# AIMB-330F Socket 370 SBC For Multimedia Applications
# Startup Manual

## Packing List

Before you begin installing your card, please make sure that the following materials have been shipped:

- 1 AIMB-330 all-in-one single board computer
- 1 2-port serial cable p/n: 1700000445
- 1 UDMA/100 IDE flat cable p/n: 1701400452
- 1 4-port serial cable (AIMB-330F only) p/n: 1700000447
- 1 startup manual
- CD-ROM or disks for utility, drivers, and manual (in PDF format)

If any of these items are missing or damaged, contact your distributor or sales representative immediately.

Note 1: For detailed contents of the AIMB-330, please refer to the enclosed CD-ROM or disk (in PDF format).

Note 2: Acrobat Reader is required to view any PDF file. Acrobat Reader can be downloaded at: www.adobe.com/Prodindex/acrobat/read-step.html(Acrobat is a trademark of Adobe.)

For more information on this and other Advantech products, please visit our website at:

**http://www.advantech.com**

**http://www.advantech.com/epc**

For technical support and service, please visit our support website at:

**http://service.advantech.com.tw/eservice/**

This manual is for the AIMB-330F series Rev. A1.

Part No. 2006033000 1st. Edition
Printed in Taiwan June 2004

**Caution:** Make sure system power is unplugged before installing/uninstalling any peripherals

## Specifications

### Standard SBC Functions

- **CPU:** Socket 370 for IntelR PentiumR III Processor/ Celeron, VIA C3 CPU> 750MHz
- **BIOS:** Award 256 KB Flash memory
- **Chipset:** VIA CLE266
- **System memory:** DDR DIMM x 2. Max. 2G
- **FDD interface:** Supports up to one FDD (optional)
- **Serial ports:** Two/Six serial RS-232 ports, COM1, 3, 4, 5, 6: RS-232, COM2: RS-232/422/485, COM3~6 share IRQ. It will depend on the OS support to have a share IRQ capability.
- **Parallel port:** Two parallel ports, supports SPP/EPP/ ECP mode
- **Infrared port:** Shared with COM2. Transfer rates up to 115 Kbps
- **Keyboard/mouse connector:** Supports standard PC/ AT keyboard and a PS/2 mouse
- **Power management:** Supports power saving modes including Normal/Standby/Suspend modes. APM 1.1 compliant
- **Watchdog timer:** 63 level timer intervals
- **USB:** Six Universal Serial Bus ports (includes 1 Embedded USB)

### Solid State Disk

- Supports one 50-pin socket for CompactFlash™ card

### VGA/LCD Interface

- **Chipset:** VIA CLE 266
- **Interface:** Intel Direct Memor Execution Mode to use system memory
- Dual display combination:
  CRT+ 24-bit LCD panel
  CRT+ LVDS panel
  DVI + 24 bit LCD panel
  DVI + LVDS panel
- Display mode:
  Maximum 3D Resolution Supported, LCD panel: 1600x1200. CRT 1400x1050, DVI 1280x1024

### Ethernet Interface

- **Chipset:** Realtek 8139DL
- **Ethernet interface:** PCI 10/100 Mbps Ethernet. IEEE 802.3 U protocol compatible
- **Connection:** On-board RJ-45 connector
- **Built-in boot ROM** (Optional)

### Audio Function

- **Chipset:** Realtek ALC202
- **Audio controller:** AC97 version 2.0 compliant interface
- **Audio interface:** Microphone in, line in, CD audio in, line out, speaker L and Speaker R

### Mechanical and Environmental

- **Dimensions (L x W):** 244x244 mm (9.6" x 9.6")
- **Power supply voltage:**+5 V ±5 %, +12 V ±5 %,-12 V ±5 %
- **Power requirements:** +12V(CPU)@0.33A, +5V@6.15mA, +3.3V@2.6A (Pentium III 1.26G, DDR333 512+256M)
- **Operating temperature:** 0 ~ 60° C
- **Weight:** 0.8 kg (weight of total package)

## Jumpers and Connectors

The board has a number of jumpers that allow you to configure your system to suit your application.
The table below lists the function of each of the jumpers and connectors.

| Jumpers | |
|---|---|
| JP1 | CMOS Power |
| JP3 | COM1~COM6 pin9 voltage output select |
| JP4 | COM2 RS232/422/485 and COM1~6 Ring signal select |
| JP5 | Panel Voltage Selection |

| Connectors | | |
|---|---|---|
| 1. | CN1 | VGA Connector (D-Sub 15Pin) |
| 2. | CN2 | COM-1 connector (D-Sub 9-Pin) |
| 4. | CN4 | Audio connector |
| 5. | CN5 | Print connector (D-Sub 25-pin) |
| 6. | CN6 | KB/MS connector (Mini-DIN) |
| 7. | CN7 | USB connector |
| 8. | CN8 | TTL LCD 40-Pin Hirose |
| 9. | CN9 | LAN and USB connector |
| 10. | CN10 | Internal speaker connector |
| 11. | CN11 | CD-Input connector |
| 12. | CN12 | Watch Dog Program |
| 13. | CN13 | 24-bits LVDS LCD 40-Pin HIROSE connector |
| 14. | CN14 | 12-bits LVDS LCD 24-Pin HIROSE Connector |
| 15. | CN15 | Reserved for Watch-Dog programing |
| 16. | CN16 | Embedded USB |
| 17. | CN17 | Inverter Power Connector |
| 18. | CN18 | ATX Power connector |
| 19. | CN19 | DIO connector |
| 20. | CN20 | 2nd IDE connector |
| 21. | CN21 | IrDA Connector |
| 22. | CN22 | Primary IDE connector |
| 23. | CN23 | Floppy connector |
| 24. | CN24 | ATX Power/Reset/LED connector |
| 25. | CN25 | COM3-COM6 connector |
| 26. | CN26 | Print 2 connector |
| 27. | CN27 | COM-2 connector |
| 28. | CN28 | MiniPCI |
| 29. | CN29 | Compact Flash (IDE secondary slave) |
| 30. | DIMM1 | DDR DIMM Socket |
| 31. | DIMM2 | DDR DIMM Socket |
| 32. | FAN 1 | CPU FAN |
| 33. | FAN2 | System FAN |
| 34. | PCI1 | PCI Slot-1 |
| 35. | PCI2 | PCI Slot-2 (optional) |

**CMOS Power (JP1)**

| Closed pins | Result |
|---|---|
| 1-2 | Default |
| 2-3 | Clear CMOS |

**JP3 COM1 - COM6 Pin-9 Voltage output select 11x2 , 2.0mm Pin-header)**

| | |
|---|---|
| Pin-1 => +5V | Pin-2 => +5V |
| Pin-3 => COM1-RI | Pin-4 => COM2-RI |
| Pin-5 => +12V | Pin-6 => +12V |
| Pin-7 => NC | Pin-8 => NC |
| Pin-9 => +5V | Pin-10 => +5V |
| Pin-11 => COM3-RI | Pin-12 => COM4-RI |
| Pin-13 => +12V | Pin-14 => +12V |
| Pin-15 => NC | Pin-16 => NC |
| Pin-17 => +5V | Pin-18 => +5V |

**JP3 COM1 - COM6 Pin-9 Voltage output select 11x2 , 2.0mm Pin-header)**

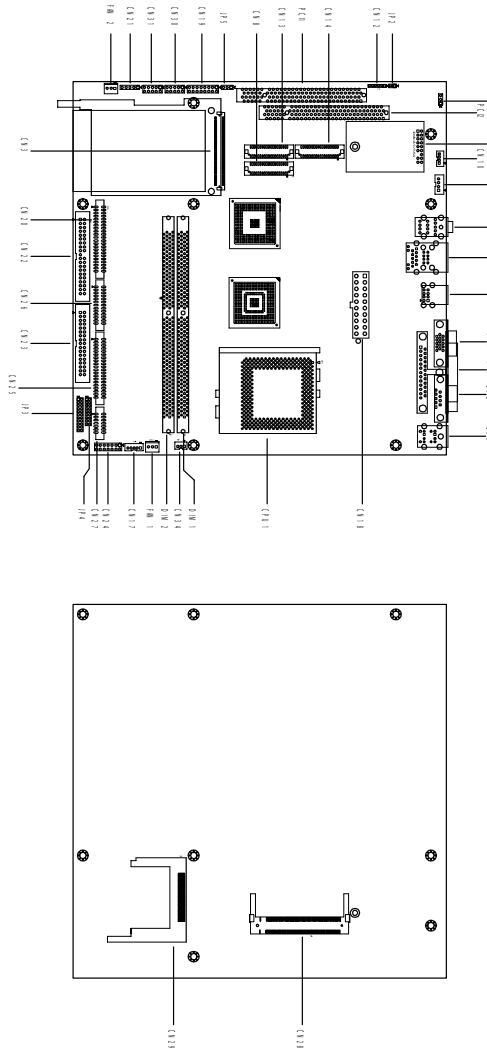
| | |
|---|---|
| Pin-1 => +5V | Pin-2 => +5V |
| Pin-3 => COM1-RI | Pin-4 => COM2-RI |
| Pin-19 => COM5-RI | Pin-20 => COM6-RI |
| Pin-21 => +12V | Pin-22 => +12V |

Example :
COM-1 Select +5V Output step => Change the JP4 Pin-7,8 jumper to JP3 Pin-1,3
COM-1 Select +12V Output step => Change the JP4 Pin-7,8 jumper to JP3 Pin-3,5
COM-2 Select +5V Output step => Change the JP4 Pin-9,10 jumper to JP3 Pin-2,4
COM-2 Select +12V Output step => Change the JP4 Pin-9,10 jumper to JP3 Pin-4,6
COM-3 Select +5V Output step => Change the JP4 Pin-11,12 jumper to JP3 Pin-9,11
COM-3 Select +12V Output step => Change the JP4 Pin-11,12 jumper to JP3 Pin-11,13
COM-4 Select +5V Output step => Change the JP4 Pin-13,14 jumper to JP3 Pin-10,12
COM-4 Select +12V Output step => Change the JP4 Pin-13,14 jumper to JP3 Pin-12,14
COM-5 Select +5V Output step => Change the JP4 Pin-15,16 jumper to JP3 Pin-17,19
COM-5 Select +12V Output step => Change the JP4 Pin-15,16 jumper to JP3 Pin-19,21
COM-6 Select +5V Output step => Change the JP4 Pin-17,18 jumper to JP3 Pin-18,20
COM-6 Select +12V Output step => Change the JP4 Pin-17,18 jumper to JP3 Pin-20,22

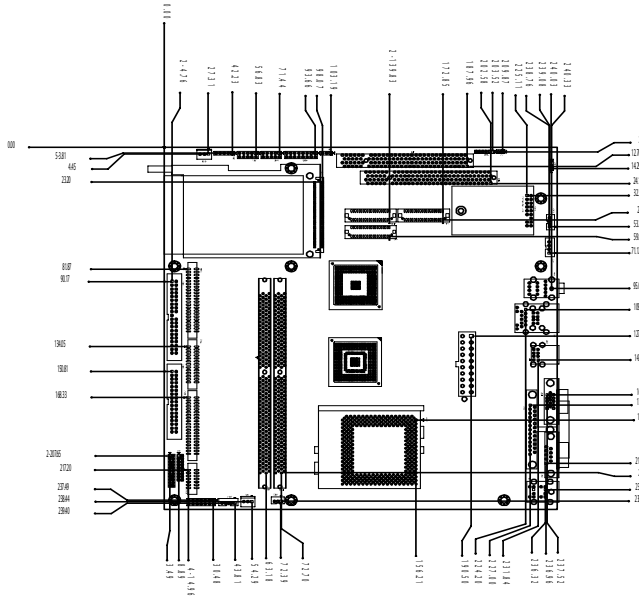
**JP4 COM-2 RS232/422/485 and COM-1 to COM-6 Ring signal select (9x2 , 2.0 mm Pin-header)**

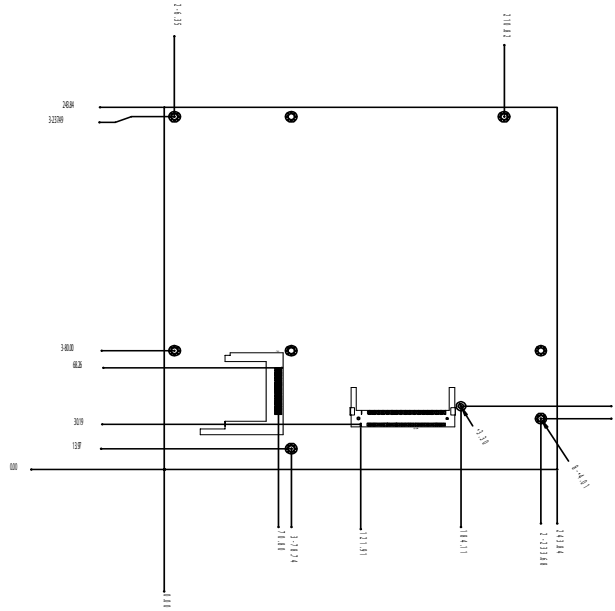
| **Pin-1 => RxD** | **Pin-2 => RxD485** |
|---|---|
| Pin-3 => RxD | Pin-4 => RxD422 |
| Pin-5 => RxD | Pin-6 => RxD232 |
| Pin-7 => COM-1 RING# input | Pin-8 => System RING1# Signal |
| Pin-9 => COM-2 RING# input | Pin-10 => System RING2# Signal |
| Pin-11 => COM-3 RING# input | Pin-12 => System RING3# Signal |
| Pin-13 => COM-4 RING# input | Pin-14 => System RING4# Signal |
| Pin-15 => COM-5 RING# input | Pin-16 => System RING5# Signal |
| Pin-17 => COM-6 RING# input | Pin-18 => System RING6# Signal |

COM-2 RS-232 Jumper setting : Pin-5,6 (Default)
COM-2 RS-422 Jumper setting : Pin-3,4
COM-2 RS-485 Jumper setting : Pin-1,2
COM-1 RING# signal select => Pin-7,8 (Default)
COM-2 RING# signal select => Pin-9,10 (Default)
COM-3 RING# signal select => Pin-11,12 (Default)
COM-4 RING# signal select => Pin-13,14 (Default)
COM-5 RING# signal select => Pin-15,16 (Default)
COM-6 RING# signal select => Pin-17,18 (Default)



*AIMB-330F Jumpers & Connectors*





*AIMB-330F Board Dimensions*