PCM-9365
Intel® Celeron® N2930 & Atom™ E3825, 3.5" SBC, 2GB/4GB On-board Memory, VGA, 48-bit LVDS, 2GbE, Mini PCIe, PCI-104, SUSI 4
Startup Manual

Packing List

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

1. 1 PCM-9365 SBC
2. 1 Startup Manual
3. 1 RS-232 COM3/4 cable p/n: 1701200220
4. 1 SATA power cable p/n: 1700018785
5. 1 RS-232 COM2 cable p/n: 1700019414
6. 2 USB Cable p/n: 1700018730
7. 1 SATA Cable p/n: 1700008941
8. 1 Audio cable p/n: 1700019584
9. 1 Heatsink p/n: 1960067897T001
10. 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: For detailed contents of PCM-9365, please refer to Advantech website for detailed information.

Note 2: Acrobat Reader is required to view any PDF file. Acrobat Reader can be downloaded at: http://get.adobe.com/reader/ (Acrobat is a trademark of Adobe)

For more information on this and other Advantech products, please visit our website at:

http://www.advantech.com

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

http://support.advantech.com

This manual is for the PCM-9365 Series Rev. A1

Part No. 2006936500 1st Edition
Printed in China June 2015

Specifications

General

- **CPU:** Intel® Celeron® N2930 Quad Core 1.83 GHz, burst frequency 2.16GHz/ Atom™ E3825 Dual Core 1.33 GHz
- **System Memory:** 2GB/4GB DDR3L on-board memory, N2930 with 1333MHz, E3825 with 1066MHz
- **L2 Cache:** 2 MB (N2930) / 1 MB (E3825)
- **BIOS:** AMI uEFI 64 Mbit
- **Watchdog Timer:** 255 levels timer interval, programmable by software. Multi-level WDT (set by SUSI 4)
- **Battery:** Lithium 3 V/210 mAH
- **Audio:** High definition audio (HD), line-in, line-out, Mic-in

Expansion Interface

- 1 x Full-size Mini PCIe
- 1 x Full-size mSATA
- 1 x PCI-104

Display

- **Controller:** Intel® Gen 7 graphics and media encode/ decode engine
- **Maximum Resolution:**
  - VGA: 2560 x 1600 @ 60 Hz
  - HDMI (support by request):
    * HDMI 1.4a with audio, 1920x1080
  - LVDS/eDP:
    * 48-bit LVDS up to WUXGA 1920 x 1200 at 60Hz, the 2nd LVDS is supported by request
  - Dual Display: VGA + LVDS, HDMI+ LVDS, LVDS + LVDS (HDMI and the 2nd LVDS are supported by request)

Ethernet Interface

- **Speed:** 10/100/1000 BASE-T
- **Controller:** Realtek RTL8111E-VL-CG

Mechanical and Environmental

- **Dimensions:** 146 x 102 mm (5.7" x 4")
- **Power Supply Type:** ACPI support
- **Power Requirement:** +12 V ± 10%
- **Power Consumption:**
  - Typical in Window 8:
    PCM-9365E-2GS3A1E :0.39A @ 12V (4.68W)
    PCM-9365EV-4GS3A1E : 0.44A @ 12V (5.28W)
    PCM-9365N-4GS8A1E: 0.509A @ 12V (6.108W)
  - Max in HCT:
    PCM-9365E-2GS3A1E :0.49A @ 12V (5.88W)
    PCM-9365EV-4GS3A1E : 0.554A @ 12V (6.648W)
    PCM-9365N-4GS8A1E: 0.745A @ 12V (8.94W)
- **Operating Temperature:** 0 ~ 60 °C (32 ~ 140 °F)
- **Weight:** 0.54 kg (1.19 lb) (reference total weight)

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	Auto Power On
J2	PCI-104 VIO
J4	LVDS1 Power
J5	LVDS2 Power
J6	Clear CMOS
J7	LVDS JEIDA/VESA Selection

Connectors	
Label	**Function**
CN1	12V Power Input
CN2	Battery
CN3	EC Debug Port
CN4	Power Switch
CN5	Reset
CN6	GPIO
CN7	VGA
CN8	HDMI
CN9	SATA
CN10	HDD & PWR LED
CN11	SATA Power
CN12	Mini PCIE
CN13	mSATA
CN14	Internal USB
CN15	Internal USB
CN16	External USB3.0
CN17	External USB
CN18	COM1
CN19	COM2
CN22	LAN1
CN23*	LAN1 & LAN2 (Dual LAN connector)
CN24	Internal LAN LED
CN25	LAN2
CN26	Audio
CN27	PCI-104
CN28	Inverter Power (LVDS1)
CN29	48-bit LVDS1
CN30	Inverter Power (LVDS2)
CN31	48-bit LVDS2
CN33	SMBus
CN37	COM3/COM4
J3	PCI-104 -12V Input

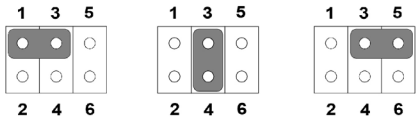
Jumper Settings

J1	Auto Power On
Setting	Function
Open	ATX
Close*	Auto power on

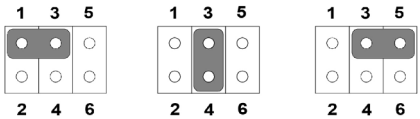
* default

J2	PCI-104 VIO
Setting	Function
1-2	+5V
2-3*	+3.3V

J4	LVDS1 Power
Setting	Function
1-3*	+3.3V
3-5	+5V
3-4	+12V

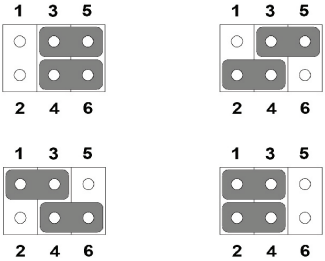


J5	LVDS2 Power
Setting	Function
1-3*	+3.3V
3-5	+5V
3-4	+12V



J6	Clear CMOS
Setting	Function
1-2*	Normal
2-3	Clear CMOS

J7	LVDS JEIDA/VESA Selection
Setting	Function
1-3	LVDS1 Pull-high to +3.3V (JEIDA or VESA base on panel definition)
3-5*	LVDS1 Pull-low to GND (JEIDA or VESA base on panel definition)
2-4	LVDS2 Pull-high to +3.3V (JEIDA or VESA base on panel definition)
4-6*	LVDS2 Pull-low to GND (JEIDA or VESA base on panel definition)



Caution! The computer is provided with a battery-powered real-time clock circuit. There is a danger of explo sion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacturer. Discard used batteries according to manufacturer's instructions.

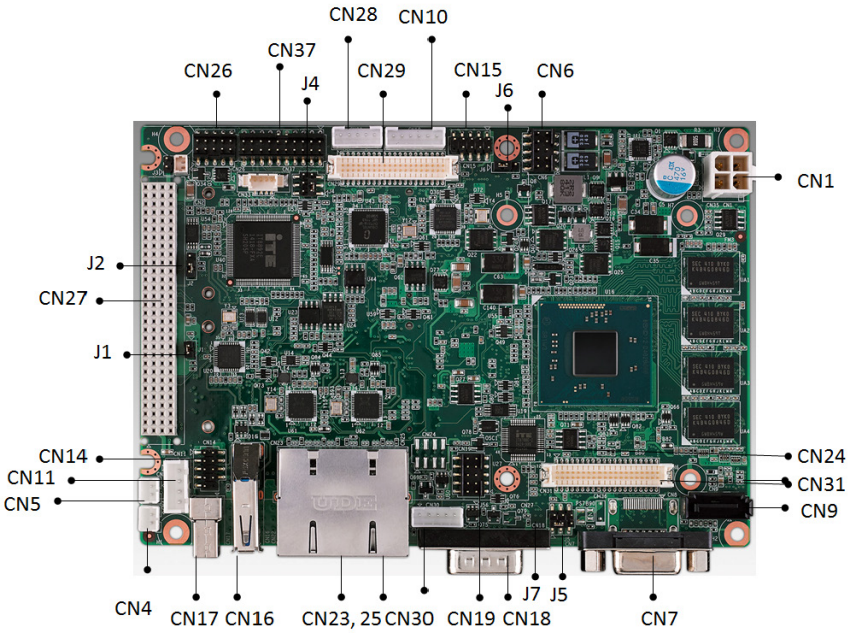


Figure 1: PCM-9365 Connecter Location (Top Side)

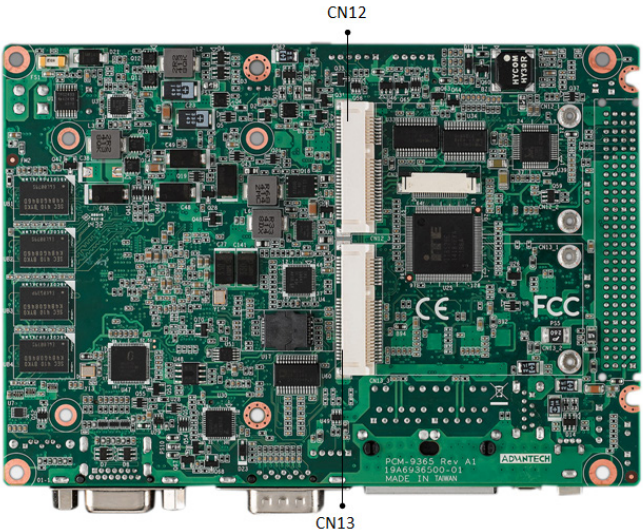


Figure 2: PCM-9365 Connecter Location (Bottom Side)

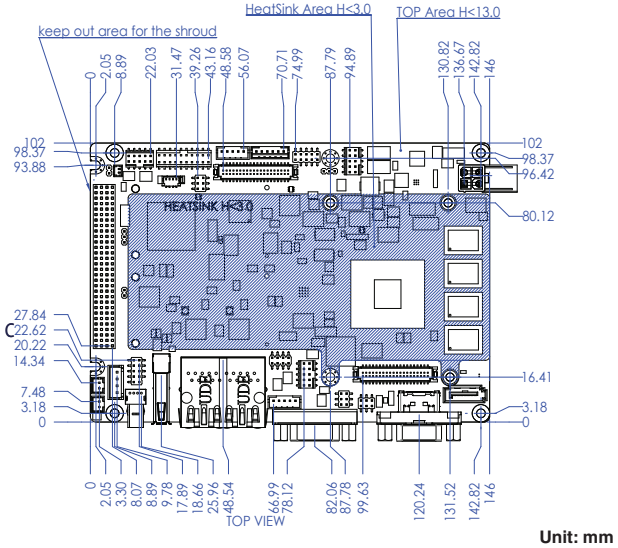


Figure 3: PCM-9365 Mechanical Drawing (Top Side)

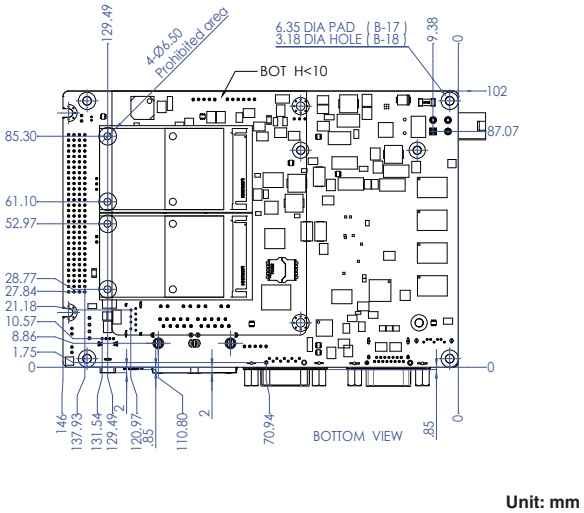


Figure 4: PCM-9365 Mechanical Drawing (Bottom Side)

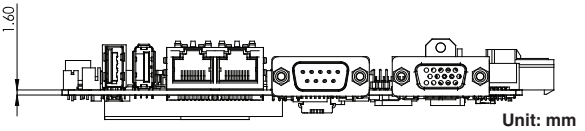


Figure 5: PCM-9365 Mechanical Drawing (Side View)