

PCM-9376 AMD T16R 3.5" SBC, DDR3 SODIMM, 48-bit LVDS, 18-bit TTL, VGA, 2GbE, Mini PCIe, mSATA, PC/104, iManager Startup Manual

Packing List

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

1. 1 x PCM-9376 SBC with heatsink
2. 1 x COM2 cable (p/n: 1700019414)
3. 1 x COM3/4 cable (p/n: 1701200220)
4. 1 x LAN cable (p/n: 1700017863)
5. 1 x USB cable (p/n: 1700019071)
6. 1 x SATA cable (p/n: 1700008941)
7. 1 x SATA Power cable (p/n: 1700018785)
8. 1 x Audio cable (p/n: 1703100152)
9. 1 x PS/2 cable (p/n: 1700060202)
10. 1 x mini jumper pack (p/n: 9689000002)

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

Note 1: 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.emacinc.com>

<http://www.emacinc.com/products/>

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

<http://www.emacinc.com/support/>

This manual is for the PCM-9376 Series Rev. A1

Part No. 2006937600
Printed in China

1st Edition
December 2013

Specifications

General

- **CPU:** AMD® G-Series™ Single Core Processor T16R 615MHz
- **System Memory:**
 - SODIMM: DDR3 1066MHz up to 4GB
 - Onboard: DDR3 800MHz up to 1GB (support by project)
- **L2 Cache:** 512 KB
- **System Chipset:** AMD® A55E
- **BIOS:** AMI EFI 32Mbit
- **Watchdog timer:** 255-level timer interval, software programmable. Multi-level WDT (set by iManager)
- **Expansion Interface:**
 - PC/104 (ISA bus)
 - Half-size Mini PCIe
 - Full-size mSATA (support Mini PCIe by request)
 - LPC connector
- **Battery:** Lithium 3V/210 mAh
- **Storage:**
 - Full-size mSATA
 - 2x SATAII (3Gb/s)
- **Audio:** High Definition Audio (HD), line-in, line-out, mic-in

Display

- **Controller:** AMD® T16R with AMD Radeon™ HD 6250
- **Maximum Resolution:**
 - VGA: Up to 1920 x 1200 @ 85Hz
 - LVDS: 48-bit up to 1920x1200 @60Hz (PCM-9376E)
 - TTL: 18-bit TTL up to 1024x600 @60Hz (PCM-9376F)
 - Dual Independent Display: VGA + LVDS, VGA + TTL, LVDS + TTL

Ethernet Interface

- **Speed:** 10/100/1000 Mbps
- **Controller:** Realtek® RTL8111E-VL-CG

I/O

- **Rear I/O:** RS-232/422/485, GbE, PS/2, VGA, Reset button
- **Internal I/O:** Audio, 2xSATAII, GbE, 4xUSB2.0, RS-232/422/485, 2xRS-232, SMBus (shared with I²C), 8-bit GPIO

Mechanical and Environmental

- **Dimensions:** 146 x 102 mm (5.7" x 4")
- **Height:** Top side 15.5mm (heatsink), bottom side 6.8mm (Mini PCIe), PCB 1.6mm
- **Power Supply Type:** AT/ATX
- **Power Management:** ACPI
- **Power Requirement:** +5V ± 5%, (12V only for LCD, PC/104 and SATA power)

Specifications

- **Power Consumption:**
 - Max in HCT: 2.28A @ 5V (11.4W)
 - Idle mode on Win7: 1.48A @5V (7.4W)
- **Operating temperature:** 0 ~ 60° C (32 ~ 140° F)
- **Weight:** 0.5 kg (reference weight of total package)

Jumpers and Connectors

Jumpers

Label	Function
J1	AT / ATX
J2	LCD Power
J3	Clear CMOS

Connectors

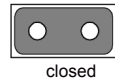
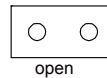
Label	Function
CN2	PC/104 -5/-12V power input
CN5	SATA
CN6	2 x Internal USB
CN7	2 x Internal USB
CN8	Internal COM3/4: RS-232
CN9	Internal COM2: RS-232/422/485
CN10	GPIO
CN11	Audio
CN12	Power input
CN13	SATA
CN14	ATX power input
CN15	SMBus / I ² C
CN16	PC/104
CN17	TTL
CN18	Inverter power
CN19	SATA power (5V/12V)
CN20	SATA power (5V)
CN21	Internal GbE
CN22	LVDS
CN23	External GbE
CN24	PS/2
CN25	ATX Power Button
CN26	External COM1: RS-232/422/485
CN27	VGA

Jumpers and Connectors

CN28	Half-size Mini-PCIe
CN29	LPC
CN30	Full-size mSATA
CN31	DDR3 SODIMM

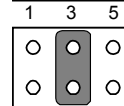
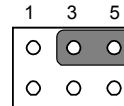
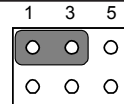
J1: AT / ATX

Setting	Function
(Closed)*	AT
(Open)	ATX



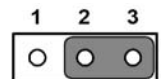
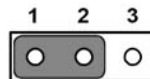
J2: LCD Power

Setting	Function
(1-3)*	+3.3V
(3-5)	+5V
(3-4)	+12V



J3: Clear CMOS

Setting	Function
(1-2)*	Normal
(2-3)	Clear COMS



Caution

Caution! The computer is supplied with a battery-powered Realtime Clock circuit. There is a danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacturer. Discard used batteries according to manufacturer's instructions.



Connector Locations

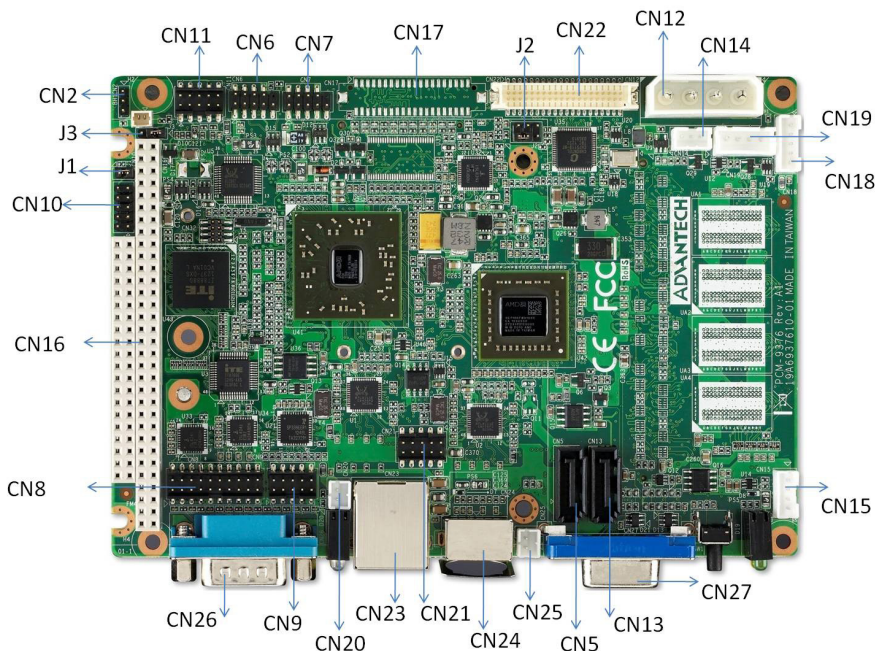


Figure 1: PCM-9376 Locations of Connectors & Jumpers (Top side)

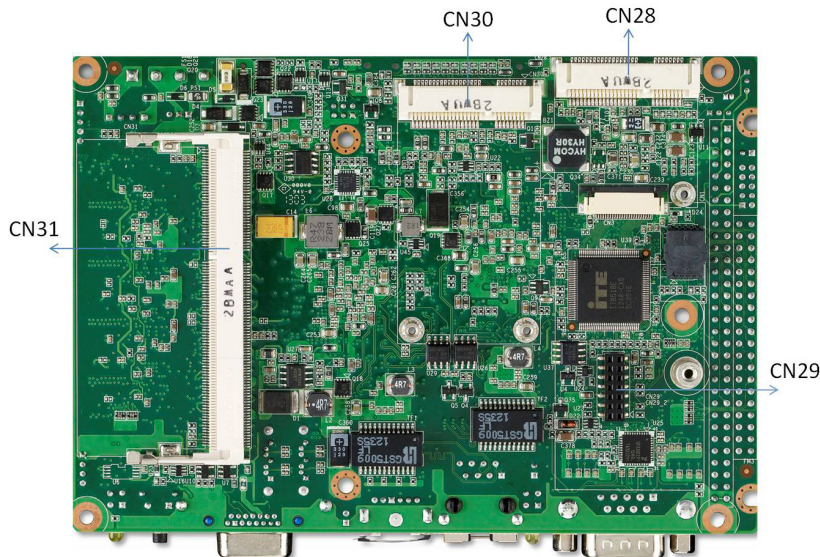


Figure 2: PCM-9376 Locations of Connectors & Jumpers (Bottom side)

Connector Locations

Unit: mm

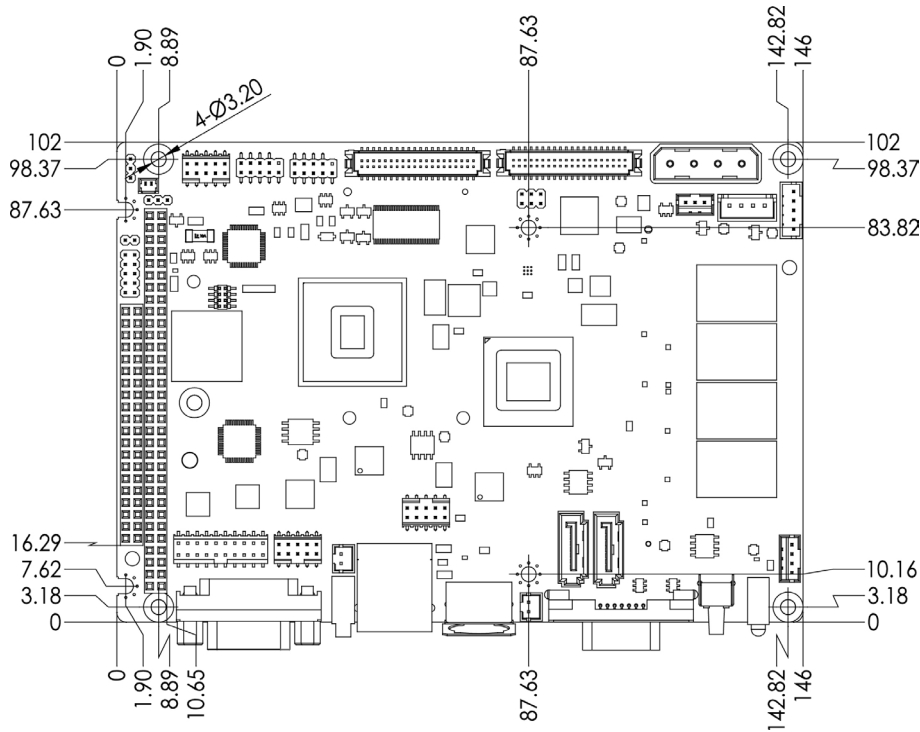


Figure 3: PCM-9376 Mechanical Drawing (Top side)

Unit: mm

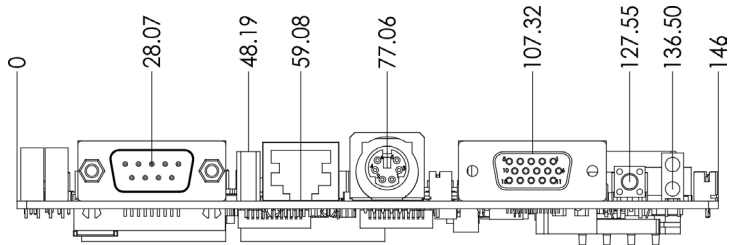


Figure 4: PCM-9376 Mechanical Drawing (Coastline)