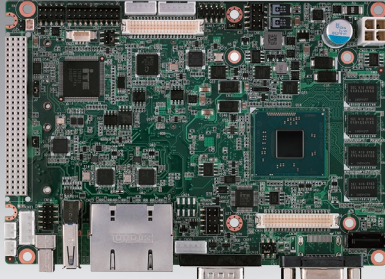


# PCM-9365

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

**NEW**



**iManager susiAccess** **CE FCC**

## Features

- Intel® Atom™ E3825 & Celeron® N2930, DDR3L-1066/1333MHz 2GB/4GB on-board memory
- DirectX11, OpenGL3.2, OpenCL1.1, 3 independent display: VGA+LVDS/HDMI+LVDS\*/Dual LVDS
- Support PCI-104 expansion
- 2 GbE, rich I/O: 4COM, SATA, USB3.0, SMBus/I<sup>2</sup>C, GPIO, full-size Mini PCIe, full-size mSATA
- Supports iManager (SUSI 4.0), SUSIAccess and Embedded Software APIs

### Software APIs:



### Utilities:

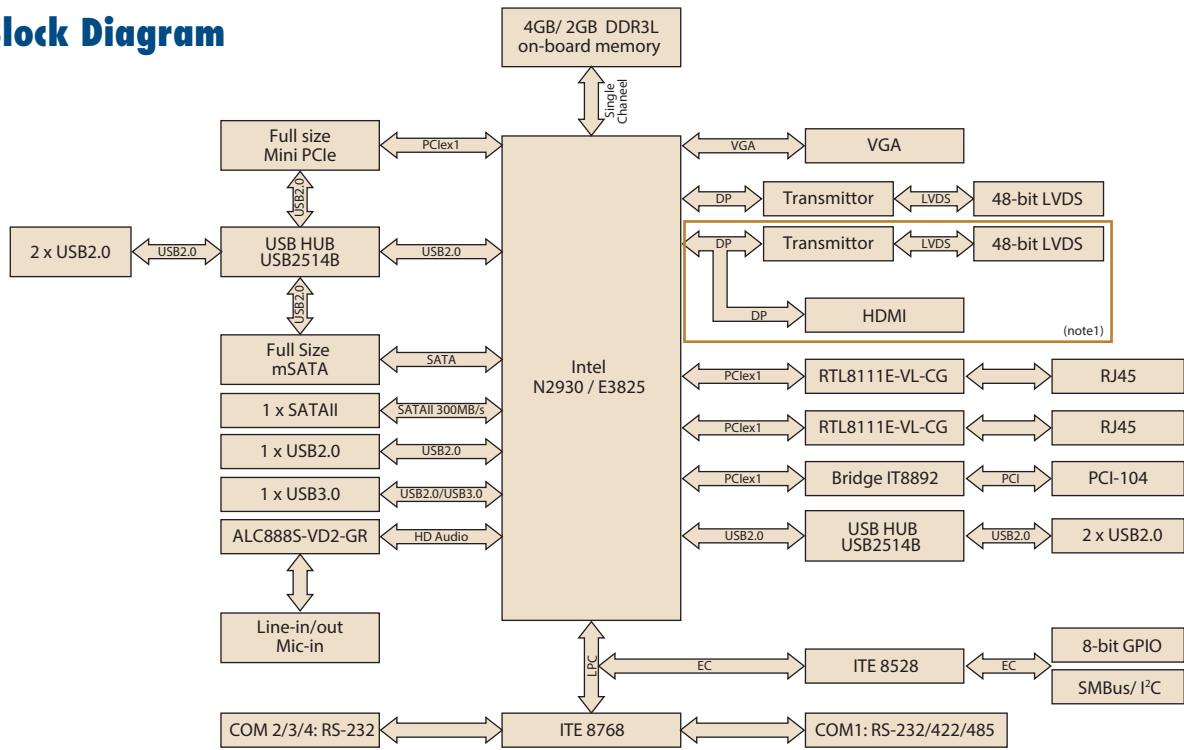


## Specifications

|                          |                                      |  |                         |  |
|--------------------------|--------------------------------------|--|-------------------------|--|
| Processor System         | CPU                                  | Intel Celeron N2930  | Intel Atom E3825        |  |
|                          | Base Frequency                       | 1.83 GHz (Quad-Core)   | 1.33 GHz (Dual-Core)    |  |
|                          | Max Turbo Frequency                  | 2.16 GHz   | -                       |  |
|                          | L2 Cache                             | 2MB  | 1MB                     |  |
| Memory                   | BIOS                                 | AMI UEFI BIOS at 64 Mb   |                         |  |
|                          | Technology                           | DDR3L 1333 MHz   | DDR3L 1066 MHz          |  |
|                          | Max. Capacity                        | 4 GB   |                         |  |
| Display                  | On-board memory                      | Yes  |                         |  |
|                          | Controller                           | Intel Gen7 graphic engine  |                         |  |
|                          | Processor Graphics                   | DirectX11, OpenGL3.2, OpenCL1.1  |                         |  |
|                          | VGA                                  | Full HW acceleration, decode: H.264, MPEG2/4, VC-1, WMV9. Encode: H.264, MPEG2                     |                         |  |
|                          | LVDS                                 | 2560 x 1600 at 60Hz  |                         |  |
|                          | HDMI                                 | 48-bit dual LVDS up to WUXGA 1920 x 1200 at 60Hz, the 2nd LVDS is supported by request             |                         |  |
| Ethernet                 | Speed                                | Supports 3.3/5/12V for VDD power, 1A@5V/12V for inverter   |                         |  |
|                          | Controller                           | HDMI 1.4a for HD video playback, 1080P at 60Hz   |                         |  |
|                          | Connector                            | VGA + LVDS, HDMI*+ LVDS, LVDS + LVDS*  |                         |  |
| Audio                    | Speed                                | 10/100/1000Mbps  |                         |  |
|                          | Controller                           | Realtek RTL8111E-VL-CG   |                         |  |
| WatchDog Timer           | Connector                            | 2 RJ45   |                         |  |
|                          | Codec                                | Realtek ALC888S, High Definition Audio (HD), Line-in, Line out, Mic-in                             |                         |  |
| Storage                  | SATA                                 | Output System reset, Programmable counter from 1 - 255 minutes/ seconds                            |                         |  |
|                          | mSATA                                | 1, up to 3Gb/s (300 MB/s)  |                         |  |
| Rear I/O                 | Ethernet                             | 1 x Full-size  |                         |  |
|                          | VGA                                  | PCI-104 Expansion  |                         |  |
|                          | HDMI                                 | 1 (support by request)   |                         |  |
|                          | USB 2.0                              | 1  |                         |  |
|                          | USB 3.0                              | 1  |                         |  |
|                          | Serial                               | 1 RS232/422/485 support auto flow control  |                         |  |
| Internal I/O             | Serial                               | 3 RS-232 (ESD protection: Air gap ±15kV, Contact ±8kV)   |                         |  |
|                          | USB2.0                               | 4  |                         |  |
|                          | I <sup>2</sup> C                     | 1 (Shared with SMBus pin)  |                         |  |
|                          | SMBus                                | 1  |                         |  |
| Expansion                | GPIO                                 | 8-bit  |                         |  |
|                          | Mini PCIe                            | 1 x Full-size  |                         |  |
| Power                    | Power Type                           | Single 12V DC power input  |                         |  |
|                          | Power Supply Voltage                 | 12V ± 10%  |                         |  |
|                          | Power Consumption (Typical)          | PCM-9365E-2GS3A1E  | :0.39A @ 12V (4.68W)    |  |
|                          |                                      | PCM-9365EV-4GS3A1E   | : 0.44A @ 12V (5.28W)   |  |
|                          |                                      | PCM-9365N-4GS8A1E  | : 0.509A @ 12V (6.108W) |  |
|                          | Power Consumption (Max, test 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)   |                         |  |
| Battery                  | ACPI                                 |  |                         |  |
| Environment              | Operational                          | Lithium 3 V / 210 mAH  |                         |  |
|                          | Non-Operational                      | 0 - 60° C with 0.7m/s air flow (32 - 140° F) (Operational humidity: 40° C @ 95% RH Non-Condensing) |                         |  |
| Physical Characteristics | Dimensions (L x W)                   | -40° C - 85° C and 60° C @ 95% RH Non-Condensing   |                         |  |
|                          | Weight                               | 146 x 102 mm (5.7" x 4"), same as 3.5"   |                         |  |
|                          | Height                               | 0.54kg (1.19lb), weight of total package   |                         |  |
|                          |                                      | Top Side: 19.5 mm; Bottom Side: 7.8 mm; PCB: 1.6 mm  |                         |  |

\* The specification is supported by request

## Block Diagram



Note1: Supported by request

## Ordering Information

| Part No.           | CPU                      | Onboard Memory | LVDS   | VGA | GbE | Audio | RS-232/422/485 | RS-232 | USB 3.0 | USB 2.0 | SATAII | Mini PCIe | mSATA     | PCI-104 | Power connector | Thermal Solution* | Operating Temp. |
|--------------------|--------------------------|----------------|--------|-----|-----|-------|----------------|--------|---------|---------|--------|-----------|-----------|---------|-----------------|-------------------|-----------------|
| PCM-9365E-2GS3A1E  | Intel E3825 1.33GHz 6W   | 2GB            | 48-bit | Yes | 2   | Yes   | 1              | 3      | 1       | 5       | 1      | Full-size | Full-size | Yes     | 2x2pin          | Passive           | 0 ~ 60° C       |
| PCM-9365EV-4GS3A1E | Intel E3825 1.33GHz 6W   | 4GB            | 48-bit | Yes | 2   | Yes   | 1              | 3      | 1       | 5       | 1      | Full-size | Full-size | Yes     | 2x2pin          | Passive           | 0 ~ 60° C       |
| PCM-9365N-4GS8A1E  | Intel N2930 1.83GHz 7.5W | 4GB            | 48-bit | Yes | 2   | Yes   | 1              | 3      | 1       | 5       | 1      | Full-size | Full-size | Yes     | 2x2pin          | Passive           | 0 ~ 60° C       |
| PCM-9365EZ22GS3A1E | Intel E3825 1.33GHz 6W   | 2GB            | 48-bit | Yes | 2   | Yes   | 1              | 3      | 1       | 5       | 1      | Full-size | Full-size | Yes     | 2x2pin          | Passive           | -40~85° C       |
| PCM-9365NZ24GS8A1E | Intel N2930 1.83GHz 7.5W | 4GB            | 48-bit | Yes | 2   | Yes   | 1              | 3      | 1       | 5       | 1      | Full-size | Full-size | Yes     | 2x2pin          | Passive           | -40~85° C       |

Note: Passive=fanless; Active=with fan

## Packing List

| Part No.       | Description  | Quantity |
|----------------|--|----------|
|                | PCM-9365 SBC   | 1        |
|                | Startup Manual   | 1        |
| 1701200220     | RS-232 COM3/4 cable, F Cable 2*10P-2.0/D-SUB 9P(M)*2 22CM        | 1        |
| 1700018785     | SATA 35cm power cable  | 1        |
| 1700019414     | RS-232 COM2 Cable D-SUB 9P(M)/2*5P-2.0 30cm                      | 1        |
| 1700018730     | USB Cable 2*5P-2.0/USB-A(F)*2 25CM F/9                           | 2        |
| 1700008941     | M Cable SATA 7P/SATA 7P 32CM C=R 180/180D W/Lock                 | 1        |
| 1700019584     | Audio Cable 2*5P-2.0/JACK*3 20cm                                 | 1        |
| 9689000002     | mini Jumper pack   | 1        |
| 1960067897T001 | Heatsink for PCM-9365 (131.24 x 69.21 x 19.5 mm)                 | 1        |
| 1960067897T011 | Heatsink for PCM-9365Z&Z2 series only (131.24 x 69.21 x 19.5 mm) | 1        |

## Rear I/O View



## Optional Accessories

| Part No.       | Description                          |
|----------------|--------------------------------------|
| 1960070254T001 | Heat spreader                        |
| 1653130421     | PCI-104 connector 120-pin (Long pin) |

## Embedded OS/API

| Embedded OS/API | Part No.   | Description                   |
|-----------------|------------|-------------------------------|
| WES8            | TBD        |                               |
| WES7            | 2070013531 | WES7E PCM-9365 X64 V5.6.8 Eng |
| WEC7            | TBD        |                               |
| Linux           |            | Kernel 3.x                    |
| VxWorks         |            | 6.9.3.3                       |
| Android         |            | Kit Kat 4.4                   |
| Software API    |            | iManager (SUSI 4.0)           |