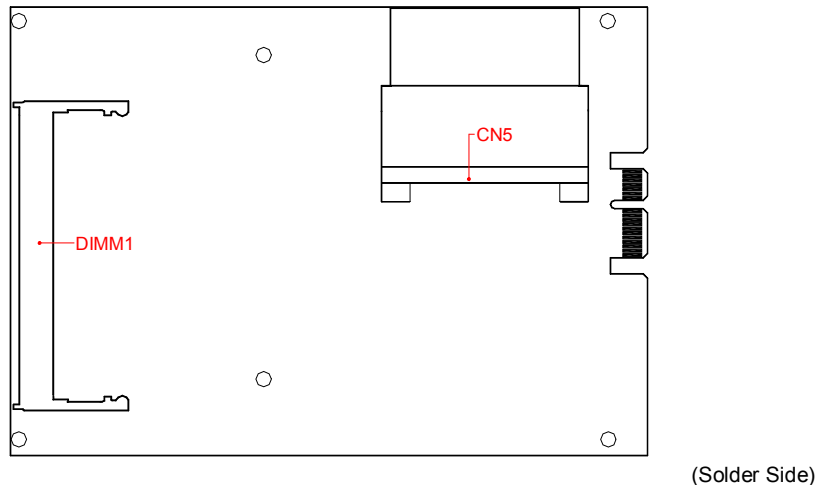
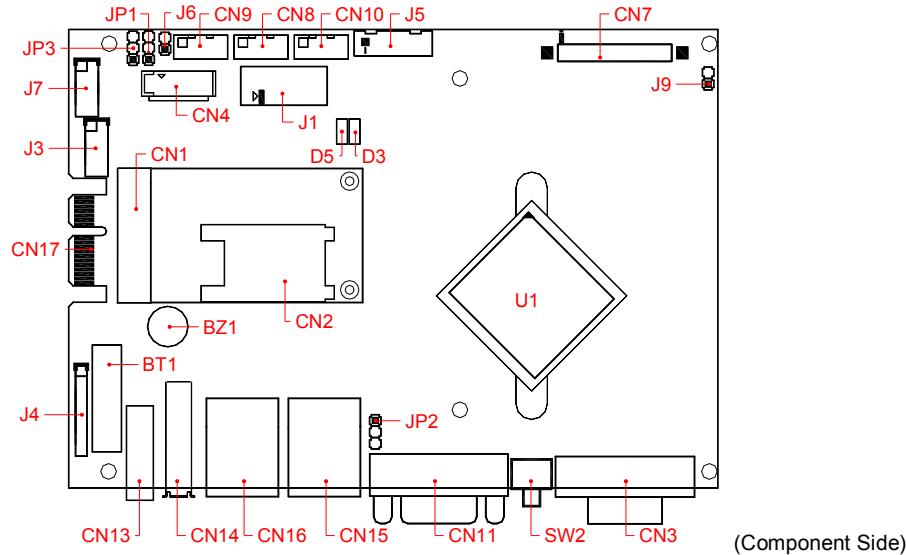


1. Brief

The FB2730x is an all-in-one, 3.5" disk size with low power Intel Bay Trail-I CPU on-board. This user's quick setting provides the jumper settings, connector location, and their pin assignment.

2. Board Placement



3. Packing List

A. Standard Items

- 1 FX2730x embedded board.
- 1 6-pin DC power cable for power input.
- 1 8-pin SATA signal cable for SATA devices.
- 1 10-pin dual port USB adapter cable.
- 1 compact disc includes software utilities and manuals.

B. Optional Items

- # Half size mini PCIe module adapter kit (AK1006, 1 piece of metal with 2 screws, P/N: 0606010028G)
- # Audio/USB adapter kit (P/N: 0103020022G-21, 1 FB4706 board with 2 cables)
- # Serial port adapter cable (P/N: 7001000100R, 10-pins JST to DB9)

4. Features

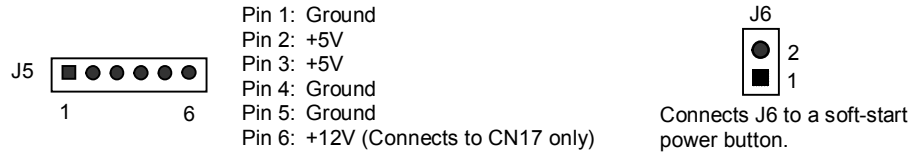
On-Board Intel® Bay Trail-I E3845 (Quad Core 1.91GHz, 2MB cache, FSB 1333MHz, 10 Watts) low power processor. E3825 (Dual Core 1.33GHz, 1MB cache, FSB 1067MHz, 6 Watts) is optional.
 1 SoDIMM socket for DDR3L modules. (8GB Maximum)
 Two 10/100/1000 base-TX Ethernet ports.
 4 USB ports (including 1 USB 3.0), 3 RS-232, and 1 RS-232/422/485 serial ports.
 1 VGA, 1 eDP, and 1 Audio connectors.
 1 SATA, 1 CFAST socket, and 1 mini PCIe socket with 1 SIM sockets.
 1 DC-In power connector and 2 LEDs indicate power, HDD/CFAST access.
 1 PCIe expansion bus. (The riser card is needed and optional item)
 +5V DC, 4.63A maximum (2.94A typical) with fully I/O loads.
 Dimensions: 144.8mm (L) x 102.1mm (D) (PCB only).

5. Connectors and Jumpers List

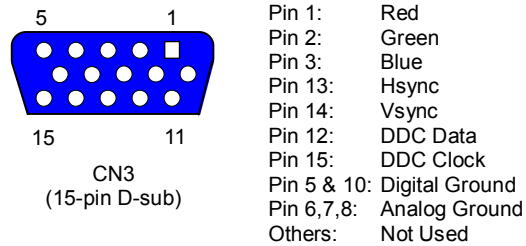
| Name | Function | Name | Function |
|------|---------------------------------------|-------|---------------------------------|
| CN1 | Mini PCIe Socket | J1 | AMR Connector (mIDC 2*6-pin) |
| CN2 | SIM Socket | J3 | LPC Connector (J2*5 header) |
| CN3 | VGA Connector (15-pin D-sub) | J4 | Reserved for on-board CPLD |
| CN4 | SATA Connector | J5 | Power Connector (6-pin JST) |
| CN5 | CFAST Socket (PCB Solder Side) | J6 | Power Button Header (J1*2) |
| CN7 | DDI Panel Connector (40-pin DF-13) | J7 | USB #1 / #3 Connector (J2*5) |
| CN8 | Serial Port 3 Connector (IDC 2*5-pin) | J8 | Reserved |
| CN9 | Serial Port 4 Connector (IDC 2*5-pin) | J9 | Clear CMOS RAM Header (J1*2) |
| CN10 | Serial Port 2 Connector (IDC 2*5-pin) | JP1 | mPCIe Aux. Power Select (J1*3) |
| CN11 | Serial Port 1 Connector (9-pin D-Sub) | JP2 | RS-485 Terminator Select (J1*3) |
| CN13 | USB #2 Connector | JP3 | USB #3 Signal Select (J1*3) |
| CN14 | USB #0 Connector (USB 3.0) | BZ1 | On-Board Buzzer |
| CN15 | LAN #1 Connector (RJ-45 w/LEDs) | D3 | SATA/CFAST Access LED (Red) |
| CN16 | LAN #2 Connector (RJ-45 w/LEDs) | D5 | Power LED (Green) |
| CN17 | PCIe Expansion Bus (x1) | DIMM1 | DDR3L SoDIMM Socket |
| | | SW2 | Reset Switch |

6. Connectors and Their Relative Jumpers

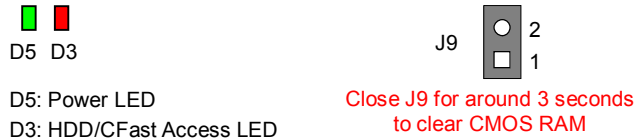
A. Power Connector (J5) and Power Button Header (J6)



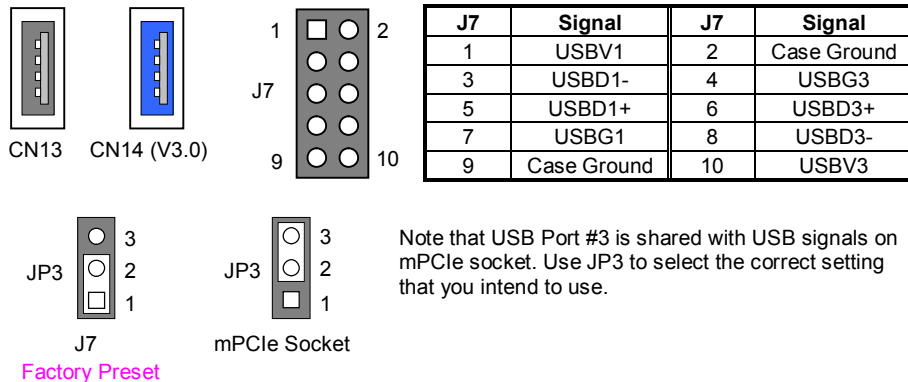
C. VGA Connector (CN3)



D. On-board LED Indicators (D3, D5) and Clear CMOS RAM (J9)



E. USB Connectors (CN13, CN14, J7, and JP3)

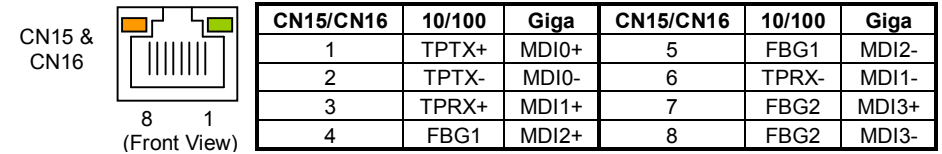


F. SoDIMM Socket (DIMM1)

DIMM1 (Located on the solder side) supports 204-pin, 1.35V, and DDR3L DRAM modules with size of 4GB and 8GB.

G. LAN Connectors and LED Indicators (CN15 and CN16)

CN15 and CN16 both are standard RJ45 connector with 2 LEDs. The orange LED indicates data is accessing and the green LED indicates on-line status.

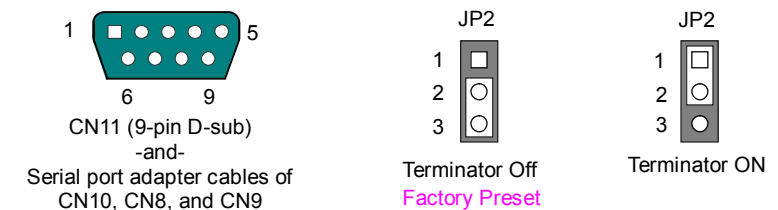


H. Serial Port Connectors and Select Jumpers (CN8, CN9, CN10, CN11, and JP2)

There are 4 connectors and 1 jumper that served for on-board 4 serial ports. The following table and figure list the combination and pin definition of them:

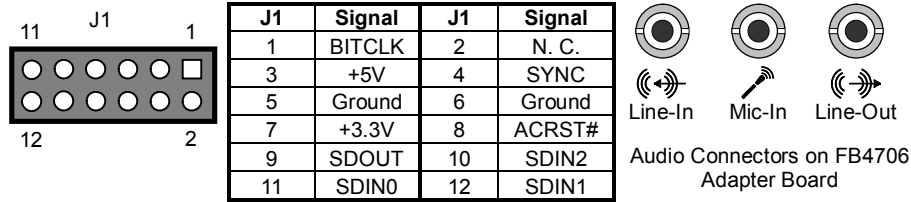
| Functional connector, header, and jumper of serial ports | Serial Port 1 | Serial Port 2 | Serial Port 3 | Serial Port 4 | Remark |
|--|--------------------|---------------|---------------|---------------|--------|
| RS-232 Signals | CN11 | CN10 | CN8 | CN9 | |
| RS-422 Signals | CN11 | - | - | - | |
| RS-485 Signals | CN11, JP2 | - | - | - | |
| 232/422/485 Mode Select | CMOS Setup Utility | - | - | - | |

| CN11 | RS-232 | RS-422 | RS-485 | CN10/CN8/CN9 | 9-pin D-sub | Signals |
|-------|--------------------|--------|--------|--------------|-------------|-------------|
| 1 | -DCD1 | | - | 1 | 1 | -DCD2/3/4 |
| 6 | -DSR2 | | - | 2 | 6 | -DSR2/3/4 |
| 2 | RXD1 | RX- | 485- | 3 | 2 | RXD2/3/4 |
| 7 | -RTS1 | TX- | - | 4 | 7 | -RTS2/3/4 |
| 3 | TXD1 | RX+ | 485+ | 5 | 3 | TXD2/3/4 |
| 8 | -CTS1 | TX+ | - | 6 | 8 | -CTS2/3/4 |
| 4 | -DTR1 | | - | 7 | 4 | -DTR2/3/4 |
| 9 | -RI1 | | - | 8 | 9 | -RI2/3/4 |
| 5 | Ground1 | | | 9 | 5 | Ground2/3/4 |
| Metal | Case Ground (C.G.) | | | 10 | Metal | C. G. |

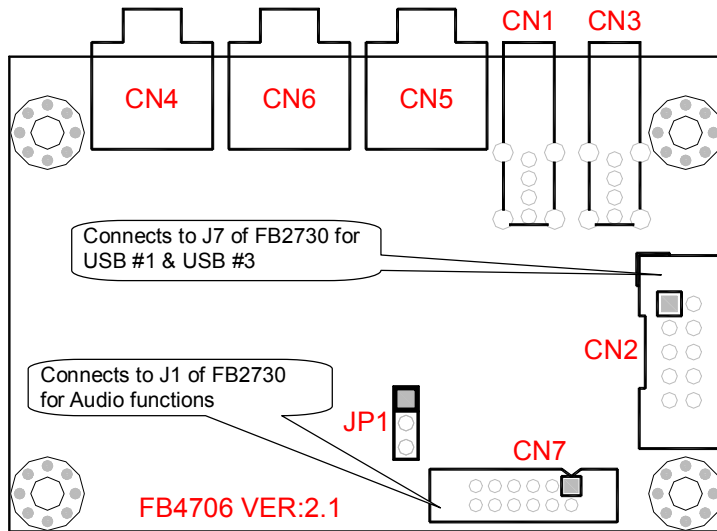


I. Audio (AMR) Connector (J1: 12-pin 2.0mm IDC) and Expand USB Connectors on FB4706 Adapter Board

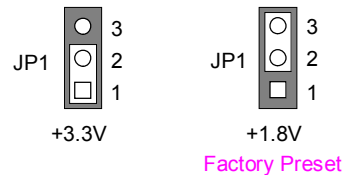
J1 is a 12-pin 2.0mm IDC connector with AMR signals for Audio I/O. Use the included Audio cable and FB4706 adapter board for your Audio applications. CN5, CN6, and CN4 connectors on FB4706 are 2-way Line-In, mono Microphone input, and 2-way Line-Out respectively. The following figure shows CN19 and Audio connectors on FB4706 board:



Use the included expand USB cable connects to J7 of FB4706 (V2.1 and later) for USB #3 and USB #4 signals (CN1 and CN3 on FB4706). Please refer the following FB4706 Board Layout:



J. Mini PCIe Aux. Power Source Select (JP1)

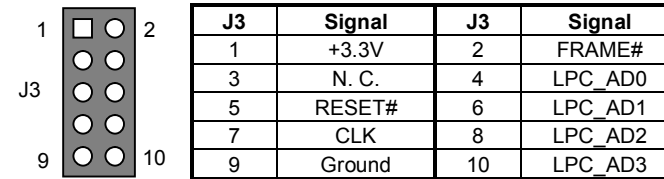


K. DDI Connector (CN7)

| CN7 | Signal | CN7 | Signal | CN7 | Signal | CN7 | Signal |
|-----|--------|-----|---------|-----|---------|-----|----------|
| 1 | +3.3V | 21 | TX1- | 2 | +3.3V | 22 | N. C. |
| 3 | +3.3V | 23 | TX1+ | 4 | +3.3V | 24 | BKLT_EN |
| 5 | +3.3V | 25 | Ground | 6 | N. C. | 26 | BKLT_CTL |
| 7 | Ground | 27 | TX0- | 8 | N. C. | 28 | Ground |
| 9 | TX3- | 29 | TX0+ | 10 | N. C. | 30 | BKLT_VCC |
| 11 | TX3+ | 31 | Ground | 12 | SMB_CLK | 32 | BKLT_VCC |
| 13 | Ground | 33 | AUX+ | 14 | SMB_DAT | 34 | N. C. |
| 15 | TX2- | 35 | AUX- | 16 | N. C. | 36 | N. C. |
| 17 | TX2+ | 37 | Ground | 18 | N. C. | 38 | +5VS |
| 19 | Ground | 39 | EMP_HDP | 20 | +3.3VS | 40 | +3.3VS |

Note: If any question when connecting FB2730 with DDI panels, you could contact technical support division of FabiaTech Corporation.

L. LPC Connector (J3)



End of Document