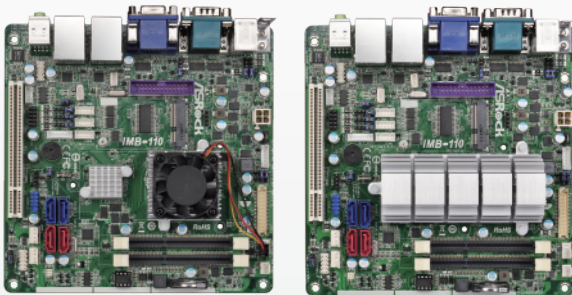


# IMB-110

Mini-ITX Motherboard



IMB-110D

IMB-110C / 110N



## Spotlight Features

- Intel® Atom™ PineView Processor D525/D425/N455
- Intel® NM10 Express Chipset
- Integrated Intel® Graphics Media Accelerator 3150, DirectX 9.0
- Supports DDR3 800MHz, 2 x SO-DIMM, up to 4GB system memory
- 1 x D-Sub, 1 x Single Channel 18-bit LVDS
- 8 x USB 2.0, 2 x SATA3, 2 x SATA2
- 1 x PCI, 1 x mini-PCIe
- Gigabit LAN : 2 x Realtek RTL8111E-VL

## Specifications

| Processor System       |   |
|------------------------|---|
| Dimension              | Mini-ITX (6.7-in x 6.7-in)  |
| CPU                    | Intel® Dual-Core Atom™ PineView Processor D525/D425/N455<br>Supports Hyper-Threading Technology         |
| Core Number            | D525 : 2 ; D425/N455 : 1  |
| Max Speed              | D525/D425: 1.8 GHz, N455: 1.66 GHz  |
| L3 Cache               | N/A   |
| Chipset                | NM10  |
| BIOS                   | UEFI  |
| Expansion Slot         |   |
| PCI                    | 1   |
| Mini-PCIe              | 1 (Full Size)   |
| mSATA                  | 0   |
| PCIe x16 (Gen2)        | 0   |
| CFast Card Socket      | 0   |
| Memory                 |   |
| Technology             | D525/D425: Single Channel DDR3 800 MHz SDRAM<br>N455: Single Channel DDR3 667 MHz SDRAM                 |
| Max.                   | D525/D425: 4GB, N455: 2GB   |
| Socket                 | 2 x SO-DIMM   |
| Graphics               |   |
| Controller             | Intel® Graphics Media Accelerator 3150<br>Pixel Shader 2.0, DirectX 9.0                                 |
| VRAM                   | Shared Memory   |
| VGA                    | D525/D425: supports max. resolution 2048x1536 @ 60Hz<br>N455: supports max. resolution 1400x1050 @ 60Hz |
| LVDS                   | Single channel 18-bit, max resolution 1366X768  |
| HDMI                   | No  |
| DVI                    | No  |
| Display Port           | No  |
| Multi Display          | Yes   |
| Ethernet               |   |
| Interface              | 10/100/1000 Mbps  |
| Controller             | GbE LAN: 2 x Realtek RTL8111E-VL  |
| Connector              | 2 x RJ-45   |
| SATA                   |   |
| Max Data Transfer Rate | SATA2 (3.0Gb/s), SATA3 (6.0Gb/s), Supports RAID 0/1   |

| Rear I/O     |                                |
|--------------|--------------------------------|
| VGA          | 1                              |
| HDMI         | 0                              |
| DVI-I/D      | 0                              |
| Display Port | 0                              |
| Ethernet     | 2                              |
| USB          | 4 (USB 2.0 compliant)          |
| Audio        | 2 (Mic-in, Line-out)           |
| Serial       | 3 (RS-232/422/485)             |
| PS/2         | 2 (1 x keyboard and 1 x mouse) |

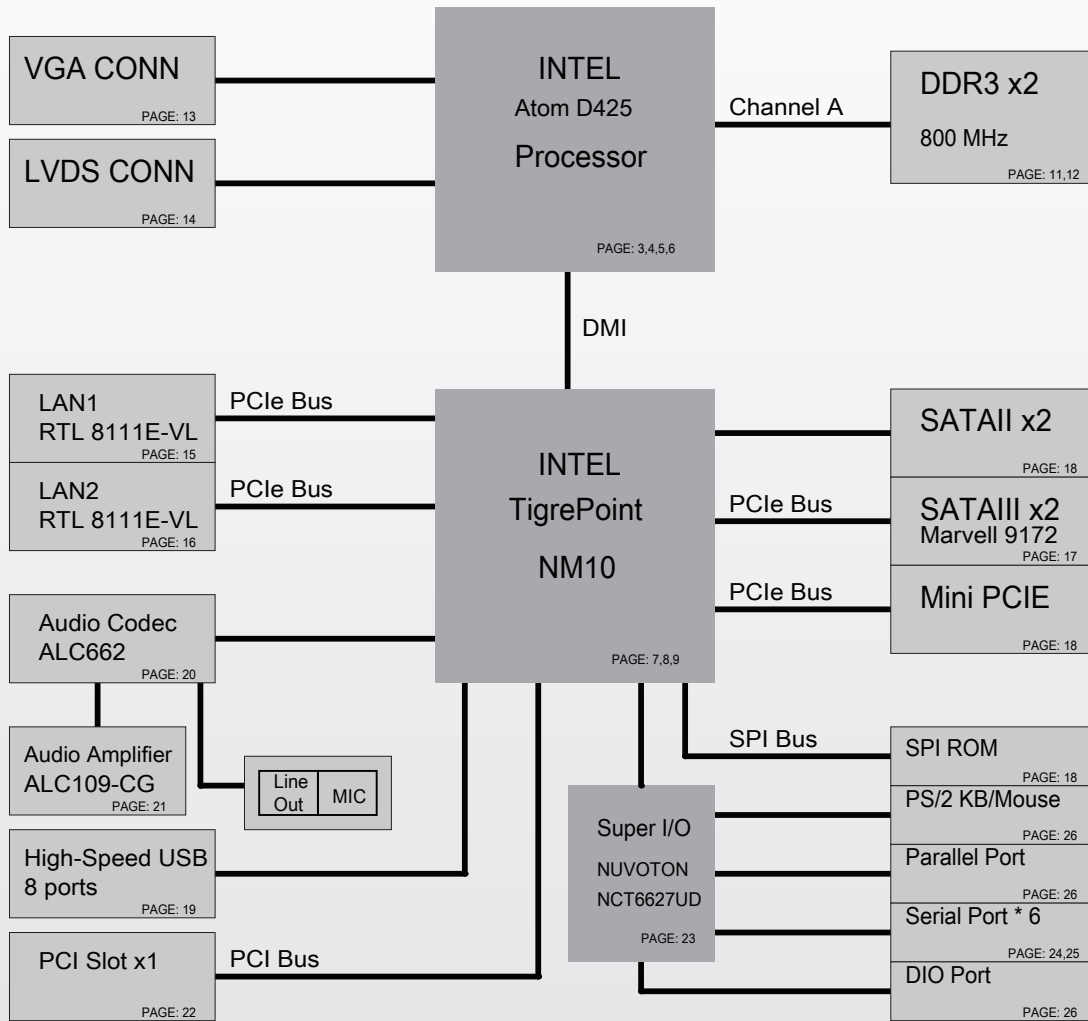
| Internal Connector  |  |
|---------------------|--|
| USB                 | 4 (USB 2.0 compliant)                                      |
| LVDS/Inverter       | 1/1  |
| VGA                 | 0  |
| Serial              | 3 (RS-232)   |
| SATA                | 2 x SATA2 (3.0Gb/s), 2 x SATA3 (6.0Gb/s), Support RAID 0/1 |
| m-SATA              | 0  |
| Mini-PCIe           | 1  |
| Parallel            | 1  |
| IrDA                | 0  |
| GPIO                | 4 x GPI + 4 x GPO  |
| SATA PWR Output Con | 2  |
| Speaker Header      | 1  |

| Watchdog Timer |                                  |
|----------------|----------------------------------|
| Output         | From Super I/O to drag RESETCON# |
| Interval       | 256 segments, 0,1,2...255sec/min |

| Power Requirements |  |
|--------------------|--|
| Input PWR          | 12V DC-In (4-pin ATX PWR Con)  |
| Power On           | AT/ATX Supported<br>AT : Directly PWR on as Power input ready<br>ATX: Press Button to PWR on after Power input ready |

| Environment           |            |
|-----------------------|------------|
| Operating Temperature | 0°C – 60°C |

## Board Diagram



## IPC Motherboards Focused Markets

ASRock IMB solutions can be widely used for industrial applications, such as process control, data acquisition, and so on. IMB-PCs are typically panel mounted and often incorporate touch screens for user interaction.

