E. IDE Hard Disk Connector (CN2 - 40-pin 2.54mm IDC)

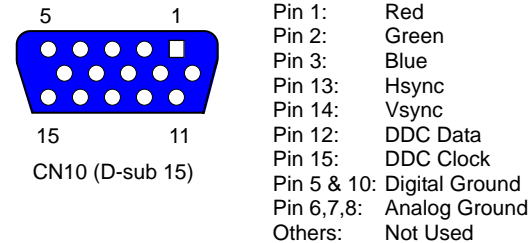
Use the included 40-pin hard disk cable, you can attach up to two 3.5" hard disk drives.

### F. LAN Connector and LED Indicators (CN12)

CN12 is a RJ45 connector with 2 LEDs. 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)

CN12	10/100	Giga	CN12	10/100	Giga
1	TPTX+	MDI0+	5	FBG1	MDI2-
2	TPTX-	MDI0-	6	TPRX-	MDI1-
3	TPRX+	MDI1+	7	FBG2	MDI3+
4	FBG1	MDI2+	8	FBG2	MDI3-

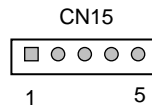
### G. CRT Connector (CN10)



## H. LCD Connectors (CN14 and CN15)

CN14 supports 36-bit LVDS LCD signals, and CN15 is the power connector for inverter board.

CN14	Signal	CN14	Signal
1	Ground	2	Y0+
3	Y0-	4	Ground
5	Y1+	6	Y1-
7	Ground	8	Y2+
9	Y2-	10	Ground
11	YCK+	12	YCK-
13	Ground	14	Z0+
15	Z0-	16	Ground
17	Z1+	18	Z1-
19	Ground	20	Z2+
21	Z2-	22	Ground
23	ZCK+	24	ZCK-
25	Ground	26	Ground
27	+3.3V	28	+3.3V
29	+5V	30	+5V

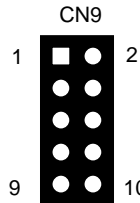


Pin 1: +12V  
Pin 2: Ground  
Pin 3: ENVDD  
Pin 4: N.C.  
Pin 5: +5V

*Note: If any trouble when connecting FB2602 with LCD panels, you could contact technical support division of FabiaTech Corporation.*

## I. USB and Audio Connectors (CN9 and CN6), and Connectors on FB4641x Adapter Board

CN9 supports 2 port USB signals and CN6 provides AC97 signals for Audio function. Use the FB4641x (USB and Audio Adapter Board) and cables for your USB and Audio applications.



CN9	Signal	CN9	Signal
1	USBV0	2	Case Ground
3	USB0-	4	USBG1
5	USB0+	6	USB0+
7	USBG0	8	USB0-
9	Case Ground	10	USBV1

CN6	Signal	CN6	Signal
1	AC97_CLK	2	+12V
3	+5V	4	AC97_SYNC
5	Ground	6	Ground
7	N. C.	8	AC97_RST#
9	AC97_SDO	10	AC97_SDI2
11	AC97_SDI0	12	AC97_SDI1

Audio connectors on the FB4641x adapter board



*Note that the FB4641x and cables are optional items.*

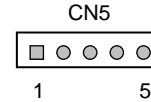
## J. SoDIMM Socket (DIMM1)

DIMM1 (Located on the solder side) supports 200-pin, 2.5V, and DDR-333 DRAM modules with size of 128MB, 256MB, 512MB, and 1GB.

## K. Floppy Connector (CN3: 34-pin 2.54mm IDC)

Note that the included floppy cable supports only 720KB, 1.44MB, and 2.88MB disk drives.

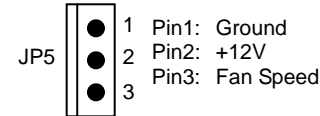
## L. TTL I/O Connector (CN5: 5-pin 2.0mm JST)



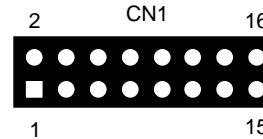
CN5	TTL Lines	Bit Location
1	Output Line 0	<i>Please refer to User's Manual for details.</i>
2	Output Line 1	
3	Input Line 0	
4	Input Line 1	
5	Ground	-

## M. Cooling Fan Connector (JP5)

JP5 is 3-pin Molex connector which is used to drive CPU cooling fan for non-low-power CPUs are used.



## N. Multi-Function Header (CN1)

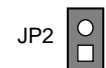


CN1	Signal	CN1	Signal
1	Power LED+	2	Power LED-
3	HDD LED+	4	HDD LED-
5	LAN LED+	6	LAN LED-
7	Temperature Sensor+	8	Temperature Sensor-
9	IRTX	10	IRRX
11	Ground	12	Ground
13	Reset+	14	Reset-
15	Soft Start SW+	16	Soft Start SW-

## O. CompactFlash Socket (CN18)

The CompactFlash socket CN18 (Located on the solder side) supports 3.3V CompactFlash and MicroDrive. Its default setting is secondary master port.

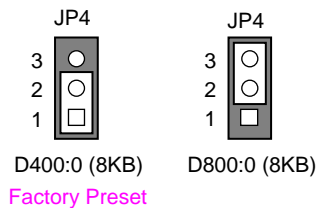
## P. Clear CMOS Data (JP2)



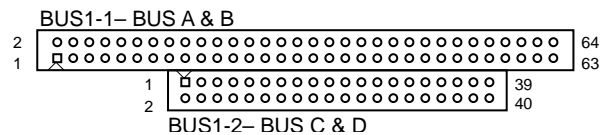
JP2 is used to clear CMOS data by closing its 2-pin for about 3 seconds.

### Q. Memory Bank Address Select (JP4)

JP4 is used to select the occupied memory address of on-board SRAM. It will occupy 8K bytes for each selection.



### R. PC/104 Connectors (BUS1: 64-pin IDC & 40-pin IDC)



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