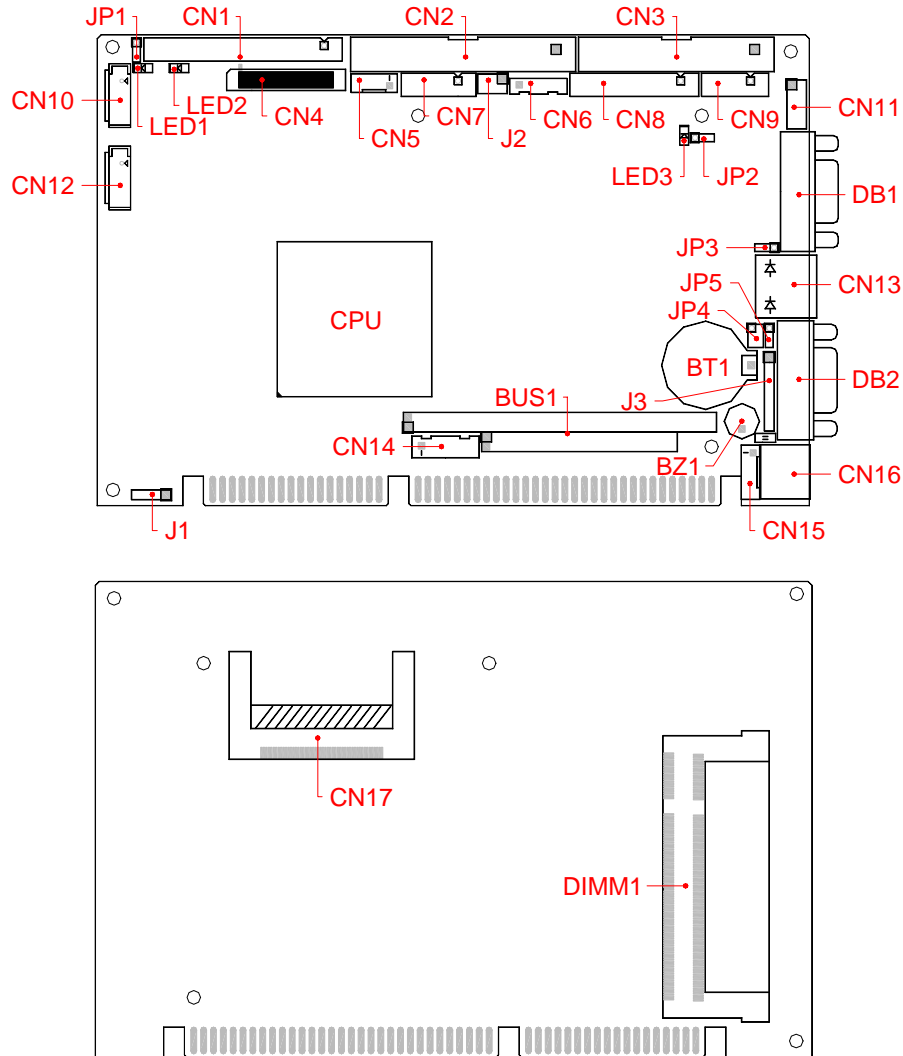


1. Brief

The FB2505 is a Low power AMD LX, 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 FB2505 all-in-one CPU board.
- 1 40-pin hard disk drive interface cable and 1 34-pin floppy drive interface cable.
- 1 serial port and parallel port interface cable with bracket.
- 1 PS/2 keyboard and mouse port adapter cable. (Optional)
- 1 USB cable, 1 Audio cable, and 1 FB4641x Audio adapter board. (All are optional items)
- 1 compact disc includes software utilities and manuals.

4. Features

- * On-board AMD LX-800 CPU (running at 500MHz) with heat sink only. (Fanless operation)
- * Compact size slot card with ISA and PC/104 bus.
- * AMD Geode CS5536 chipset with UMA architecture.
- * Support 16-bit ISA bus, but without DMA transfer function.
- * On-board 128MB DDR and 1 SoDIMM socket (FB2505A only) for up to 1152MB maximum.
- * 2 USB ports, 10/100M-TX Ethernet with RJ-45 connector.
- * Supports CRT and LCD (FB2505A only) with up to 254MB shared memory.
- * 1 floppy, 1 PCI IDE, 1 parallel, 1 RS-232 and 1 RS-232/422/485 ports.
- * CompactFlash socket for 3.3V CompactFlash and MicroDrives.
- * PS/2 keyboard and mouse interface, 4-bit TTL I/O, On-board buzzer, and LED indicators.
- * Software programmable watchdog timer and Flash BIOS with easy upgrade utility.
- * Provides 1 AC97 connector for Audio functions. (FB2505A only)
- * Compact size, 185 mm x 122 mm.

5. Connectors and Jumpers List

Name	Function	Name	Function
CN1	44-pin IDE Connector (Reserved)	J1	Reserved
CN2	40-pin IDE Connector (40-pin IDC)	J2	Reset and LED Indicator Header (J2*3)
CN3	Floppy Connector (34-pin IDC)	J3	Reserved
CN4	LCD Connector (40-pin DF13)	DB1	CRT Connector (15-pin D-sub)
CN5	LCD Power Connector (5-pin JST)	DB2	COM1 Connector (9-pin D-sub)
CN6	TTL I/O Connector (5-pin JST)	DIMM1	SoDIMM Socket (200-pin)
CN7	AC97 Connector (12-pin IDC)	BUS1	PC/104 Connector (64 and 40 pin)
CN8	Parallel Port Connector (26-pin IDC)	BUS2	ISA Golden Finger (16-bit)
CN9	COM2 Connector (10-pin IDC)	BUS3	ISA Golden Finger (8-bit)
CN10	SATA#1 Connector (Reserved)	JP1	CF Master/Slave Select Jumper (J1*3)
CN11	USB Connector (J2*5)	JP2	485 Terminator Resistor Select (J1*3)
CN12	SATA#0 Connector (Reserved)	JP3	SRAM Mapping Select (J1*3)
CN13	LAN Connector (RJ45 w/LEDs)	JP4	COM2 Mode Select (J2*3)
CN14	Aux. Power Connector (6-pin JST)	JP5	CMOS RAM Select (J1*3)
CN15	KB/MS Connector (6-pin JST)	LED1	SATA Access LED (Reserved)
CN16	KB/MS Connector (6-pin mini-Din)	LED2	IDE Access LED (Red, Reserved)
CN17	CompactFlash Socket (50-pin)	LED3	On-Board Power/WD LED (Green)
BZ1	On-board Buzzer	D4	Reserved LED Indicator

6. Connectors and Their Relative Jumpers

A. Reset and LED Indicator Header (J2)

	J2	Function	J2	Function
	1	PWR/WD LED+	2	PWR/WD LED-
	3	IDE Access LED+	4	IDE Access LED-
	5	Ground	6	Reset

B. Keyboard and Mouse Connector (CN15 and CN16)

CN16 is a standard PS/2 type keyboard connector and any PS/2 type keyboard can plug into CN16 directly without extra adapter cable. CN15 provides PS/2 mouse interface, use optional mouse adapter cable to connect between CN15 and standard PS/2 mouse.

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

Note that CN15 and CN16 all support PS/2 keyboard and mouse signals and have to order 3-head cable from your supplier.

C. Auxiliary Power Connector and Power/WD LED (CN14, LED3, and J2)

	1	Pin 1: Ground
	2	Pin 2: +5V
	3	Pin 3: +5V
	4	Pin 4: Ground
	5	Pin 5: Ground
	6	Pin 6: +12V

Note: CN14 is ideal for standalone applications. LED3 is on-board power/watchdog LED and pin 1 & 2 of J2 provide header for external LEDs.

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

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

E. Hard Disk Connectors and LED Indicators (CN1, CN2, CN10, CN12, J2, LED1, and LED2)

Use the included 40-pin hard disk cable, you can attach up to two 3.5" hard disk drives with CN2 connector. CN1, CN10, CN12 connectors and LED1, LED2 are all reserved. FB2505 series only provides pin 3 & 4 of J2 header for connecting external IDE LED.

F. Parallel Port Connector (CN8: 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).

G. SoDIMM Socket (DIMM1, FB2505A only)

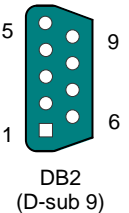
DIMM1 supports 200-pin DDR-333/400 RAM with size of 1128MB, 256MB, 512MB, and 1GB.

H. Serial Port Connectors & Selector (DB2, CN9, JP2, and JP4)

There are 2 connectors and 2 jumpers that served for on-board 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	DB2	CN9 and JP4
RS-422 Signals	-	CN9, JP2, and JP4
RS-485 Signals	-	CN9, JP2, and JP4
Terminator for RS-422/RS-485	-	JP2

DB2	Signals	CN9	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		



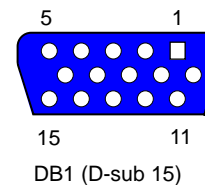
JP4: RS-232, RS-485, RS-422, Reserved

JP2: Terminator Resister Select

Factory Preset (Half Duplex) Factory Preset (Full Duplex)

Off ON

I. CRT Connector (DB1)

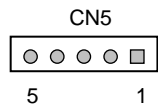


Pin 1:	Red
Pin 2:	Green
Pin 3:	Blue
Pin 13:	Hsync
Pin 14:	Vsync
Pin 12:	DDC Data
Pin 15:	DDC Clock
Pin 5 & 10:	Digital Ground
Pin 6,7,8:	Analog Ground
Others:	Not Used

J. LCD Connectors (CN4 and CN5, FB2505A only)

CN4 supports 24-bit TTL LCD signals, and CN5 is the power connector for inverter board. Please refer the pin assignment as following table and figure.

CN4	Signal	CN4	Signal	CN4	Signal	CN4	Signal
1	+5V	21	FP12	2	+5V	22	FP13
3	Ground	23	FP14	4	Ground	24	FP15
5	+3.3V	25	FP16	6	+3.3V	26	FP17
7	N.C.	27	FP18	8	Ground	28	FP19
9	FP0	29	FP20	10	FP1	30	FP21
11	FP2	31	FP22	12	FP3	32	FP23
13	FP4	33	Ground	14	FP5	34	Ground
15	FP6	35	FPCLK	16	FP7	36	FPVS
17	FP8	37	DE	18	FP9	38	FPHS
19	FP10	39	ENVDD	20	FP11	40	ENAVEE

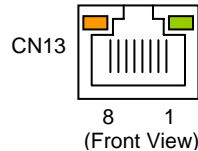


Pin 1: +12V
 Pin 2: Ground
 Pin 3: ENVDD
 Pin 4: N.C.
 Pin 5: +5V

Note: If any question when connecting FB2505A with LCD panels, you could contact technical support division of FabiaTech Corporation.

K. LAN Connector and LED Indicators (CN13: RJ45)

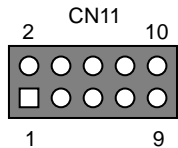
CN13 is a RJ45 connector with 2 LEDs. The up side LED (orange) indicates data is accessing and the down side LED (green) indicates on-line status. (When lighted indicates on-line and off indicates off-line) The following lists the pin assignment of CN13:



CN13	Signal	CN13	Signal
1	TPTX+	5	FBG1
2	TPTX-	6	TPRX-
3	TPRX+	7	FBG2
4	FBG1	8	FBG2

L. USB and Audio Connectors (CN11 and CN7), and Connectors on FB4641x Adapter Board

CN11 supports 2 port USB signals and CN7 provides AC97 signals for Audio function. Use the FB4641x (USB and Audio Adapter Board) and cables for your USB and Audio applications.



CN11	Signal	CN11	Signal
1	USBV0	2	Case Ground
3	USB0-	4	USBG1
5	USB0+	6	USB1+
7	USB0-	8	USB1-
9	Case Ground	10	USBV1

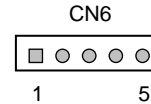
CN7	Signal	CN7	Signal
1	BITCLK	2	N.C.
3	+5V	4	SYNC
5	Ground	6	Ground
7	+3.3V	8	ACRST#
9	SDOUT	10	N.C.
11	SDIN	12	N.C.

Audio connectors on the FB4641x adapter board



FB2505A only.

M. TTL I/O Connector (CN6: 5-pin 2.0mm JST)



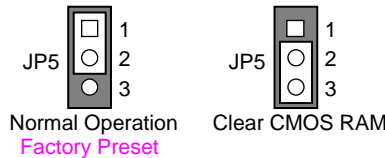
CN6	TTL Lines	Bit Location
1	Output Line 0	Bit 1 of A20h
2	Output Line 1	Bit 2 of A20h
3	Input Line 0	Bit 3 of A20h
4	Input Line 1	Bit 4 of A20h
5	Ground	-

N. CompactFlash Socket and Master/Slave Select (CN17 and JP1)

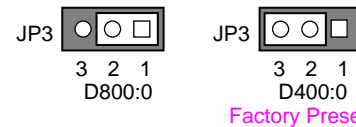
The CompactFlash socket CN17 (on the solder side) supports 3.3V CompactFlash and MicroDrives. JP1 is used to select master/slave device of this socket. Be sure to avoid the same master/slave setting with which connects to 44-pin IDE (CN1) connector, if CN17 and CN1(if existed) are used simultaneously.



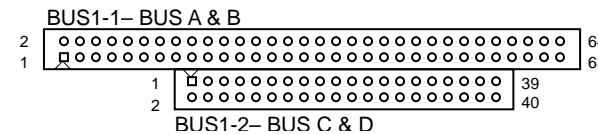
O. CMOS RAM Select Jumper (JP5)



P. SARM Memory Mapping Address Select Jumper (JP3, Reserved)



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



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