

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
Printed in China

1st Edition
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

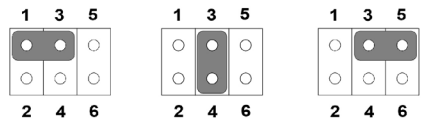
J1	Auto Power On
Setting	Function
Open	ATX
Close*	Auto power on

* default

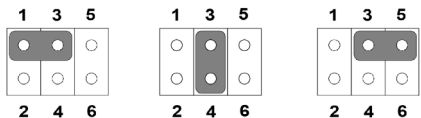
J2	PCI-104 VIO
Setting	Function
1-2	+5V
2-3*	+3.3V



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

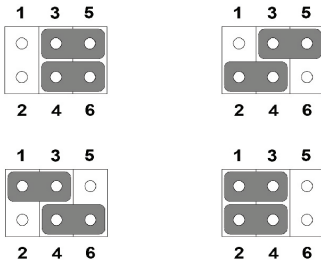


Jumpers and Connectors (Cont.)

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 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.



PCM-9365 Connector Locations Mechanical Drawing

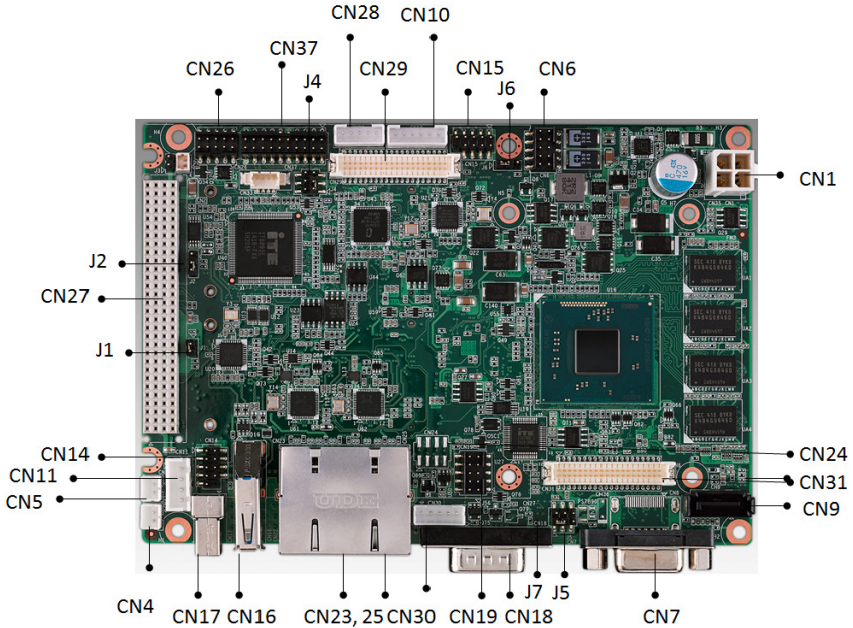


Figure 1: PCM-9365 Connector Location (Top Side)

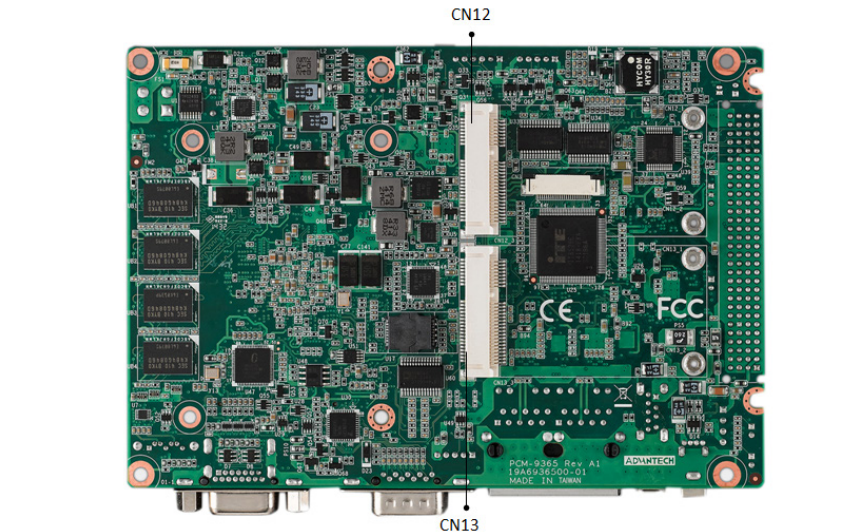


Figure 2: PCM-9365 Connector Location (Bottom Side)

PCM-9365 Mechanical Drawing

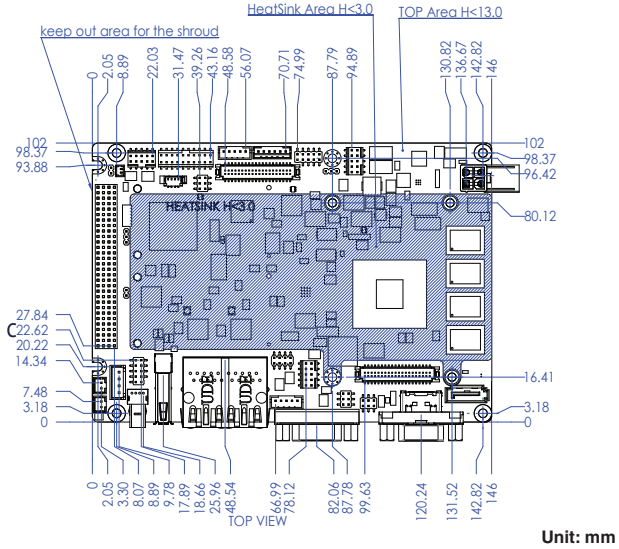


Figure 3: PCM-9365 Mechanical Drawing (Top Side)

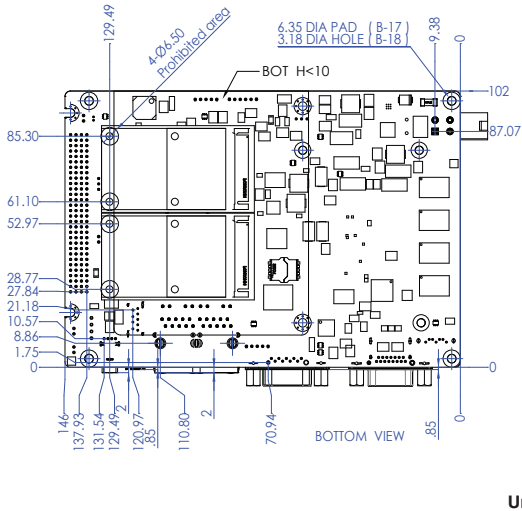


Figure 4: PCM-9365 Mechanical Drawing (Bottom Side)

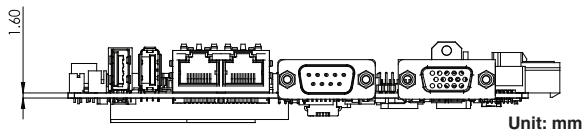


Figure 5: PCM-9365 Mechanical Drawing (Side View)