

## 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 x PCM-9376 SBC with heatsink
- 1 x COM2 cable (p/n: 1700019414)
- 1 x COM3/4 cable (p/n: 1701200220)
- 1 x LAN cable (p/n: 1700017863)
- 1 x USB cable (p/n: 1700019071)
- 1 x SATA cable (p/n: 1700008941)
- 1 x SATA Power cable (p/n: 1700018785)
- 1 x Audio cable (p/n: 1703100152)
- 1 x PS/2 cable (p/n: 1700060202)
- 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](http://www.adobe.com/Products/acrobat/readstep2.html) (Acrobat is a trademark of Adobe)

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<http://www.advantech.com>

<http://www.advantech.com/eplatform>

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

<http://service.advantech.com.tw/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 I<sup>2</sup>C), 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

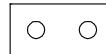
Label	Function
CN2	PC/104 -5/-12V power input
CN5	SATA
CN6	2 x Internal USB
CN7	2 x Internal USB
CN8	Internal COM3/4: RS-232
CN9	Internal COM2: RS-232/422/485
CN10	GPIO
CN11	Audio
CN12	Power input
CN13	SATA
CN14	ATX power input
CN15	SMBus / I <sup>2</sup> C
CN16	PC/104
CN17	TTL
CN18	Inverter power
CN19	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



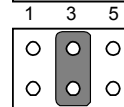
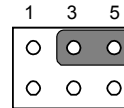
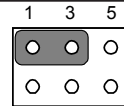
open



closed

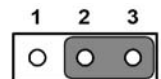
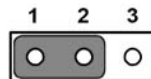
### J2: LCD Power

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



### J3: Clear CMOS

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

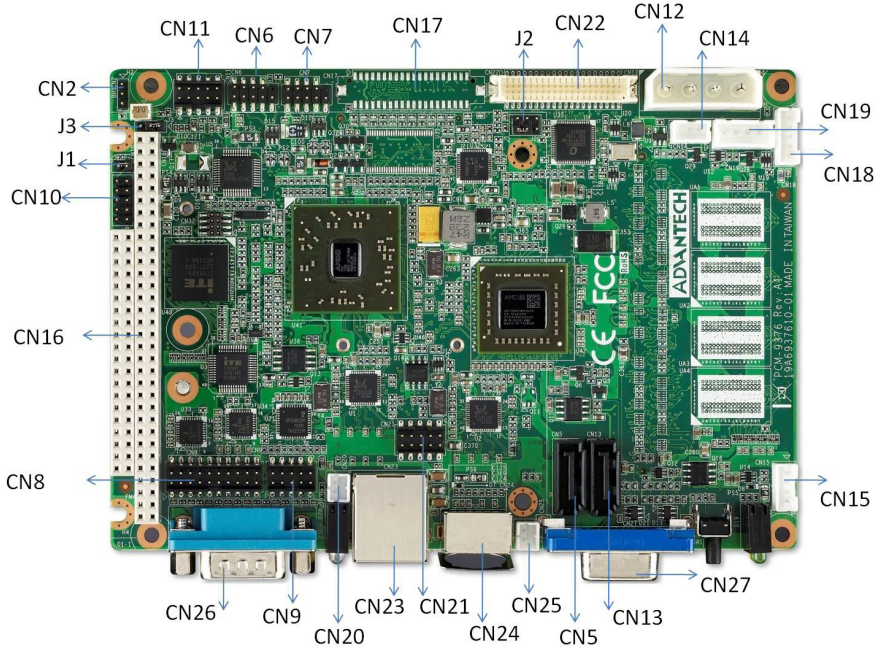


## Caution

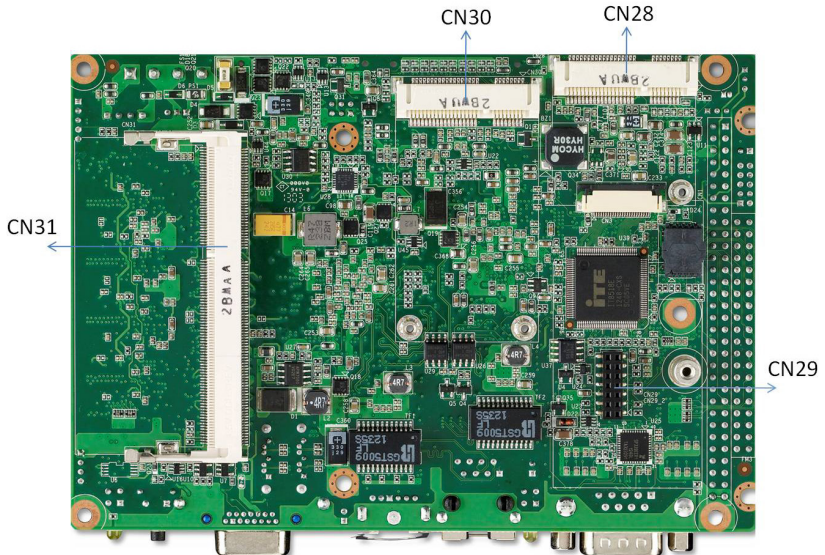
**Caution!** The computer is supplied with a battery-powered Realtime Clock circuit. There is a danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacturer. Discard used batteries according to manufacturer's instructions.



## Connector Locations



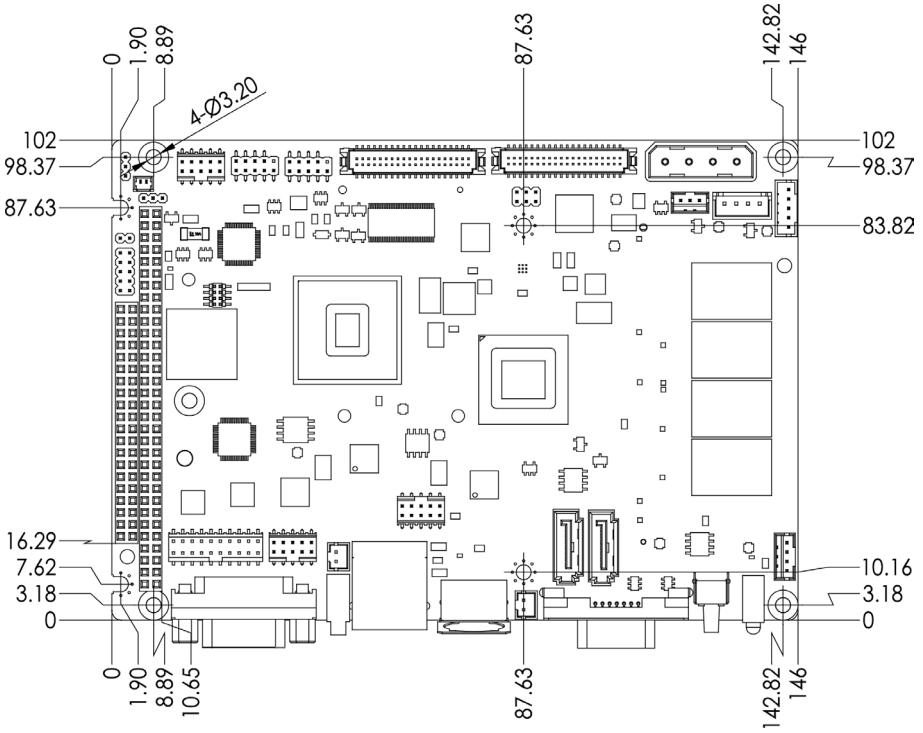
*Figure 1: PCM-9376 Locations of Connectors & Jumpers (Top side)*



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

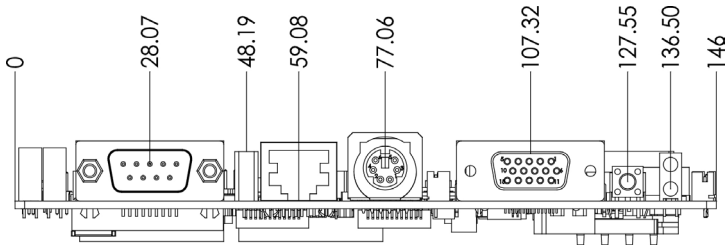
# Connector Locations

Unit: mm



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

Unit: mm



**Figure 4: PCM-9376 Mechanical Drawing (Coastline)**