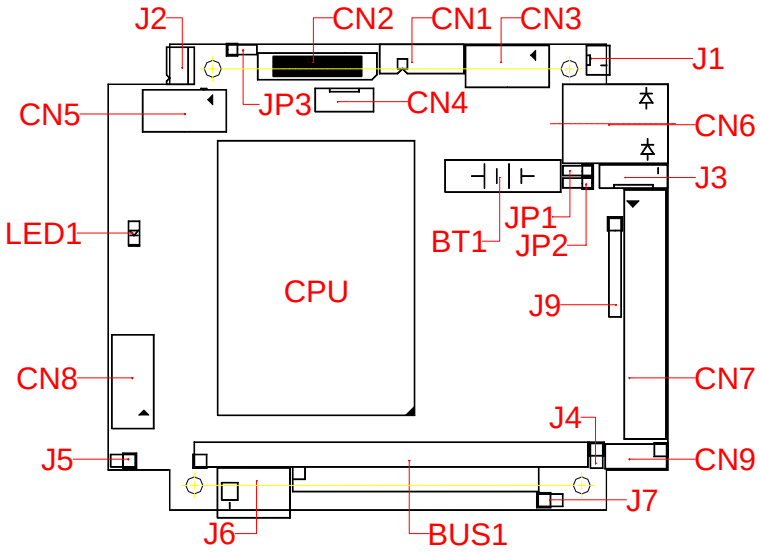
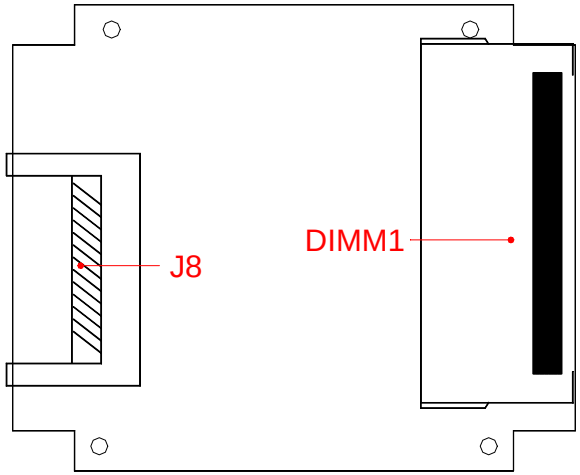
FB2611 Series User's Quick Setting

Brief

The FB2611 is an all-in-one, PC/104, VIA MARK CoreFusion™ CPU module. This user's quick setting provides the jumper settings, connector location, and their pin assignment.

1. Board Placement





2. Packing List

1 FB2611x all-in-one PC/104 CPU board.
1 VGA (CRT interface) adapter cable.
1 44-pin hard disk drive interface cable.
2 serial port adapter cable
1 PS/2 keyboard and mouse port adapter cable.
1 USB cable, 1 Audio cable, and 1 FB4641 Audio/USB adapter board.
1 compact disc includes software utility.

3. Features

* On-board 533/800 MHz VIA MARK CoreFusion™ CPU. (800MHz is the standard)
* VIA MARK CoreFusion™+VT82C686B chipset.
* 1 So-DIMM socket for up to 512MB PC-133 SDRAM.
* One 10/100 base-T Ethernet port.
* Supports CRT and LVDS interface with up to 32MB shared memory.
* 1 RS-232, 1 RS-232/485, 2 USB, and 1 PCI IDE interface.
* CompactFlash socket for 3.3V CompactFlash modules.
* PS/2 compatible keyboard and mouse interface.
* Provides header for external speaker and hard disk access LED.
* Provides 1 CPU cooling fan connector for monitoring.
* Provides AC97 Audio functions.
* Flash BIOS with easy upgrade utility.
* Power requires +5V only, 2.6A maximum.
* PC/104 form factor, 95.9 mm x 115.6 mm (3.775" x 4.55")

4. Connectors, Headers, and Jumpers List

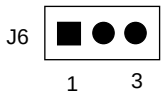
Name	Function	Name	Function
CN1	CRT Connector (10-pin IDC)	J1	External Battery Connector (2-pin JST)
CN2	LVDS Connector (30-pin DF-13)	J2	Cooling Fan Connector (3-pin)
CN3	COM1 Connector (10-pin IDC)	J3	KB. and Mouse Connector (6-pin JST)
CN4	Power Connector for LCD (5-pin JST)	J4	External Speaker Header (J1*2)
CN5	COM2 Connector (10-pin IDC)	J5	Reset Header (J1*2)
CN6	LAN Connector (RJ45 with LEDs)	J6	Power Connector (3-pin)
CN7	IDE Connector (44-pin IDC)	J7	External HDD LED Header (J1*2)
CN8	AC97 Audio Connector (12-pin IDC)	J8	CompactFlash Socket (50-pin)
CN9	USB Connector (10-pin Header)	J9	Reserved Header (J1*8)
BUS1	PC/104 Connector (64 and 40 pin)	JP1	Battery Select Jumper (J1*3)
DIMM1	SoDIMM Socket (144-pin)	JP2	CF Master/Slave Select Jumper (J1*3)
LED1	On-Board Power LED Indicator	JP3	RS485 Terminator Select Jumper (J1*3)

5. Connectors, Headers and Their Relative Jumpers

A. Reset Header (J5)

J5 is a 2-pin header for connecting to system reset bottom. Close these 2 pins to hardware reset FB2611 and restart system booting.

B. Power Connector (J6: 3-pin 0.2" terminal block)

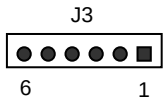


Pin 1: Ground
Pin 2: +5V
Pin 3: +12V

Note: FB2611 needs +5V only, +12V is not necessary unless J2 driving a cooling fan.

C. Keyboard and Mouse Connector (J3)

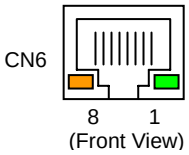
J3 provides PS/2 keyboard and mouse interface, use the included adapter cable to connect between J3 and standard PS/2 devices.



Pin 1: Mouse Data
Pin 2: Keyboard Data
Pin 3: Ground
Pin 4: +5V
Pin 5: Mouse Clock
Pin 6: Keyboard Clock

D. LAN Connector and LED Indicators (CN6: RJ45)

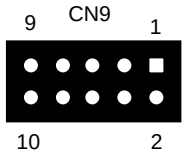
CN6 is a standard RJ45 connector with 2 LEDs. The left side LED (orange) indicates data is accessing and the right side LED (green) indicates on-line status. (When lighted indicates on-line and off indicates off-line) The following lists the pin assignment of CN6:



CN6	Signals	CN6	Signals
1	TPTX+	5	FBG1
2	TPTX-	6	TPRX-
3	TPRX+	7	FBG2
4	FBG1	8	FBG2

E. USB Connector (CN9)

Use the USB adapter cable and FB4641x board, you can attach up to 2 USB devices.



Pin 1: USBV0
Pin 2: Case Ground
Pin 3: USBD0-
Pin 4: USBG1
Pin 5: USBD0+
Pin 6: USBD1+
Pin 7: USBG0
Pin 8: USBD1-
Pin 9: Case Ground
Pin 10: USBV1

F. Serial Port Connectors and Select Jumper (CN3, CN5 and JP3)

The included serial port cables are used to transfer CN3 and CN5 to 9-pin D-type male connector. The following table shows the pin definitions of CN3, CN5, and 9-pin D-sub connectors:

CN3	RS232	9-pin D-Sub	RS232	RS485	CN5
1	-DCD1	1	-DCD2		1
2	-DSR1	6	-DSR2		2
3	RXD1	2	RXD2	485-	3
4	-RTS1	7	-RTS2		4
5	TXD1	3	TXD2	485+	5
6	-CTS1	8	-CTS2		6
7	-DTR1	4	-DTR2		7
8	-RI1	9	-RI2		8
9	Ground1	5	Ground2		9
10	Case Ground	Metal Case	Case Ground		10

Note: RS232/RS485 on CN5 is selectable via BIOS setup program

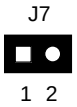
RS485 Terminator Select Jumper

Terminator ON

Terminator OFF
Factory Preset

G. IDE Hard Disk Connector and Access LED Header (CN7 and J7)

Use the included 44-pin hard disk cable, CN7 can attach up to two 2.5" hard disk drives.



Pin 1: LED+
Pin 2: LED-

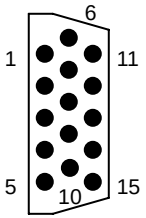
H. AC97 Audio I/O Connector (CN8)

CN8 is a 12-pin 2.0mm IDC connector with AC97 signals for Audio I/O. Use the included Audio cable and FB4641x adapter board for your Audio applications. The J3, J4, and J5 connectors on FB4641x are 2-way Line-In, mono Microphone input, and 2-way Line-Out respectively. The following figure shows these Audio connectors on FB4641x board:

I. CRT and LVDS Connectors (CN1, CN2, and CN4)

The following table and figure illustrate the pin definition of CN1, CN2, CN4 and D-sub 15-pin on the CRT adapter cable:

CN1	Signal	DB-15	CN1	Signal	DB-15
1	RED	1	2	Case Ground	Case
3	GREEN	2	4	Digital Ground	5,10
5	BLUE	3	6	Analog Ground	6,7,8
7	VSYNC	14	8	DDC Data	12
9	HSYNC	13	10	DDC Clock	15



DB-15 (Front View)

CN2	Signal	CN2	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

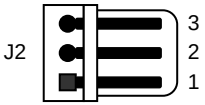
CN4

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

Note: If any trouble when connecting FB2611x with LCD panels, you could contact technical support division of FabiaTech Corporation.

J. Cooling Fan Connector (J2)

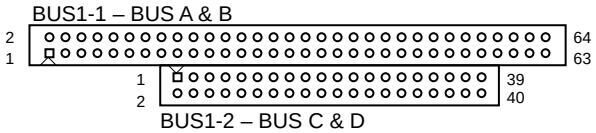
J2 is 3-pin Molex connector, which is use to drive CPU cooling fan if Non-Low-Power CPUs are used.



Pin 1: Ground
Pin 2: +12V
Pin 3: Fan Speed

Note: It needs to have +12V inputs from J6 power connector if this fan connector is used.

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



L. SoDIMM Socket (DIMM1)

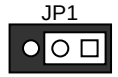
DIMM1 (on the solder side) supports 144-pin, 3.3V, and PC-133 SDRAM with size of 32MB, 64MB, 128MB, 256MB, and 512MB.

M. External Battery Header and Battery Select Jumper (J1 & JP1)

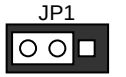
J1 is used to connect an external battery pack if on-board Lithium battery is empty, and please setting JP1 properly of on-board battery or external battery.

Pin 1: Battery+
Pin 2: Battery-
Note: 2.6V to 3.6V

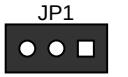
External Battery Connector



On-Board Battery
Factory Preset



External Battery



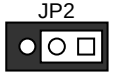
Clear CMOS Data (Open all pins for about 30 seconds)

N. External Speaker Header (J4)

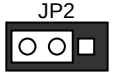
Pin 1: Speaker+
Pin 2: Speaker-

O. CompactFlash Socket and Master/Slave Select (J8 and JP2)

The CompactFlash socket J8 (on the solder side) supports 3.3V CompactFlash and MicroDrivers. JP2 is used to select master/slave device of this socket.



Master



Slave
Factory Preset

P. Power/Watchdog LED (LED1)

LED1 is used to indicate as powered-on when it lighted, and watchdog is enabled when it is blinking. The watchdog will be disabled and LED1 will always lighted after system reset.

End of Document