

## **AW-C661 Socket-370 5.25" Embedded SBC**

### **STARTUP MANUAL**

#### **Specifications**

##### **General Functions**

- CPU: Intel®socket 370Celeron™/Pentium®III/Tualatin & VIA C3 processor up to 100MHz FSB
- BIOS: Award®256KB Flash BIOS
- Cache: 128/256KB on-chip cache
- Chipset: Intel®440BX+82371EB
- I/O Chipset: Two Winbond w83977EF-AW
- Memory: Two 144-pin SO-DIMM socket up to 512MB
- Enhanced IDE: Up to two IDE devices (UDMA 33)
- FDD interface: Supports one 34-pin header
- Parallel port: Supports SPP/ECP/EPP
- Serial port: Three RS-232 and one RS-232/422/485 serial ports
- IR interface: Supports one IrDA Tx/Rx header
- KB/Mouse connector: Supports PS/2 keyboard and mouse
- USB connectors: Supports two USB ports
- Battery: Lithium battery for data retention up to 10 years
- Watchdog Timer: Supports software selectable timeout interval
- System Monitoring: Software programmable
- PC/104 connector: One PC/104

connector

- PCI slot: One 32-bit PCI slot
- Digital I/O: Supports eight TTL input and output pins
- SMBus connector: Supports SMBus LCD interface
- Power management: Supports ATX power supply, PC97, LAN wake up, and modem ring-in functions

##### **Flat Panel/CRT Interface**

- Chipset: SMI Lynx3DM
- Display memory: Built-in 4MB/8MB for Lynx3DM SMI721
- Display type: Supports CRT and LCD displays
- Resolution: Supports up to 1024 x 768 16M colors and CRT monitors up to 1280 x 1024 16M colors

##### **TV-Out Interface (option)**

- TV Format: Supports NTSC, NTSC-EIA (Japan) and PAL signals format
- Output connector: Supports RCA (Composite) video and S-video connector
- Resolution: Supports 640 x 480 and 800 x 600 resolutions

##### **Ethernet Interface**

- Chipset: Three Intel® 82559ER or Realtek RTL8139C (option)
- Ethernet interface: PCI 100/10MB Ethernet controller

##### **SSD Interface**

- One 50-pin CompactFlash™ socket

##### **PCI Sound Interface**

- Chipset: ESS Solo-1
- Audio controller: SoundBlaster and

- SoundBlaster Pro Compatible
- Audio interface: Mic in, Line in, Speaker out and CD audio in
- Software Driver: Supports for Win95/98/NT

### **Mechanical and Environmental**

- Power supply voltage: +5V(4.75V to 5.25V), +12V(11.4V to 12.6V)
- Max. power requirements: 7A @ 5V, 200mA @ +12V
- Operating temperature: 32 to 140°F (0 to 60°C)
- Board size: 8”(L) x 5.75”(W) (203mm x 146mm)
- Weight: 0.6lb. (0.3Kg) (bare)

For more information on AW-C661 or Aewin products, please visit our website <http://www.aewin.com.tw>

For Technical Supports or Free Catalog, please send mail to [info@aewin.com.tw](mailto:info@aewin.com.tw)

### **AW-C661 Package**

Before you begin installing your AW-C661, please make sure that the following materials have been shipped

1. AW-C661
2. 46-I00IDE-00: 2.5” & 1.8” IDE Cable
3. 46-IFDC01-00: Floppy Cable
4. 46-IIO001-00: COM1-COM4 Ports Cable
5. 46-ILPT01-00: Printer Cable
6. 46-IPOWER-00: Auxiliary Power Cable

7. 46-IPS200-00: KB/Mouse Cable
8. 46-IVGA01-00: CRT VGA Cable

### **Optional Cable List**

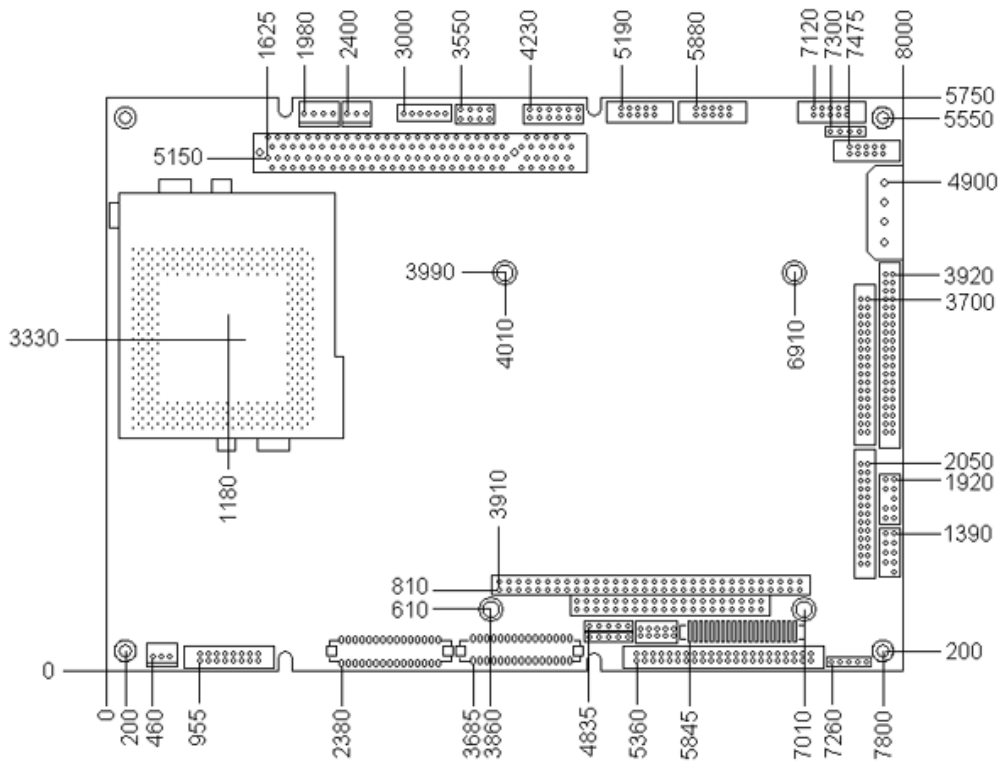
1. 46-IAUD01-00: Audio Cable
2. 46-ILAN01-00: 10/100Base-T LAN Cable
3. 46-TV0001-00: TV-Out Cable
4. 46-IUSB01-00: USB Port Cable

If any of these parts are missing or damaged, contact your distributor or sales representatives immediately.

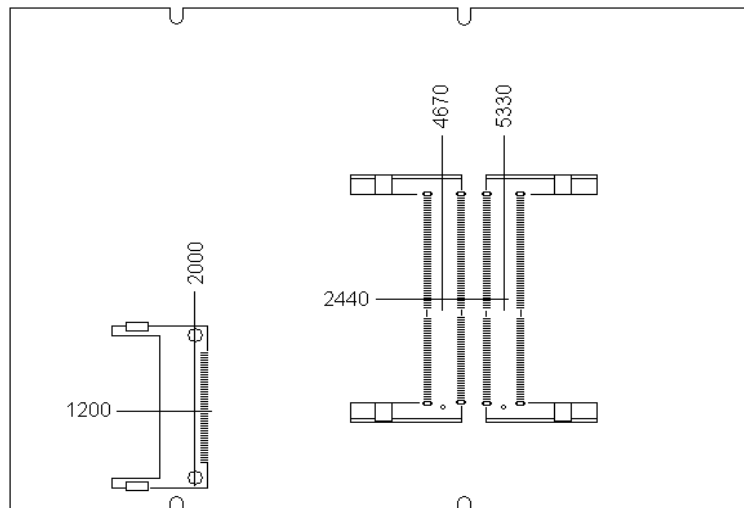
**Note:** For detailed contents of the AW-C661, please refer to the enclosed CD-ROM

## AW-C661 Board Dimension

Component Side

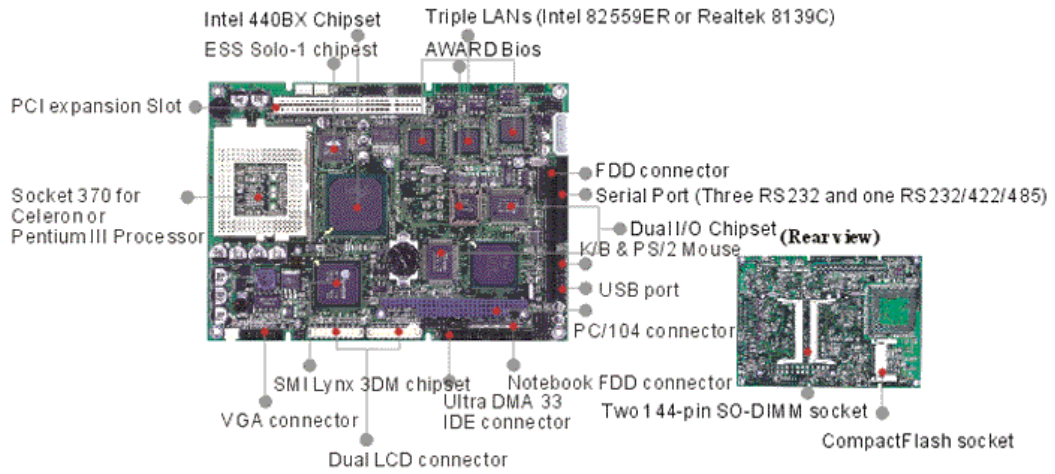


Solder Side

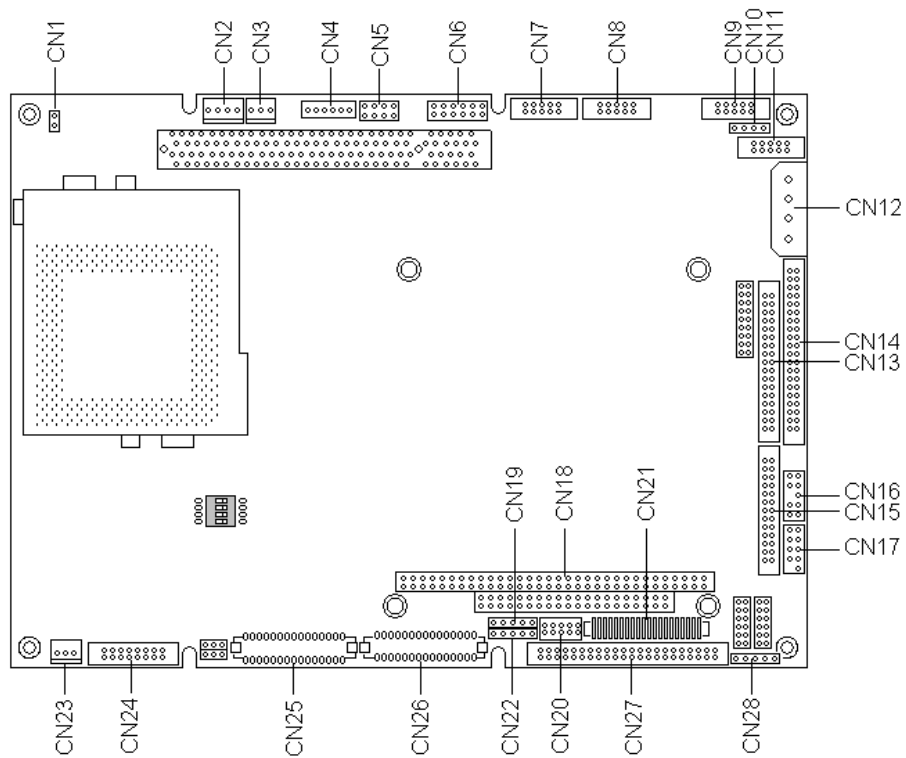


## AW-C661 Board Layout

### AW-C661



## AW-C661 Location of Connectors



## List of Connectors

Connectors	Description	Connectors	Description
CN1	Speaker Connector	CN16	PS/2 Mouse/KB Connector
CN2	-5V/-12V Power Connector	CN17	USB Connector
CN3	ATX Power Control Connector	CN18	PC/104 Connector
CN4	SMBus Connector	CN19	TV-Out Connector
CN5	Front Panel Connector	CN20	GPIO Connector
CN6	LAN LEDs	CN21	Notebook Type FDD Connector
CN7	LAN1 Connector	CN22	Infrared Connector
CN8	LAN 2 Connector	CN23	CPU Fan Connector
CN9	LAN 3 Connector	CN24	CRT Display Connector
CN10	CD Audio Input Connector	CN25, CN26	Flat Panel Connector
CN11	Audio Connector	CN27	2.00mm pitch IDE Connector
CN12	Main Power Connector	CN28	Isolated Digital I/O Connector
CN13	34-pin FDD Connector	J1, J2	SO-DIMM Sockets (Solder Side)
CN14	COM Ports Connector	CF-Socket	CF Socket (Solder Side)
CN15	Parallel Port Connector		

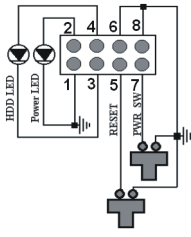
### CN4: SMBus Connector

Pin	Signal
1	Ground
2	+5V
3	SMBCLK
4	SMBDATA
5	+12V
6	NC

### CN19: TV-Out Connector

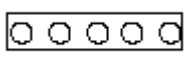
Pin	Signal
1	LUMA
2	CHROMA
3	Ground
4	Ground
5	COMP

### CN5: Front Panel Connector



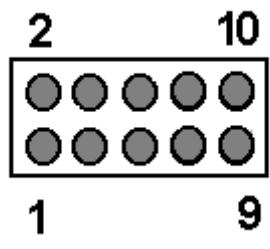
Pin	Signal
1	Ground
2	+5V
3	IDEACT
4	+5V
5	Reset
6	Ground
7	PANSWIN
8	Ground

### CN28: Isolated Digital I/O Connector



Pin	Signal
1	+5V
2	ISO_OUT0
3	ISO_OUT1
4	+12V
5	Ground

### CN20: GPIO Connector

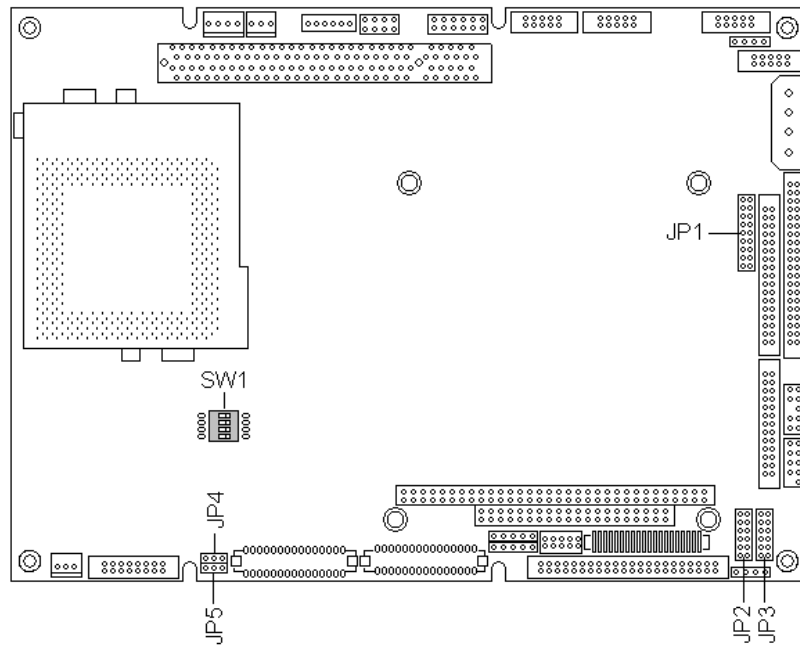


Pin	Signal
1	+5V
2	GPIO0
3	GPIO1
4	GPIO2
5	GPIO3
6	GPIO4
7	GPIO5
8	GPIO6
9	GPIO7
10	Ground

### CN25, 26: Flat Panel Connector

<b>CN25: DF13A-40DP-1.25V</b>				<b>CN26: DF13A-40DP-1.25V</b>			
Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	VDDSAFE5	2	VDDSAFE5	1	VDDSAFE5	2	VDDSAFE5
3	Ground	4	Ground	3	Ground	4	Ground
5	VDDSAFE3	6	VDDSAFE3	5	VDDSAFE3	6	VDDSAFE3
7	NC	8	Ground	7	NC	8	Ground
9	LCD_FD24	10	LCD_FD25	9	LCD_FD0	10	LCD_FD1
11	LCD_FD26	12	LCD_FD27	11	LCD_FD2	12	LCD_FD3
13	LCD_FD28	14	LCD_FD29	13	LCD_FD4	14	LCD_FD5
15	LCD_FD30	16	LCD_FD31	15	LCD_FD6	16	LCD_FD7
17	LCD_FD32	18	LCD_FD33	17	LCD_FD8	18	LCD_FD9
19	LCD_FD34	20	LCD_FD35	19	LCD_FD10	20	LCD_FD11
21	LCD_FD36	22	LCD_FD37	21	LCD_FD12	22	LCD_FD13
23	LCD_FD38	24	LCD_FD39	23	LCD_FD14	24	LCD_FD15
25	LCD_FD40	26	LCD_FD41	25	LCD_FD16	26	LCD_FD17
27	LCD_FD42	28	LCD_FD43	27	LCD_FD18	28	LCD_FD19
29	LCD_FD44	30	LCD_FD45	29	LCD_FD20	30	LCD_FD21
31	LCD_FD46	32	LCD_FD47	31	LCD_FD22	32	LCD_FD23
33	Ground	34	Ground	33	Ground	34	Ground
35	RLVDSCLK	36	LCD_FD23	35	LCD_FPCLK	36	FP/FVSYNC
37	LCD_FD15	38	LCD_FD22	37	DE	38	LP/FHSYNC
39	NP_FPEN	40	VBIASEN	39	NP_FPEN	40	VAIASEN

## Location of Jumpers



## List of Jumpers

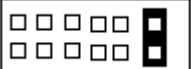



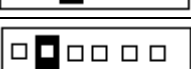
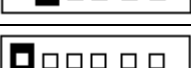
Jumper	Signal	Jumper	Signal
1	COM2 RS-232/422/485 Select	4	Watch Dog Timer Action Select
2	COM3/COM4 RI/Voltage Select	5	Clear CMOS
3	COM1/COM2 RI/Voltage Select	SW1	Panel Type Select

### JP1: COM2 RS-232/422/485 Selector (Default: RS-232)

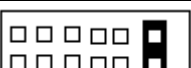




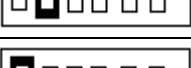
Setting		COM Port
2 1		RS-232 (Default)
2 1		RS-422
2 1		RS-485



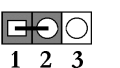

**JP2: COM3/COM4 RI/Voltage Selector**

Pin Setting		COM Port	RI/Voltage
1 2		COM4	+12V
1 2		COM4	+5V
1 2		COM4	RI (default)
1 2		COM3	+12V
1 2		COM3	+5V
1 2		COM3	RI (Default)

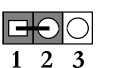

**JP3: COM1/COM2 RI/Voltage Selector**

Pin Setting		COM Port	RI/Voltage
1 2		COM2	+12V
1 2		COM2	+5V
1 2		COM2	RI (default)
1 2		COM1	+12V
1 2		COM1	+5V
1 2		COM1	RI (Default)

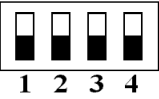
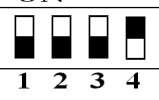




**JP4: Watchdog Timer/Action Select**

Setting	Define
 1-2	IRQ11
 2-3	Reset System (Default)

**JP5: Clear CMOS**

Setting	Define
 1-2	Normal Status (Default)
 2-3	Clear CMOS

**SW1: Panel Type Select**

Setting	Pin No.				Resolution/Type	
	1	2	3	4		
<p>ON</p>  <p>1 2 3 4</p>	On	On	On	On	640 x 480 (18-bit)	TFT
<p>ON</p>  <p>1 2 3 4</p>	On	On	On	Off	640 x 480 (16-bit)	DSTN
<p>ON</p>  <p>1 2 3 4</p>	On	On	Off	On	800 x 600 (18-bit)	TFT
<p>ON</p>  <p>1 2 3 4</p>	On	On	Off	Off	800 x 600 (16-bit)	DSTN
<p>ON</p>  <p>1 2 3 4</p>	On	Off	On	On	1024 x 768 (18-bit)	TFT
<p>ON</p>  <p>1 2 3 4</p>	On	Off	On	Off	1024 x 768 (24-bit)	DSTN