

# GMB-N270

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



## Features

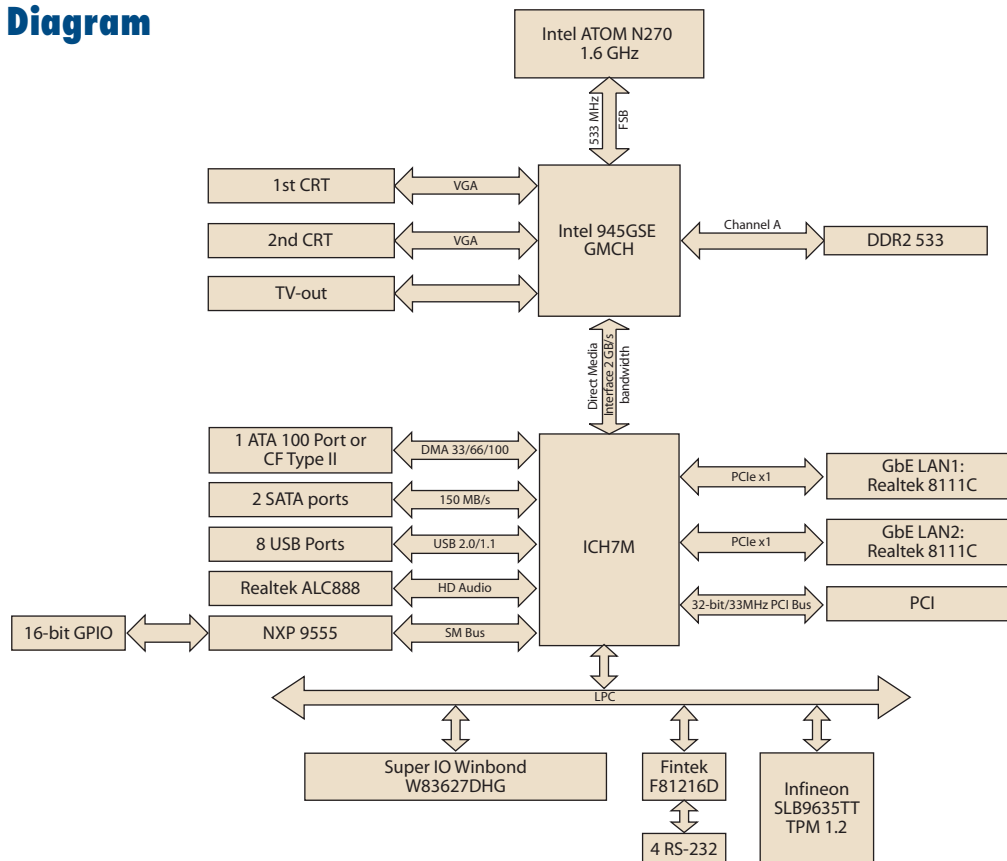
- Intel® ATOM Mini-ITX motherboard supports N270 1.6 GHz processor
- Intel 945GSE and ICH7M
- One 200-pin SODIMM up to 2 GB DDR2 533 SDRAM
- Supports dual display for VGA, and TV-Out
- Supports dual GbE LAN
- Built with 6 serial ports, 8 USB, and CF
- Supports 1 PCI expansion
- Onboard TPM 1.2 support (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	+3.3 V	+12 V	-12 V	+5 VSB
		1.96 A	1.21 A	0.19 A	0.06 A	0.28 A
Environment	Operating		Non-Operating			
	Temperature	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