



Features

- Onboard Intel® Atom™ N270 1.6GHz CPU
- Intel® 945GSE/ ICH7-M Chipset
- Onboard 1GB DDR2 Memory, One 200-pin SODIMM Up to 1GB DDR2 400/ 533 SDRAM
- Dual View, Dual-channel 18-bit LVDS
- Intel® High Definition Audio
- Intel® 82583V Gigabit Ethernet
- 4 PCI, 3 PCIe1, 2 SATA, 8 USB, 8-bit GPIO
- Type 2 Pin-out

Specifications

System

• CPU	Onboard Intel® Atom™ N270 1.6GHz CPU
• BIOS	Award 8Mbit Flash BIOS
• System Chipset	Intel® 945GSE/ ICH7-M
• System Memory	One 200-pin SODIMM Socket Supports Up to 1GB DDR2 400/ 533 SDRAM Onboard 1GB DDR2 Memory
• Expansion	4 x PCI (PCI Rev. 2.3 Compliant), 3 x PCIe1, 1 x SDVO

I/O

• MIO	1 x EIDE (Ultra DMA 100), LPC, SMBus/I ² C Bus, 2 x SATA
• USB	8 x USB 2.0
• DIO	4-bit GPI and 4-bit GPO

Display

• Chipset	Intel® 945GSE Integrated
• Display Memory	Intel® DVM T 3.0 Supports up to 224MB Shared Video Memory
• Resolution	CRT Mode: 2048 x 1536 @ 75Hz LCD/ Simultaneous Mode: 1600 x 1200 @ 60Hz
• Multiple Display	CRT + LVDS
• LVDS Interface	Dual-channel 18-bit LVDS

Audio Interface

• Chipset	Intel® ICH7-M
• Interface	Intel® High Definition Audio

Ethernet

• LAN	Intel® 82583V Gigabit Ethernet
• Ethernet Interface	1000 Base-Tx Gigabit Ethernet Compatible

Mechanical & Environmental

• Power Requirement	+12V, +5Vsb
• Power Type	AT/ ATX (+5Vsb is Required for AT Input)
• Operating Temperature	0 ~ 60°C (32 ~ 140°F)
• Storage Temperature	-40 ~ 75°C (-40 ~ 167°F)
• Operating Humidity	0% ~ 90% Relative Humidity, Non-condensing
• Size (L x W)	5" x 3.7" (125mm x 95mm)
• Weight	0.44lbs (0.2kg)

Ordering Information

- **ESM-945GSE**
Intel® Atom™ N270 COM Express Module with Intel® 945GSE + ICH7-M Chipset
- **EEV-EX13**
COM Express Carrier Board for Evaluation
- **ACC-HSK-2856-2R**
Heat Sink for ESM-945GSE
- **ACC-HSP-2856-2R**
Heat Spreader for ESM-945GSE

- 1 Embedded System
- 2 Qseven Module
- 3 ETX/XTX COM Express
- 4 3.5" SBC
- 5 EPIC
- 6 5.25" SBC
- 7 ATX
- 8 Micro ATX
- 9 Mini ITX
- 10 Nano ITX
- 11 ACP
- 12 Rack Mount System
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