POD-6552 Intel® Celeron® M 600 SBC with VGA/LCD and Ethernet Startup Manual

Packing List

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

- 1 POD-6552 all-in-one single board computer
- Mini Jumper (yellow) p/n: 1653300100
- Mini Jumper (black) p/n: 1653302122

Optional

- 1 Startup manual
- CD-ROM or disks for utility, drivers, and manual (in PDF format)
- Wiring kit for POD-6552 p/n:PCM-10586-K100

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

Note 1: For detailed contents of the POD-6552, please refer to the enclosed CD Disc or disk (in PDF format).

Note 2: Acrobat Reader is required to view any PDF file. Acrobat Reader can be downloaded at: http://www.adobe.com/products/acrobat/readstep2.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/eplatform

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

http://www.advantech.com.tw/support

This manual is for the POD-6552 Series Rev. A1.

Part No. 200K655200 1st Edition
May 2005.

Specifications

Standard SBC Functions

- **CPU:** Intel Celeron M 600 w/o L2 cache. Socket 479(Optional for Celeron M CPU)
- **BIOS:** Award 4Mbit Flash BIOS
- **System memory:** 200-pin DDR SODIMM x 1, accepts DDR 266 128/256/512 MB DRAM
- **2nd cache memory:** 0 KB
- **Enhanced IDE interface:** Two channels support up to four EIDE devices. BIOS auto-detect, PIO Mode 3 or Mode 4, supports up to UDMA 100 mode. CFC card occupies secondary master.
- **Optional FDD Interface:** Supports up to two FDDs
- **Serial ports:** Four serial RS-232 ports, COM1,COM3&COM4: RS-232, COM2: RS-232/422/485
- **Parallel port:** One parallel port, supports EPP/ECP mode
- **Keyboard/mouse connector:** Supports a standard PS/2 Keyboard and PS/2 Mouse
- **Power management:** Supports power saving modes including Normal/Standby/Suspend modes. APM 1.2 compliant
- **Watchdog timer:** 255 level timer intervals
- **USB:** Six USB 2.0 compliant universal serial bus ports
- **IrDA(Optional):** 115Kbps, IrDA 1.0 compliant
- **Expansion:** One PC/104 connector; Two PCI slots expansion; ISA with 1*8 bit ISA slot by a PCI to ISA bridge

Solid State Disk

- Supports CompactFlash Card type I/II

VGA/LCD Interface

- **Chipset:** Intel 852GM chip integrated
- **Frame buffer:** Supports 64MB frame buffer with system memory
- **Interface:** 4X AGP VGA/LCD interface, Support for 9, 12, 15, 18bit TTL TFT(Optional for 16- or 24-bit DSTN panel)
- **Display mode:** CRT Mode: 1024 x 768@16bpp (85Hz); LCD Modes: 1280 x 1024@16bpp (60Hz), 1024 x 768@16bpp (60Hz)
- **LVDS:** Supports 1 Channel 18bit LVDS interface(Optional for 2 Channel 2 x 18bit LVDS)
- **Dual Independent Display:** CRT+LVDS, CRT+TV-Out, LVDS+TV-Out

Ethernet interface

- **Chipset:** RealTek 8100BL
- **Ethernet interface:** IEEE 802.3u 100BASE-T Fast Ethernet compatible
- I/O address switchless setting
- Built-in boot ROM

TV-Out

- **Chipset:** Chrontel CH7009
- Supports TV output
- Supports NTSC and PAL formats
- Support s-video
- TV output supports graphics resolutions up to 1024 x 768 pixels

Audio Function

- **Chipset:** Realtek ALC202
- **Audio controller:** AC97 3D surround sereo sound
- Supports Speaker out, CD-input, Line-in, Line-out, Microphone

Mechanical and Environmental

- **Dimensions:** (L x W)203 x 146 mm (8" x 5.75")
- **Power supply voltage:** +5 V, ±12V ±5%
  Power requirements:
  Max: (Win2000, Kpower)
  2.8A@+5V (W/Celeron M 600MHz, 128MB DDR333)
  0.25A@+12V (W/Celeron M 600MHz, 128MB DDR333)
  Typical:(Win2000, Kpower)
  1.9 A@+5 V (W/Celeron M 600MHz, 128MB DDR333)
  0.10 A@+12V V ((W/Celeron M 600MHz, 128MB DDR333)
- **Operating temperature:**0 ~ 60° C (32~140° F)
- **Operating Humidity:**0% ~ 90% Relative Humidity, noncondensing

Weight: 0.85 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.

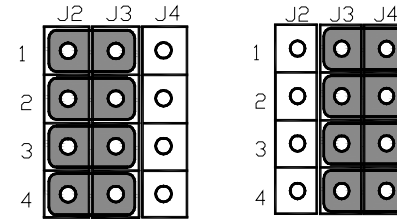
The table below lists the function of each of the jumpers and connectors.

Jumpers	
Label	**Function**
J1,J2,J3,J4	Setting COM2 RS232/422/485
J5	LCD voltage setting
J6	SM BUS Connector
J7	PCI VIO setting
J8	CMOS setting

Connectors	
Label	**Function**
CN1	VGA D-SUB connector
CN2	COM port 1,2
CN3	TV-Out connector
CN4	USB port 0,1
CN5	PS/2 Mouse/keyboard connector
CN6	LAN connector
CN7	VGA connector
CN8	Audio connector
CN9	COM port 3,4
CN10	IrDA connector

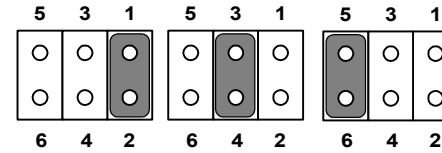
Connectors	
Label	**Function**
CN11	USB port 4,5
CN12	USB port 2,3
CN13	PS/2 connector
CN14	LVDS connector
CN15	LCD Backlight connector
CN16	CD-IN connector
CN17	TTL LCD connector or DSTN connector
CN18	PC104 connector
CN19	ISA connector
CN20	EBX POWER connector
CN21	-5V & -12V connector
CN22	CF connector
CN23	ATX connector
CN24	Secondary IDE connector
CN25	Primary IDE connector
CN26	Panel connector
CN27	Floppy connector
CN28	Print connector
FAN1,2	FAN connector

J2/J3/J4 Setting COM2 RS232/422/485	
RS232	**RS422/RS485**
J2(1)~J3(1)	J3(1)~J4(1)
J2(2)~J3(2)	J3(2)~J4(2)
J2(3)~J3(3)	J3(3)~J4(3)
J2(4)~J3(4)	J3(4)~J4(4)

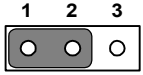


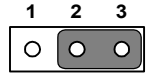
RS232 RS422/485

J1 Setting COM2 RS232/422/485		
RS232	**RS422**	**RS485**
1~2(default)	3~4	5~6



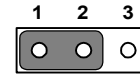
J5 Setting LCD Voltage	
Pins	**Voltage**
1~2	+5V
2~3	+3.3V (default)

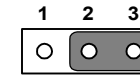




J6 SM BUS Connector	
Pins	**Signal**
1	+5V
2	SM_CLOCK
3	SM_DATA
4	GND

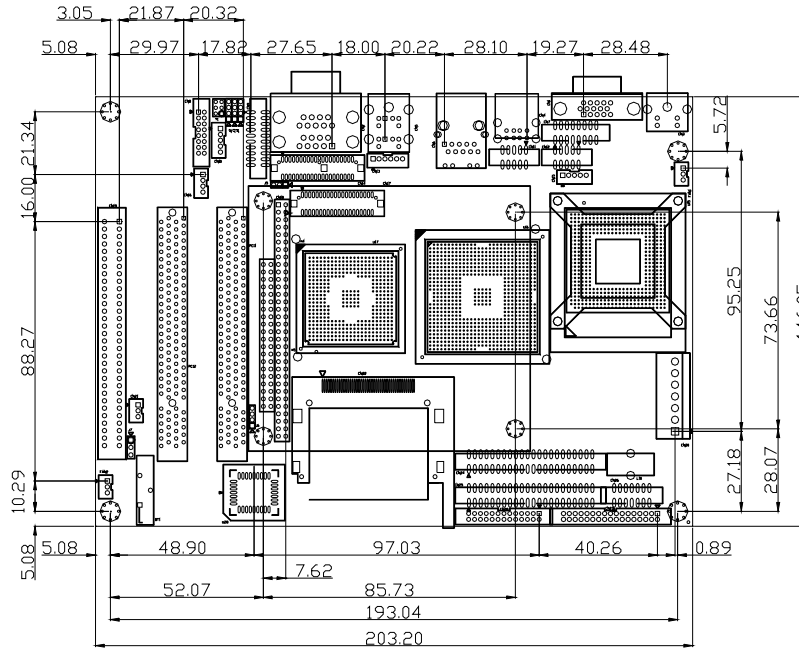
J7 PCI VIO	
Pins	**Voltage**
1~2	+5V(default)
2~3	+3.3V



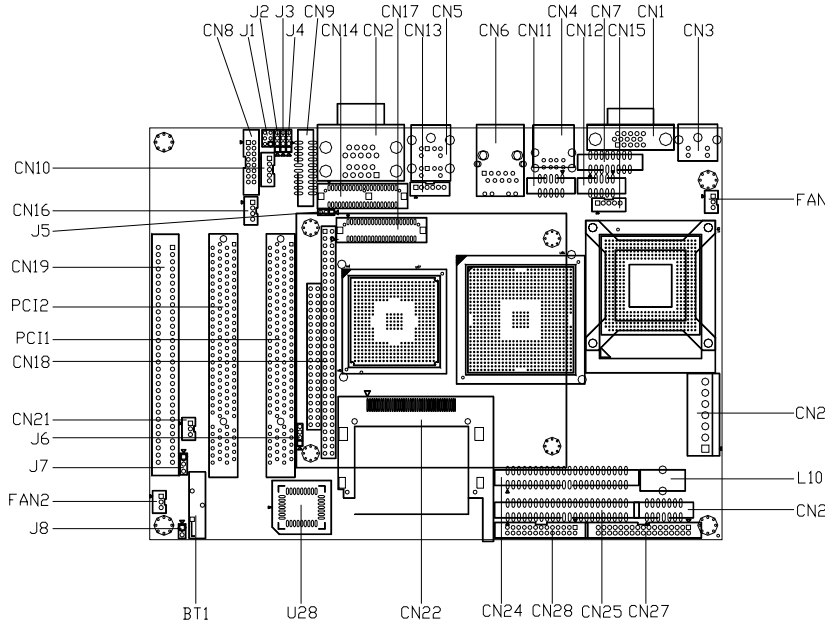


J8 Clear CMOS	
Pins	**Signal**
1~2	Clear CMOS

Dimension and Location



POD-6552 Mechanical Drawing (Component side)



POD-6552 Connectors and Jumpers Location (Component side)