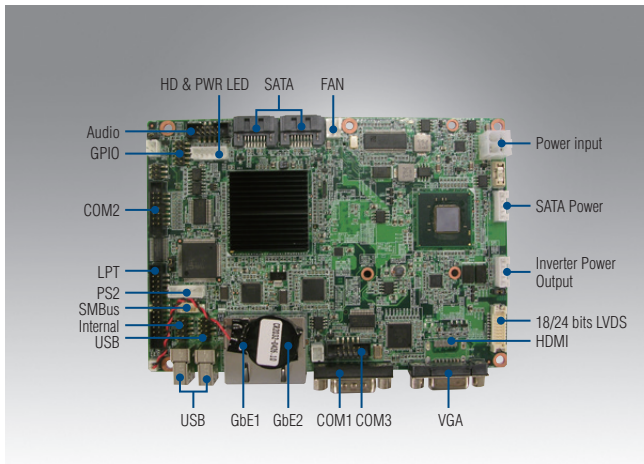


PCM-9363

Intel® Atom™ N455/D525 3.5" SBC, DDR3, 18/24-bit LVDS, VGA/HDMI, 2 GbE, Mini PCIe, CF



Features

- Embedded Intel® Atom™ N455 Single Core/ D525 Dual Core processor + ICH8M, DDR3 memory support
- Intel Gen 3.5 DX9, MPEG2 Hardware Decoder, multiple display: 18/24-bit LVDS, VGA or 1080P HDMI
- Supports extended temperature -40° C ~ 85° C
- Two Intel GbE connections; Rich I/O with 3 COM, 2 SATA, 6 USB and GPIO connectors
- Supports SUSIAccess and Embedded Software APIs

Software APIs:



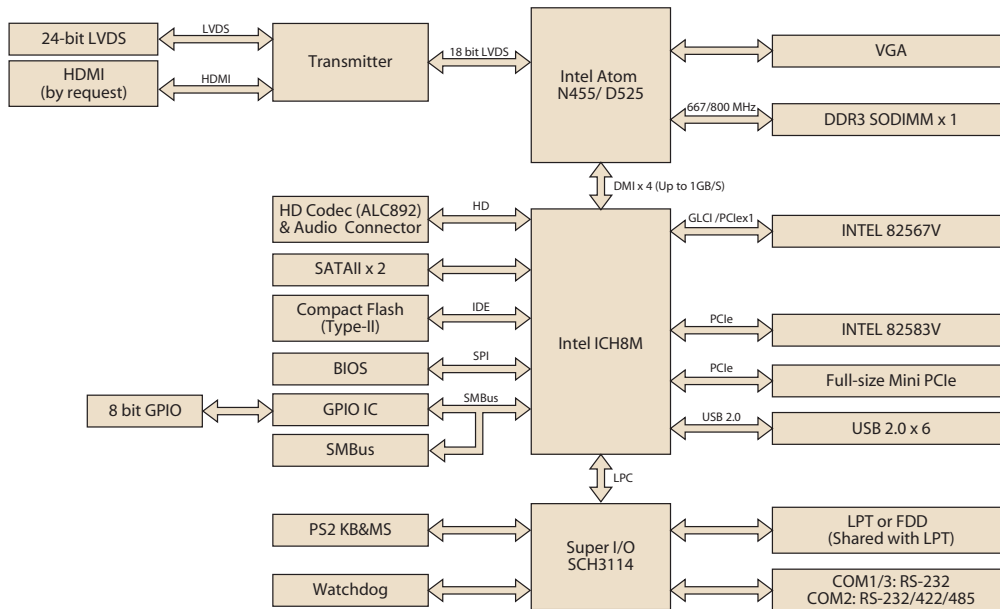
Utilities:



Specifications

| | | |
|--------------------------|--------------------------------------|--|
| Processor System | CPU | Intel Atom N455 Single Core 1.66 GHz Processor Intel Atom D525 Dual Core 1.8 GHz Processor |
| | Frequency | 1.66GHz for N455, 1.8GHz for D525 |
| | L2 Cache | 512KB for N455, 1MB for D525 |
| | System Chipset | Intel N455/D525 + ICH8M |
| | BIOS | AMI 16 Mbit Flash BIOS |
| Memory | Technology | DDR3 667 MHz for N455, 800 MHz for D525 |
| | Max. Capacity | 4GB for D525, and 2GB for N455 |
| | Socket | 1 x 204-pin SODIMM |
| Display | Chipset | Intel Atom Processor N455 1.66GHz/D525 1.8GHz |
| | VRAM | Optimized Shared Memory Architecture up to 224 MB system memory |
| | Graphic Engine | Intel Gen 3.5 DX9, MPEG2 Decode in HW Embedded Gen3.5+ GFX Core |
| | LVDS | LVDS: Single channel 18/24-bit LVDS up to WXGA 1366 x 768 |
| | VGA | Intel Atom N455 Single Core up to 1400 x 1050 (SXGA), Intel Atom D525 Dual Core up to 2048 x 1536 |
| | HDMI | Supported by request (the HDMI resolution has to be set with the Chronlet Utility in Windows XP/XP Embedded) Supports Hot Plug Detection (HPD) for HDMI |
| Ethernet | Dual Display | VGA+LVDS |
| | Speed | 10/100/1000 Mbps (Supports Wake on LAN) |
| | Controller | GbE1 Intel 82567V, GbE2 Intel 82583V |
| Audio | Connector | RJ-45 on GbE1, GbE2 |
| | Chipset | Realtek ALC892 High Definition Audio (HD), Line-in, Line out, Mic-in |
| WatchDog Timer | | Output System reset, Programmable counter from 1 ~ 255 minutes/ seconds |
| Storage | CompactFlash | CompactFlash type I/II (Primary Master IDE Channel) |
| | SATA | 2 SATA II (Max. Data Transfer Rate 300 MB/s), 1 internal SATA power connector |
| Rear I/O | Serial | 1 (COM1 supports RS-232) (ESD protection for RS-232: Air gap ±15kV, Contact ±8kV) |
| | Ethernet | 2 (10/100/1000 Mbps) |
| | VGA | 1 |
| | HDMI | 1 (Support by request) |
| | USB | 2 |
| Internal I/O | USB | 4 x USB 2.0 |
| | Serial | 2 x COM (ESD protection for RS-232: Air gap ±15kV, Contact ±8kV) COM3 supports RS-232, COM2 supports RS-232/422/485 (Supports RS-485 auto flow control) |
| | Parallel(LPT) | 1 |
| | SMBus | 1 |
| | PS/2 KB/Mouse | 1 |
| | GPIO | 8-bit GPIO |
| Expansion | Mini PCIe | 1 (Full-size) |
| Power | Power Type | AT |
| | Power Supply Voltage | Supports single 12V input, ± 10% |
| | Power Consumption (Typical) | PCM-9363N: 0.74 A @ 12 V (8.88 W) PCM-9363D: 0.86 A @ 12 V (10.32 W) |
| | Power Consumption (Max, test in HCT) | PCM-9363N: 0.86 A @ 12 V (10.32 W) PCM-9363D: 1.18 A @ 12 V (14.16 W) |
| | Power Management | APM, ACPI |
| Environment | Battery | Lithium 3 V/210 mA |
| | Operational | 0 ~ 60° C (32 ~ 140° F) (Operational humidity: 40° C @ 95% RH Non-Condensing) |
| Physical Characteristics | Non-Operational | -40° C ~ 85° C and 60° C @ 95% RH Non-Condensing |
| | Dimensions (L x W) | 146 x 102 mm (5.7" x 4") |
| | Weight | 0.64 kg (1.41 lb), weight of total package |
| | Total Height | 30.5mm for PCM-9363N 34.5mm for PCM-9363D |

Block Diagram



Ordering Information

| Part No. | CPU | L2 Cache | Memory | LVDS | VGA | GbE | Audio | RS-232 | RS-232/422/485 | USB 2.0 | SATAII | CF | Mini PCIe | Thermal Solution | Operational Temp. |
|--------------------|-----------|----------|-------------|-----------|-----|-----|-------|--------|----------------|---------|--------|----|-----------|------------------|-------------------|
| PCM-9363N-S6A1E | Atom N455 | 512 KB | SODIMM | 18/24-bit | Yes | 2 | Yes | 2 | 1 | 6 | 2 | 1 | Full-size | Passive | 0 ~ 60° C |
| PCM-9363D-S8A1E | Atom D525 | 1 MB | SODIMM | 18/24-bit | Yes | 2 | Yes | 2 | 1 | 6 | 2 | 1 | Full-size | Active | 0 ~ 60° C |
| PCM-9363NZ-1GS6A1E | Atom N455 | 512 KB | 1 GB bundle | 18/24-bit | Yes | 2 | Yes | 2 | 1 | 6 | 2 | 1 | Full-size | Passive | -20 ~ 80° C |
| PCM-9363NZ21GS6A1E | Atom N455 | 512 KB | 1 GB bundle | 18/24-bit | Yes | 2 | Yes | 2 | 1 | 6 | 2 | 1 | Full-size | Passive | -40 ~ 85° C |

Note: Passive = fanless; Active = with fan HDMI function supported by request

Packing List

| Part No. | Description | Quantity |
|----------------|--|----------|
| | PCM-9363 SBC | |
| | Startup Manual | |
| | Utility CD | |
| 9689000002 | mini Jumper pack | |
| 1700008941 | SATA Cable w/lock 30 cm | 1 |
| 1703060191 | PS/2 cable 19 cm | 1 |
| 1701140201 | COM2 IDE D-SUB 20 cm cable | 1 |
| 1703100121 | USB 2 x 5P-2.0 12 cm W/BKT cable | 2 |
| 1700018839 | Audio Cable 20 cm | 1 |
| 1700260250 | LPT IDE 26P D-SUB 25 cm cable | 1 |
| 1700018785 | Internal SATA power cable 35cm | 1 |
| 1700100250 | COM3 Cable IDE#2 10P-2.0/D-SUB 9P (M) 25 cm | 1 |
| 1960050034N001 | CPU N455 heatsink (75 x 62 x 19.9 mm) for PCM-9363N series | 1 |
| 1960050035N001 | CPU D525 cooler (75 x 62 x 24.4 mm) for PCM-9363D | 1 |
| 1960024933S00B | ICH8M Heatsink for PCM-9363 series (38.1 x 33.6 x 7.5 mm) | 1 |
| 1960050034N011 | PCM-9363NZ/NZ2 CPU N455 heatsink (85 x 62 x 24.9 mm) | 1 |

Rear I/O View



PCM-9363N-S6A1E
 PCM-9363D-S8A1E
 PCM-9363NZ-1GS6A1E
 PCM-9363NZ21GS6A1E

HDMI supported by request

Optional Accessories

| Part No. | Description |
|----------------|---|
| 1960047470N001 | Heat spreader (97 x 75 x 18.5 mm) |
| 1655003865 | Right angle power connector 2*2P |
| ACK-A001E | Embedded Chassis for PCM-9362(12V)/9363 series (System dimensions with mounting bracket: 230 x 65 x 145 mm) |

Embedded OS/API

| Embedded OS/API | Part No. | Description |
|-----------------|------------|--|
| Win XPE | 2070010314 | XPE WES2009 PCM-9363 V4.0 24MUI |
| | 2070010313 | XPE WES2009 PCM-9363 V4.0 ENG |
| WinCE | 2070010331 | CE 6.0 R3 Pro PCM-9363 V6.0.0 ENG (3COM) |
| | 2070011150 | Image CE 7.0 Pro PCM-9363 V1.0 ENG |
| WES7 | 2070009835 | Image WES7E Intel Lunar V5.0 ENG |
| QNX | | 6.5 |
| Vxwork | | 6.8 |
| Linux | | Ubuntu 10.04.1 |
| Software API | | SUSI V3.0 |