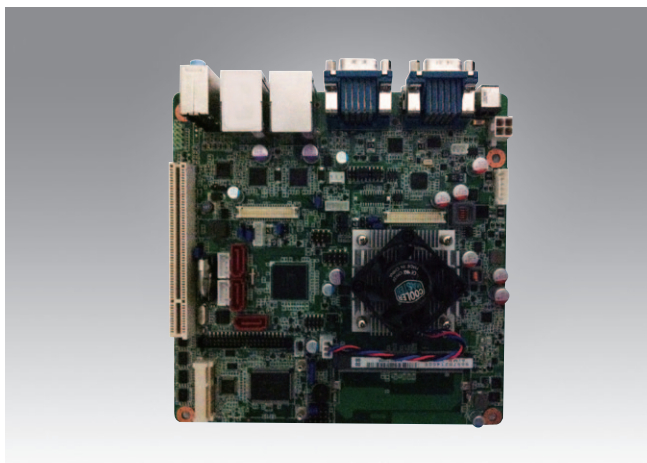


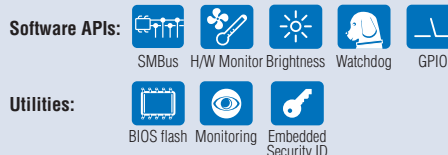
AIMB-214

Intel® Atom™ N2600/D2550 Mini-ITX with CRT/HDMI/2 LVDS, 6 COM, and Dual LAN



Features

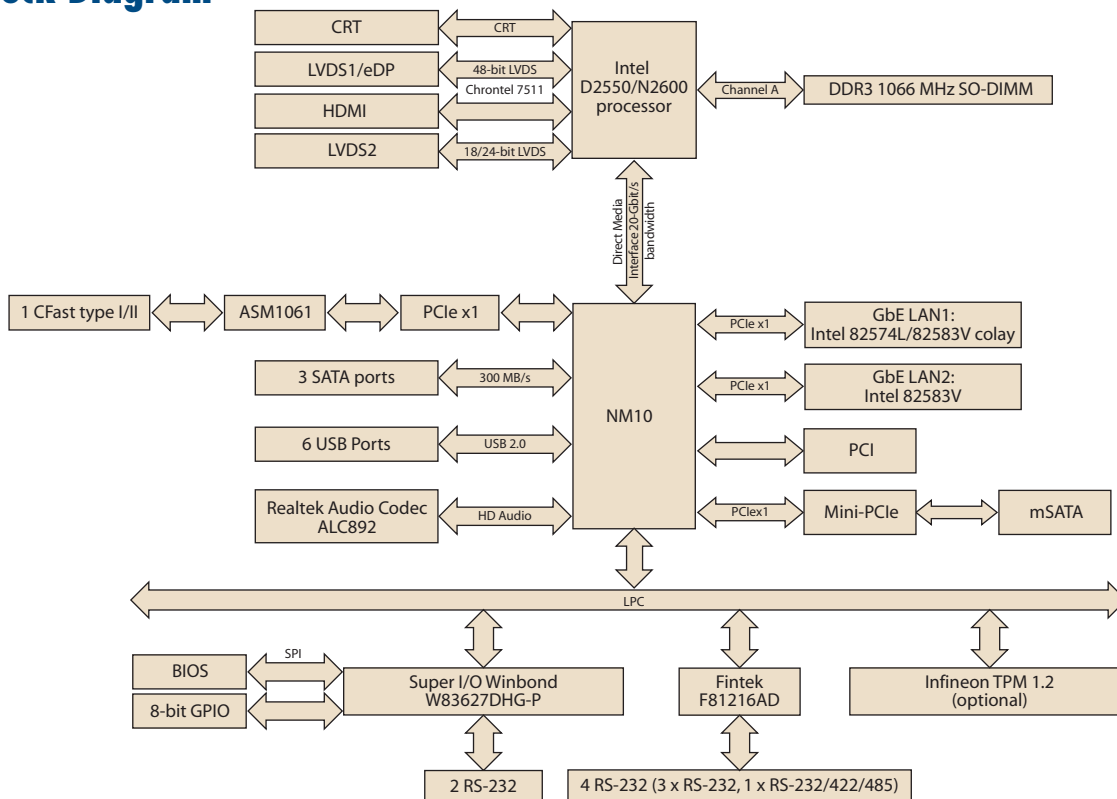
- Supports Intel® Atom™ processor N2600, and D2550 dual core
- One 204-pin SO-DIMM up to 4 GB DDR3 1066 MHz SDRAM
- Supports 1 PCI and 1 Mini-PCIe expansion, 6 serial ports, 6 USB, and CFast
- Lower total cost of ownership with DC12V support, and supports 24/48-bit LVDS
- Onboard TPM 1.2 support (optional)
- Supports SUSIAccess and Embedded Software APIs



Specifications

| | | | |
|--------------------------|---------------------------|--|----------------------|
| Processor System | CPU (32nm) | Intel Atom N2600 | Intel Atom D2550 |
| | Max. Speed | 1.6 GHz (Dual core) | 1.86 GHz (Dual core) |
| | L2 Cache | 1MB | 1MB |
| | Chipset | NM10 | NM10 |
| | BIOS | AMI 16Mbit SPI | AMI 16Mbit SPI |
| Expansion Slot | PCI | 32-bit/33 MHz, 1 slot | |
| | Mini-PCIe | 1 | |
| | PCIe | - | |
| Memory | Technology | Single channel DDR3 1066 MHz SDRAM | |
| | Max. Capacity | 4 GB | |
| | Socket | 1 x 204-pin SO-DIMM (Non-ECC) | |
| Graphics | Controller | Embedded Gen3.5+ GFX Core, 400/640 MHz render clock frequency for N2600/D2550 | |
| | VRAM | Shared system memory up to 224 MB SDRAM | |
| | VGA | Supports up to SXGA 1920 x 1200 @ 60 MHz | |
| | LVDS | Supports Dual Channel 48-bit: Max. resolution up to 2560 x 1600 (D2550); 1600 x 1200 (N2600). co-lay eDP port (optional) LVDS2 Support 24-bit single channel up to 1400 x 800 on D2550; 18-bit single channel up to 1366 x 768 on N2600 | |
| | HDMI | Supports up to 1920 x 1200 @ 60 MHz | |
| Ethernet | Dual Display | VGA+HDMI, VGA+LVDS, VGA+eDP (optional), Supports extended mode and clone mode | |
| | Interface | 10/100/1000 Mbps | |
| | Controller | GbE LAN1: Intel 82574L/82583V co-lay GbE LAN2: Intel 82583V | |
| SATA | Connector | RJ-45 x 2 | |
| | Max Data Transfer Rate | 300 MB/s (SATA 2.0) | |
| EIDE | Channel | 3 | |
| | Mode | None | |
| SSD | Channel | None | |
| | CFast CompactFlash | Supports CFast Type I/II | |
| Rear I/O | CRT | 1 | |
| | HDMI | 1 | |
| | Ethernet | 2 | |
| | USB | 4 (USB 2.0) | |
| | Audio | 3 (Mic-in, Line-out, Line-in) | |
| | Serial | 2 (1 of RS-232, 1 of RS-232/422/485) | |
| | KB/MS | 1 | |
| | DC jack | 1 (2.5 mm) | |
| | Internal Connector | LVDS & Inverter | 2 |
| eDP | | 1 (optional, by removing LVDS1) | |
| USB | | 2 (USB 2.0) | |
| Serial | | 4 (RS-232), only COM6 supply 5V/12V | |
| IDE | | None | |
| SATA | | 3 (SATA 2.0) | |
| SATA PWR Connector | | 2 | |
| CFast | | 1 | |
| Parallel | | None | |
| Watchdog Timer | DIO | 8-bit GPIO | |
| | Output | System reset | |
| Power | Interval | Programmable 1 - 255 sec/min | |
| | Power Type | Single voltage 12V DC input; 1 x External DC jack; 1 x Internal 4-pin (2x2) power connector; Supports AT/ATX mode | |
| | Typical Power Consumption | Windows IDOL: 17.8 W (Intel N2600 1.6 GHz processor/DDR3 1333 MHz 4 GB) | |
| Environment | Operating | Non-Operating | |
| | Temperature | 0 ~ 60° C (32 ~ 140° F) / -40 ~ 85° C (-40 ~ 185° F) | |
| Physical Characteristics | Dimensions | 170 mm x 170 mm (6.69" x 6.69") | |

Block Diagram



Ordering Information

| Part Number | CPU | SC/DC | GbE | COM | LVDS | TPM | Thermal solution |
|-----------------|-------|-----------|-----|-----|---|-----|------------------|
| AIMB-214E-S6A2E | D2550 | Dual core | 2 | 6 | 2, LVDS1: 48-bit LVDS; LVDS2: 24-bit LVDS | 1 | Active |
| AIMB-214U-S6A2E | N2600 | Dual core | 2 | 6 | 2, LVDS1: 48-bit LVDS; LVDS2: 24-bit LVDS | (1) | Passive |

Note: Passive = fanless; Active = with fan

*() BOM options available on MP version.

Packing List

| Part Number | Description | Quantity |
|----------------|--------------------------------------|----------|
| 1960057364N001 | AIMB-214E D2550 Fanless heatsink | 1 |
| 1700003194 | SATA HDD cable | 2 |
| 1700018785 | SATA power cable | 2 |
| 1700008876 | 1-to-4 serial ports cable kit, 35 cm | 1 |
| 1960046526N001 | CPU cooler (For Atom D2550 only) | 1 |
| 1920000645T000 | I/O port bracket | 1 |
| 2002021410 | Startup manual | 1 |
| 2062021402 | Driver CD | 1 |

Optional Accessories

| Part Number | Description |
|-------------|--|
| 1700003195 | USB cable with two ports, 17.5 cm |
| 1700002204 | USB cable with two ports, 27 cm |
| 1757003995 | Adapter AC100-240V 60W +12V/5A |
| 1700018699 | KBMS cable 1*6P-2.5/DIN-6P(F)*2, 25 cm |

Optional Chassis

| Part Number | Description |
|-----------------|---|
| AIMB-B2000-00YE | Mini-ITX chassis with optional DC Adaptor |

I/O View



AIMB-214E-S6A2E
AIMB-214U-S6A2E

Embedded OS/API

| OS/API | Part No. | Description |
|--------------|------------|--------------------------------------|
| WES7 | 2070010955 | WES7E SP1 x32 AIMB-214 V5.1 ENG ATIP |
| Software API | TBD | SUSI V3.0 SW API for AIMB-214 WIN7 |