

GMB-N270

Intel® ATOM™ Mini-ITX with Dual VGA,
6 COM, and Dual LAN



Features

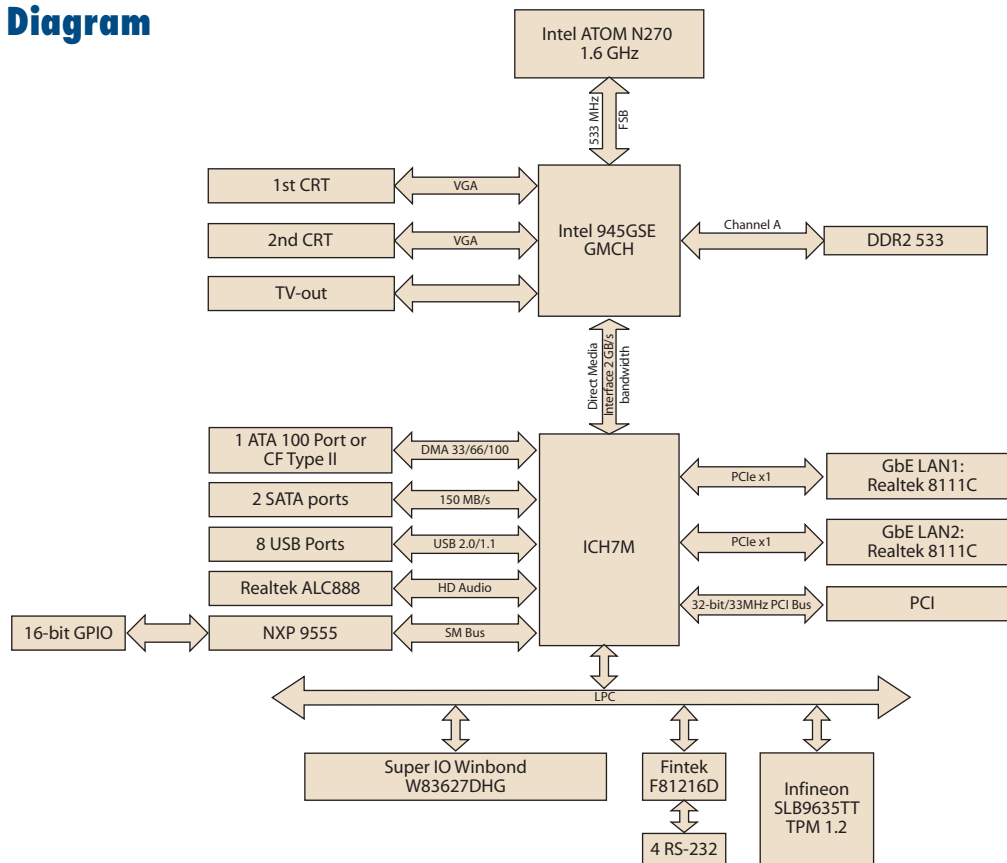
- Intel® ATOM Mini-ITX motherboard supports N270 1.6 GHz processor
- Intel 945GSE and ICH7M
- One 200-pin SODIMM up to 2 GB DDR2 533 SDRAM
- Supports dual display for VGA, and TV-Out
- Supports dual GbE LAN
- Built with 6 serial ports, 8 USB, and CF
- Supports 1 PCI expansion
- Onboard TPM 1.2 support (optional)



Specifications

Processor System	CPU (45 nm)	Intel ATOM N270			
	Max. Speed	1.6 GHz			
	Front Side Bus	533 MHz			
	L2 Cache	512 KB			
	Chipset	Intel 945GSE + ICH7M			
	BIOS	Award 16 Mbit, SPI			
Expansion Slot	PCI	32-bit/33 MHz, 1 slot			
	Mini-PCI	-			
	PCIe	-			
Memory	Technology	Single channel DDR2 533 MHz			
	Max. Capacity	2 GB			
	Socket	1 x 200-pin SODIMM			
Graphics	Controller	Intel 945GSE GMCH integrated Graphic Media Accelerator 950			
	VRAM	Shared system memory up to 224 MB SDRAM			
	TV-Out	Supports both S-video and composite video (TV-Out function is not supported during POST stage)			
	Dual Display	CRT + CRT, CRT + TV-Out			
Ethernet	Interface	10/100/1000 Mbps			
	Controller	GbE LAN1: Realtek 8111C; GbE LAN2: Realtek 8111C			
	Connector	RJ-45 x 2			
SATA	Max Data Transfer Rate	150 MB/s			
	Channel	2			
EIDE	Mode	EIDE (Ultra DMA 100)			
	Channel	1			
SSD	CompactFlash	Supports CompactFlash Type I/II			
Rear I/O	VGA	2			
	Ethernet	2			
	USB	4 (USB 2.0 compliant)			
	Audio	3 (Mic-in, Line-out, Line-in)			
	Serial	2 (RS-232)			
	Parallel	-			
	PS/2	2 (1 x keyboard and 1 x mouse)			
Internal Connector	LVDS & Inverter	-			
	USB	4 (USB 2.0 compliant)			
	Serial	4 (RS-232)			
	IDE	1			
	SATA	2			
	CompactFlash	1			
	Parallel	-			
	DIO	16-bit GPIO			
Watchdog Timer	Output	System reset			
	Interval	Programmable 1 ~ 255 sec/min			
Power Requirement	Power On	1.6 GHz ATOM processor, 2 GB DDR2 SDRAM			
			+5 V 1.96 A	+3.3 V 1.21 A	+12 V 0.19 A
Environment	Temperature	Operating	Non-Operating		
		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")			

Board Diagram



Ordering Information

Part Number	CPU	Chipset	GbE	COM	TV-out	VGA
GMB-N270G2-S6A1E	ATOM 1.6 GHz	945GSE	2	6	Yes	2

Riser Card

Part Number	Description
AIMB-RP30P-03A1E	2U riser card with 3 PCI slot expansion

Bracket View



Packing List

Description	Quantity
GMB-N270 SBC	x 1
IDE HDD cable (40-pin)	x 1
SATA HDD cable	x 2
SATA power cable	x 2
Serial port cable	x 2
CPU cooler	x 1
I/O port bracket	x 1
Startup manual	x 1
Driver CD	x 1

Accessories

Part Number	Description
1700003195	USB cable with four ports, 17.5 cm
1700002204	USB cable with four ports, 27 cm
1700002314	USB cable with four ports, 30.5 cm
1700002331	TV-out cable