



IMB-142

Mini-ITX Motherboard

Spotlight Features

- Intel® Dual-Core Atom™ CedarView Processor D2550/N2600/N2800
- Intel® NM10 Express Chipset
- Integrated Intel® PowerVR SGX545, DirectX 9.0, Pixel Shader 3.0
- Supports DDR3 1066MHz, 2 x SO-DIMM, up to 4GB system memory
- 1 x HDMI, 1 x DVI-D, 1 x Single Channel 18-bit LVDS
- 8 x USB 2.0, 2 x SATA2
- 1 x PCI, 1 x mini-PCIe
- Gigabit LAN : 2 x Intel WG82574L

Specifications

Processor System

Dimension	Mini-ITX (6.7-in x 6.7-in)
CPU	Intel® Dual-Core Atom™ CedarView Processor D2550/ N2600/N2800 Supports Hyper-Threading Technology
Core Number	2
Max Speed	D2550/N2800: 1.86 GHz, N2600: 1.6GHz
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	Single Channel DDR3 800/1066 MHz SDRAM
Max.	D2550/N2800: 4GB, N2600: 2GB
Socket	D2550/N2800: 2 x SO-DIMM, N2600: 1 x SO-DIMM

Graphics

Controller	Intel® PowerVR SGX545, Support DirectX9 compliant Pixel Shader v3.0 and OGL 3.0
VRAM	Shared Memory
VGA	By Header, supports max. resolution 1920 x 1200
LVDS	Single Channel 18bits, max resolution 1440x900
HDMI	Supports HDMI 1.3a, max resolution 1920x1200
DVI	Supports max resolution 1920 x 1200
Display Port	No
Multi Display	Yes

Ethernet

Interface	10/100/1000 Mbps
Controller	GbE LAN: 2 x Intel WG82574L
Connector	2 x RJ-45

SATA

Max Data Transfer Rate	SATA2 (3.0Gb/s)
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Rear I/O

VGA	0
HDMI	1
DVI-I/D	1 (DVI-D)
Display Port	0
Ethernet	2
USB	2 (USB 2.0 compliant)
Audio	2 (Mic-in, Line-out)
Serial	0
PS/2	0

Internal Connector

USB	6 (USB 2.0 compliant)
LVDS/Inverter	1/0
VGA	1
Serial	2 (RS-232)
SATA	2 x SATA2 (3.0Gb/s)
m-SATA	0
Mini-PCIe	1
Parallel	0
IrDA	0
GPIO	4 x GPI + 4 x GPO
SATA PWR Output Con	1
Speaker Header	0

Watchdog Timer

Output	N/A
Interval	N/A

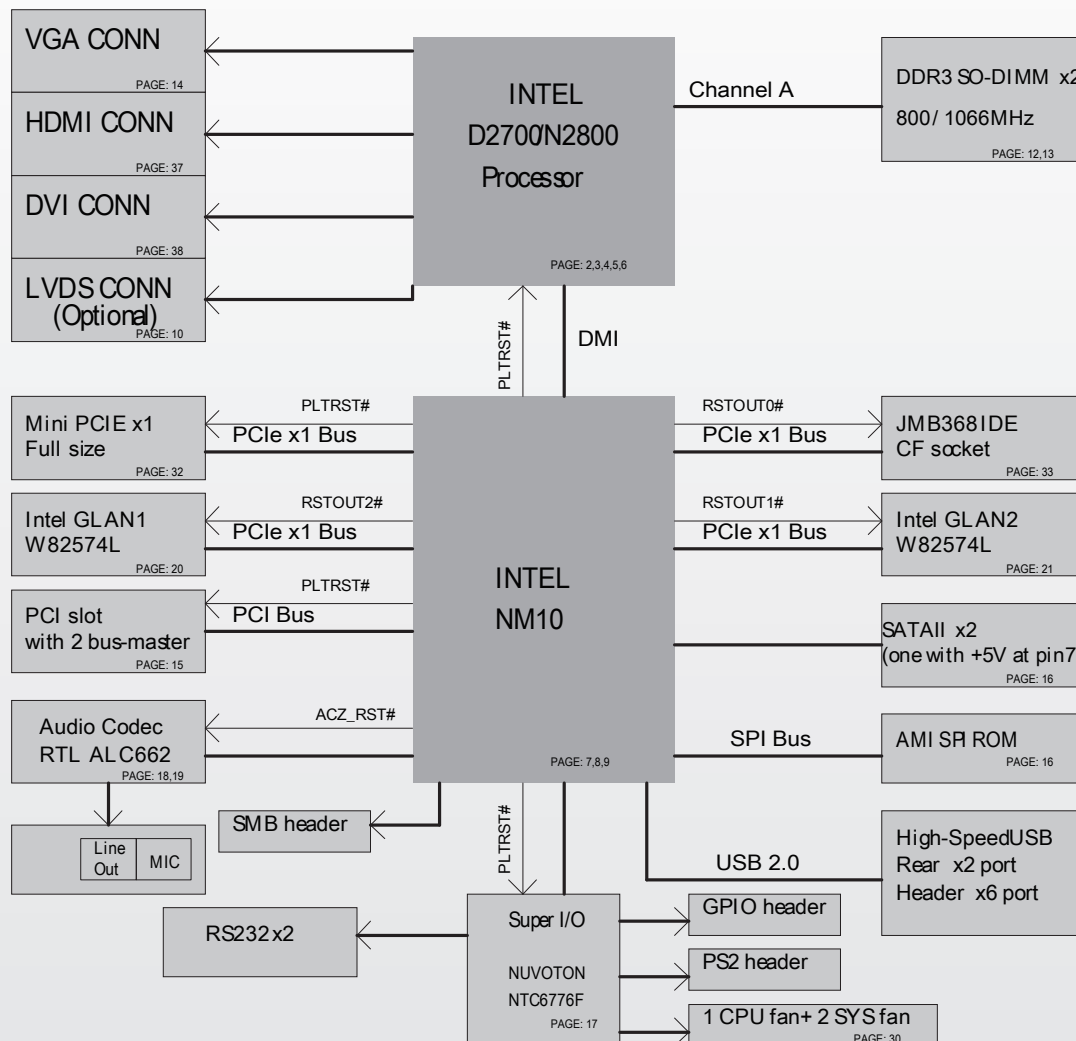
Power Requirements

Input PWR	12V DC-In (4-pin ATX PWR Con)
Power On	ATX Supported: 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.

