

POD-6552 A2 Intel® Celeron® M/ Socket 479 SBC with VGA/ LVDS/ TTL/ TV-out/ ISA/ 2xPCI/ PC-104 Startup Manual

Packing List

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

- 1 POD-6552 SBC
- 1 Startup manual
- 1 Utility CD
- 1 Power Cable 12P/Big 4Px2, 10 cm PN:1700006196
- 1 mini jumper pack PN:9689000002

Optional Accessories

Part Number	Description
PCM-10586-6552E	Wiring kit for POD-6552 Series
1700001112	ATX power cable
PCM-110-00A3E	1-slot PCI riser card for 5.25" biscuits
PCM-120-00A3E	2-slot PCI riser card for 5.25" biscuits
CF-HDD-ADP	CompactFlash 50-pin to IDE 44-pin adapter

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

Note 1: POD-6552 A2 is reversion from A1. For system I/O ports, PCM-6552 A2 add Super IO runtime register and change COM2 address from 2F8 ~ 2FF to 2E0~2E7. The list is below. The detail information please refer to user manual.

	A1 version	2 version
Super IO runtime register	No	800h - 87Fh
COM2	2F8 - 2FF	2E0 - 2E7

Note 2: For detailed contents of POD-6552 A2, please refer to information on the enclosed CD-ROM (in PDF format).

Note 3: Acrobat Reader is required to view any PDF file. Acrobat Reader can be downloaded at: 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/support>

This manual is for the POD-6552 A2 series Rev. A2

Part No. 200K655201
Print in China

2nd Edition,
May 2009

Specifications

Standard SBC Functions

- **CPU:**
 - On Board type:

Intel Celeron M 600MHz	POD-6552L-M0A2E
Intel Celeron M 1.0GHz	POD-6552L-S0A2E
 - Socket type (Socket 479):
It depend on customer requirement.
- **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 (POD-6552L-S0A2E) / 512 KB (POD-6552L-M0A2E)
- **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

Specifications

Ethernet interface

- **Chipset:** Realtek RTL8139D
- **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 Enviromental

- **Dimensions:** (L x W) 203 x 146 mm (8" x 5.75")
- **Power supply voltage:** +5 V, $\pm 12\text{V} \pm 5\%$
 - Power requirements:**
 - Max: (WinXP, HCT11.2)
3.22 A @ +5 V (W/Celeron M 600 MHz, 512 MB DDR333)
0.35 A @ +12 V (W/Celeron M 600 MHz, 512 MB DDR333)
 - **Typical:** (WinXP)
2.24 A @ +5 V (W/Celeron M 600MHz, 512 MB DDR333)
0.27 A @ +12 V ((W/Celeron M 600 MHz, 512 MB DDR333)
- **Operating temperature:** 0 ~ 60° C (32~140° F)
- **Operating Humidity:** 0% ~ 90% Relative Humidity, non-condensing
- **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.

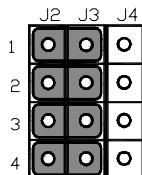
Jumpers	
Label	Function
J1, J2, J3, J4	Setting COM2 RS232/422/485
J5	LCD voltage setting
J6	SM BUS Connector
J7	PCI VIO setting
J8	CMOS setting
J9	AT/ATX power selection

Jumpers and Connectors

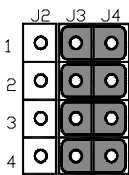
Connectors	
Label	Function
CN1	VGA D-SUB connector
CN2	COM port 1,2
CN3	TV-Out connector
CN4	USB port 0,1
CN5	PS/2 Mouse/keyboard connector
CN6	LAN connector
CN7	VGA connector
CN8	Audio connector
CN9	COM port 3,4
CN10	IrDA connector
CN11	USB port 4,5
CN12	USB port 2,3
CN13	PS/2 connector
CN14	LVDS connector
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	-5 V & -12 V 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

Jumpers and Connectors

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)

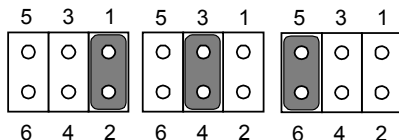


RS232

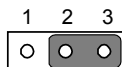
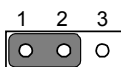


RS422/485

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



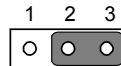
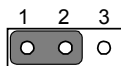
J5 Setting LCD Voltage	
Pins	Voltage
1~2	+5 V
2~3	+3.3 V (default)



Jumpers and Connectors

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

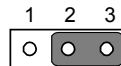
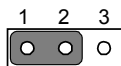
J7 PCI VIO	
Pins	Voltage
Voltage	+5 V (default)
2~3	+3.3 V



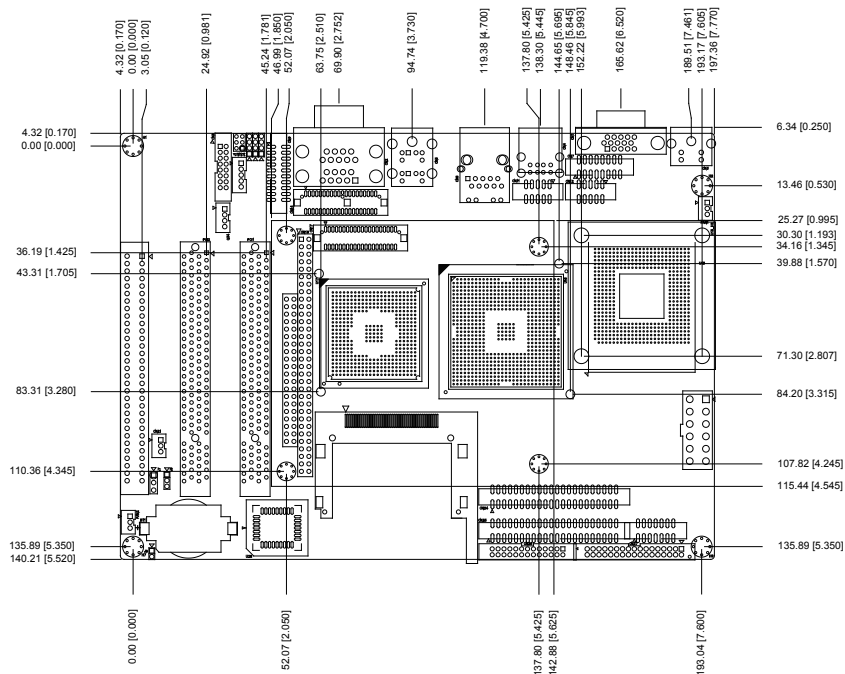
J8 Clear CMOS	
Pins	Signal
1~2	Clear CMOS



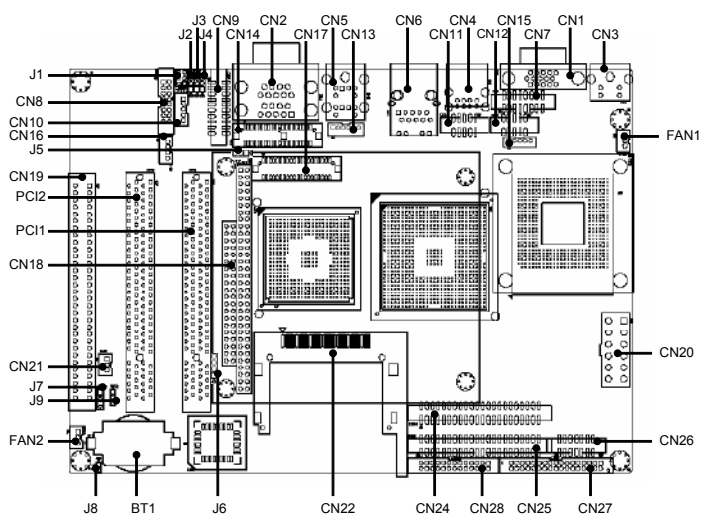
J9 AT/ATX power selection	
Pins	Power supply
1~2	AT Power
2~3	ATX Power



Dimension and Location



POD-6552 Mechanical Drawing (Component side)



POD-6552 Connectors and Jumpers Location (Component side)