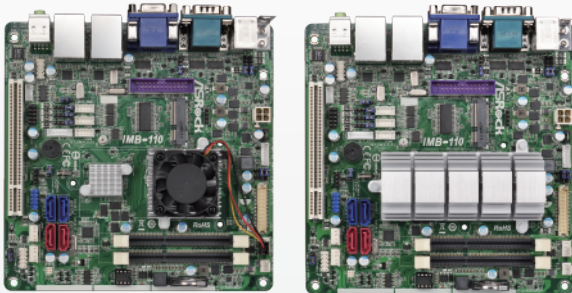


# IMB-110

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 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 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 Pixel Shader 2.0, DirectX 9.0
VRAM	Shared Memory
VGA	D525/D425: supports max. resolution 2048x1536 @ 60Hz 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
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### 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

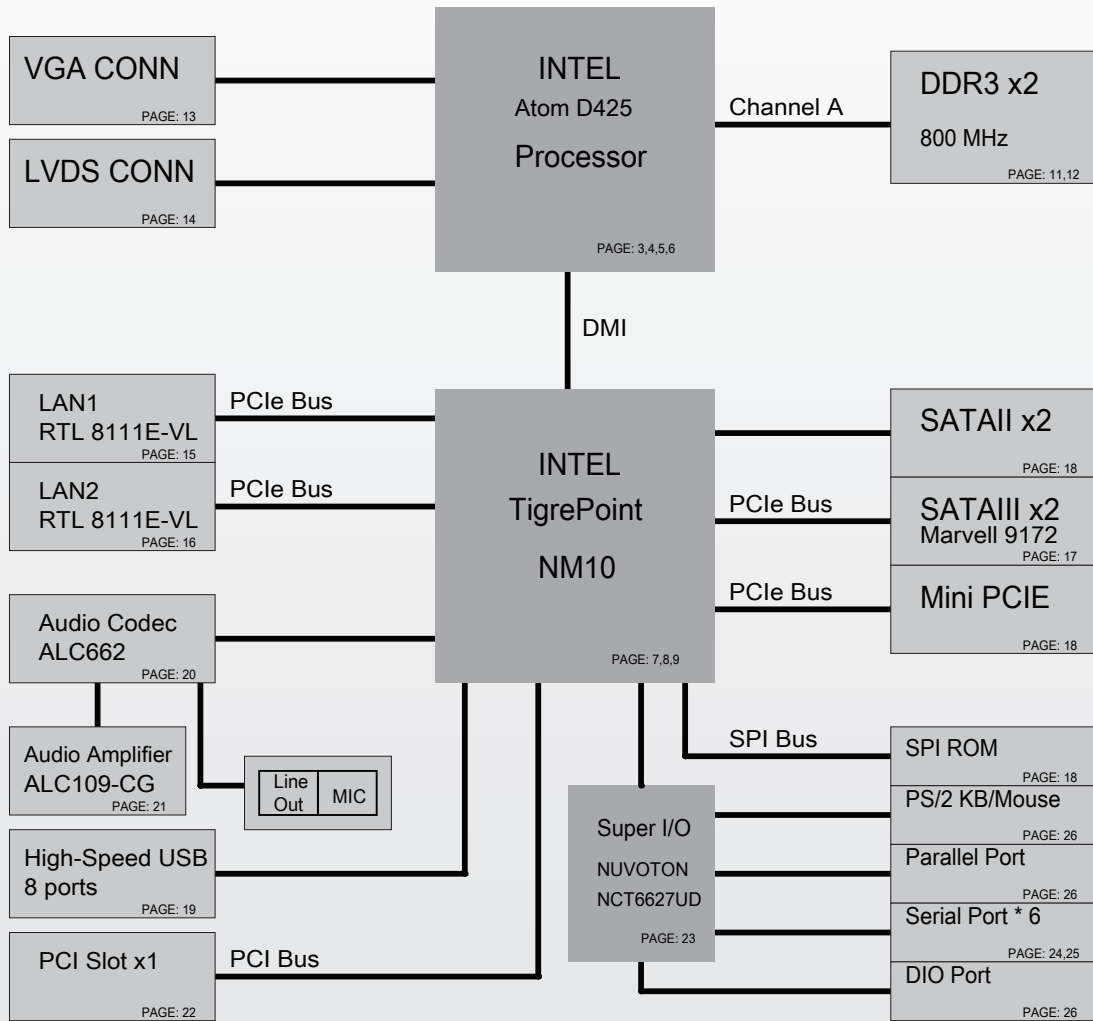
### Power Requirements

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

### Environment

Operating Temperature	0°C – 60°C
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## 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.

