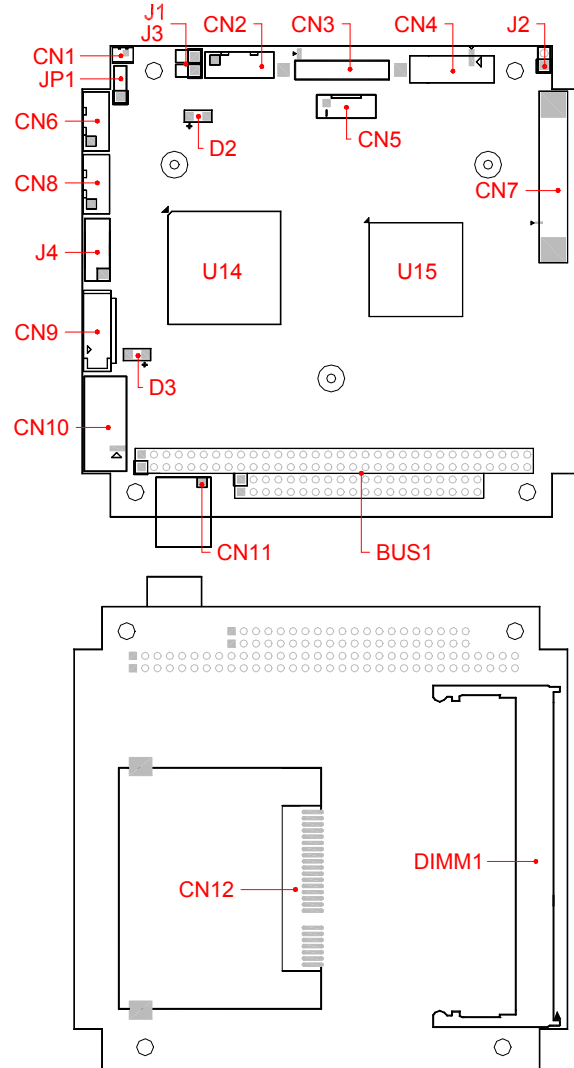


1. Brief

The FB2710 series is a Low power AMD G-T16R processor, all in one PC/104 CPU board. This user's quick setting provides the jumper and switch settings, connector location, and their pin assignment.

2. Board Placement



3. Packing List

A. Standard Items

- 1 FB2710x all-in-one PC/104 CPU board.
- 1 VGA interface adapter cable.
- 1 dual port USB interface cable.
- 2 serial port adapter cables.
- 1 FB4760 Kit (Giga LAN adapter board with cable).
- 1 Digital Versatile Disc (DVD) includes software utilities and manuals.

B. Optional Items

- # SATA interface cable (7-pin, length-15CM, P/N: 7002000033G)
- # Audio with USB Adapter Kit (Audio and USB adapter board (FB4706) with 2 cables, P/N:0153000003G)

4. Features

- * On-board AMD G-T16R low power CPU (615MHz, 1C/1T, 512KB Cache, 4.5 Watts) with fanless operation.
- * AMD A55E chipset (Radeon 6250) supports VGA and LCD interface with UMA architecture.
- * 1 So-DIMM socket for up to 4GB DDR3L (1066MHz) modules.
- * 1 GbE LAN port.
- * Provides HD Audio function and software programmable watchdog timer.
- * 2 RS-232, 2 USB (V2.0), 1 SATA and 1 CFAST socket.
- * Support 16-bit ISA bus.
- * Flash BIOS with easy upgrade utility.
- * Power requires +5V only, 2.52A typical, 3.4A maximum.
- * PC/104 form factor, 90.2 mm x 95.9 mm (3.55" x 3.775")

5. Connectors and Jumpers List

Name	Function	Name	Function
CN1	External Battery Connector (2-pin)	J1	Reset Header (J1*2)
CN2	LAN Connector (12-pin, JST)	J2	External Speaker Header (J1*2)
CN3	LVDS LCD Connector (30-pin DF-13)	J3	Power Button Header (J1*2)
CN4	VGA Connector (10-pin IDC)	J4	USB Connector (J2*5)
CN5	LVDS Power Connector (5-pin JST)		
CN6	COM2 Connector (10-pin JST)	JP1	Clear CMOS Data Jumper (J1*3)
CN7	Reserved (M2 DOM Socket)	BUS1	PC/104 BUS (64-pin+40-pin)
CN8	COM1 Connector (10-pin JST)	DIMM1	DDR3L So-Dimm Socket (204-pin)
CN9	SATA Connector (7-pin)	D2	Power LED (Green)
CN10	HD Audio Connector (12-pin IDC)	D3	SATA/CFAST Access LED (Red)
CN11	Power Connector (4-pin JAE)		
CN12	CFAST Socket (24-pin)		

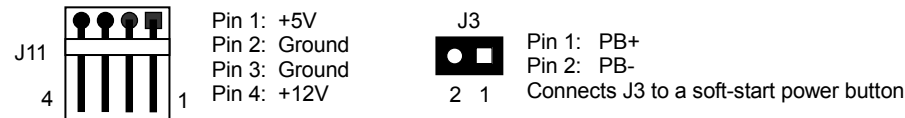
6. Connectors and Their Relative Jumpers

A. Reset Header (J1)

J1 is a 2-pin header for connecting to system reset button. Close these 2 pins to hardware reset FB2710 and restart system booting.

B. Power Connector and Power LED (CN11, J3, and D2)

D2 is used to indicate as powered-on when it lighted. CN11 is main power connector for FB2710. Note that FB2710 requires +5V only, +12V is not necessary.



C. Serial Port Connectors (CN8 and CN6)

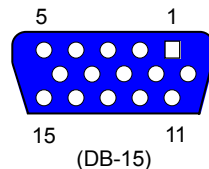
Use the included serial adapter cables for transferring to standard RS-232 connector (9-pin D-sub).

CN8	Signals	9-pin D-sub	CN6	RS-232	9-pin D-sub
1	-DCD1		1	-DCD2	1
2	-DSR1		2	-DSR2	6
3	RXD1		3	RXD2	2
4	-RTS1		4	-RTS2	7
5	TXD1		5	TXD2	3
6	-CTS1		6	-CTS2	8
7	-DTR1		7	-DTR2	4
8	-RI1		8	-RI2	9
9	Ground1		9	Ground2	5
10	Case Ground		10	Case Ground	Metal

D. VGA Connector (CN4)

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

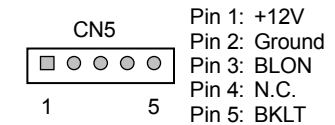
CN4	Signal	DB-15	CN4	Signal	DB-15
1	RED	1	2	Case Ground	Case
3	GREEN	2	4	Digital Ground	5,10
5	BLUE	3	6	Analog Ground	6,7,8
7	VSYNC	14	8	DDC Data	12
9	HSYNC	13	10	DDC Clock	15



E. LVDS LCD Connectors (CN3 and CN5)

CN3 is a 24-bit LVDS LCD interface connector for widely LCD panel applications. CN5 is the power connector for inverter board.

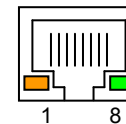
CN3	Signal	CN3	Signal
1	Ground	2	Y0+
3	Y0-	4	Ground
5	Y1+	6	Y1-
7	Ground	8	Y2+
9	Y2-	10	Ground
11	YCK+	12	YCK-
13	Ground	14	AUX+
15	AUX-	16	Ground
17	HP0	18	N.C.
19	Ground	20	N.C.
21	N.C.	22	Ground
23	N.C.	24	N.C.
25	Ground	26	Ground
27	+3.3V	28	+3.3V
29	+3.3V	30	+3.3V



Note: If any question when connecting FB2710x with LCD panels, you could contact technical support division of FabiaTech Corporation.

F. LAN Connector and LED Indicators (CN2)

CN2 provides twist-pair signals of LAN port. Use the included adapter board (FB4760) with cable to transfer to standard RJ45 connector. The left side LED (orange) indicates data is accessing and the right side LED (green) indicates on-line status. The following figure and table list the pin assignment of RJ45 connector on the FB4760 LAN adapter board:



RJ45 connector on FB4760 adapter board (Front View)

FB4760	Signal	FB4760	Signal
1	MDI0+	5	MDI2-
2	MDI0-	6	MDI1-
3	MDI1+	7	MDI3+
4	MDI2+	8	MDI3-

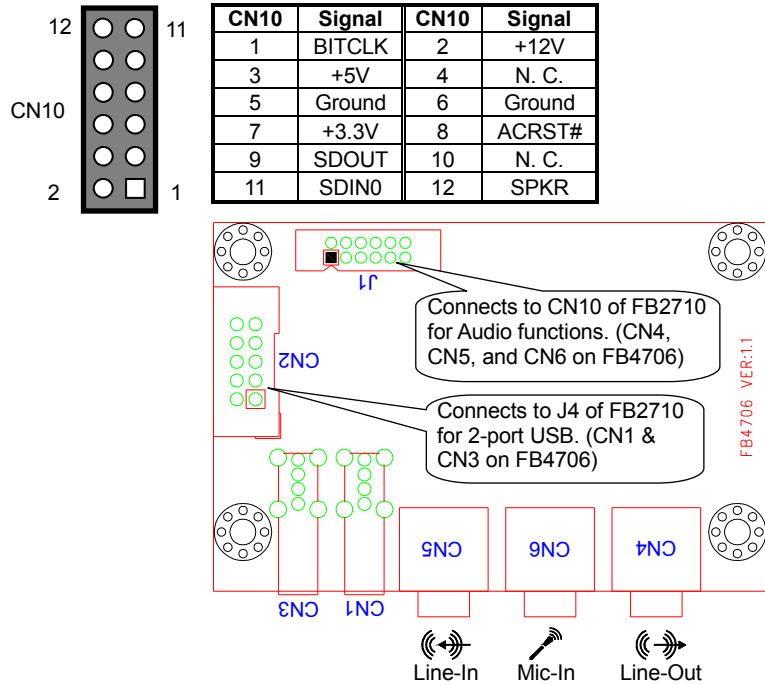
G. USB Connector (J4)

J4	Signal	J4	Signal
1	USBV0	2	Case Ground
3	USBDO-	4	USBG1
5	USBDO+	6	USBBD1+
7	USBG0	8	USBBD1-
9	Case Ground	10	USBV1

Use the included adapter cable connects to J4, you can attach up to 2 USB devices

H. Audio Connector (CN10) and Connectors on FB4706 Adapter Board

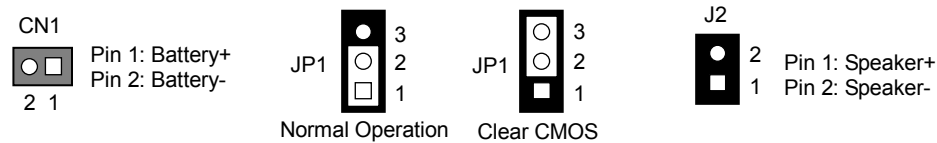
For Audio applications, an Audio with USB kit (optional) is necessary. The Audio with USB kit includes 1 FB4706 adapter board, one 12-pin Audio cable, and one 10-pin USB cable. The following figure shows CN10 signals, function connectors of FB4706 board, and how to connect cables between FB2710 with FB4706.



I. SoDIMM Socket (DIMM1)

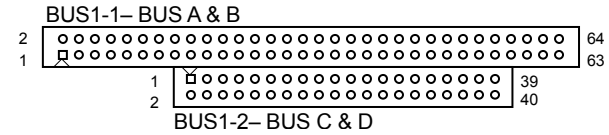
DIMM1 (Located on the solder side) supports 204-pin, 1.35V, and DDR3L DRAM modules with size up to 4GB.

J. Battery Connector (CN1), Clear CMOS Data (JP1) and External Speaker Header (J2)



Note: Close pin 2 and 3 of JP1 at least 3 seconds, then return to normal operation position.

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



Row-A	Signal	Row-A	Signal	Row-B	Signal	Row-B	Signal
1	-IOCHK	33	SA14	2	Ground	34	N. C.
3	SD7	35	SA13	4	RSTDRV	36	N. C.
5	SD6	37	SA12	6	+5V	38	-REFSH
7	SD5	39	SA11	8	IRQ9	40	BUSCLK
9	SD4	41	SA10	10	N.C. (-5V)	42	IRQ7
11	SD3	43	SA9	12	N. C.	44	IRQ6
13	SD2	45	SA8	14	N.C. (-12V)	46	IRQ5
15	SD1	47	SA7	16	-ZWS	48	IRQ4
17	SD0	49	SA6	18	+12V	50	IRQ3
19	IORDY	51	SA5	20	N.C. (KEY)	52	N. C.
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	N. C.	62	Ground
31	SA15	63	Ground	32	N. C.	64	Ground

Row-C	Signal	Row-C	Signal	Row-D	Signal	Row-D	Signal
1	Ground	21	-MEWR16	2	Ground	22	N. C.
3	-SBHE	23	SD8	4	-MEM16	24	N. C.
5	LA23	25	SD9	6	-IO16	26	N. C.
7	LA22	27	SD10	8	IRQ10	28	N. C.
9	LA21	29	SD11	10	IRQ11	30	N. C.
11	LA20	31	SD12	12	IRQ12	32	N. C.
13	LA19	33	SD13	14	IRQ15	34	+5V
15	LA18	35	SD14	16	IRQ14	36	N. C.
17	LA17	37	SD15	18	N. C.	38	Ground
19	-MERD16	39	N.C. (KEY)	20	N. C.	40	Ground

Note: The PC/104 BUS did not support DMA functions.

End of Document