

IMB-140D-Plus

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 COM (RS-232/422/485), 4 x COM (RS-232)
- 1 x D-Sub, 1 x HDMI, 1 x Dual Channel 24-bit LVDS
- 7 x USB 2.0, 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™ 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	1
PCIe	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	Supports max. resolution 1920 x 1200
LVDS	Dual channel 24-bit, max resolution 1920x1200
HDMI	Supports HDMI 1.3a, max resolution 1920x1200
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)
------------------------	-----------------

Rear I/O

VGA	1
HDMI	1
DVI-I/D	0
Display Port	0
Ethernet	2
USB	4 (USB 2.0 compliant)
Audio	2 (Mic-in, Line-out)
Serial	1 (RS-232/422/485) + 1 (RS232)+ 1 (RJ45 type)
PS/2	2 (1 x keyboard and 1 x mouse)

Internal Connector

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

Watchdog Timer

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

Power Requirements

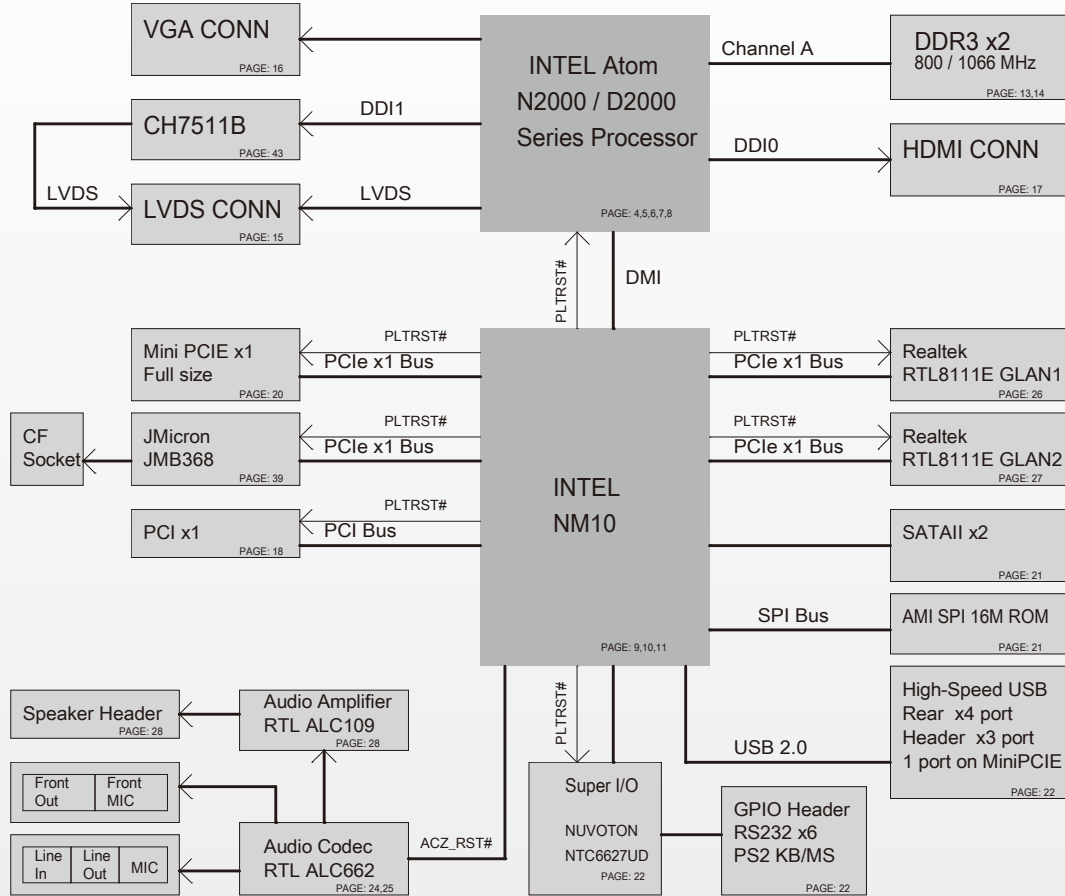
Input PWR	12V DC-In (4-pin ATX PWR Con) + 20-pin ATX PWR Con
Power On	AT/ATX Supported AT : Directly PWR on as Power input ready ATX: Press Button to PWR on after Power input ready

Environment

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

The specification is subject to change without notice. The brand and product names are trademarks of their respective companies. Any configuration other than original product specification is not guaranteed.

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.



Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

US

sales@assured-systems.com

Sales: +1 347 719 4508
Support: +1 347 719 4508

1309 Coffeen Ave
Ste 1200
Sheridan
WY 82801
USA

EMEA

sales@assured-systems.com

Sales: +44 (0)1785 879 050
Support: +44 (0)1785 879 050

Unit A5 Douglas Park
Stone Business Park
Stone
ST15 0YJ
United Kingdom

VAT Number: 120 9546 28
Business Registration Number: 07699660