

Highlights

- »» Intel Atom N270 Processor
- »» Intel 945GSE with ICH7-M DH
- »» Onboard DDR-II 512/1GB SDRAM or SO-DIMM up to 2GB
- »» Supports SATA x2 / PATAx1 / USB2.0 x 8
- »» Supports Dual Channel 18-bit LVDS panel
- »» Supports 4 of 1-lane PCI Express
- »» Supports 82573L Gigabit Ethernet



Introduction

The COM-945GSE adopts Intel Atom N270 processor and Intel's 945GSE chipset, offering high speed PCI-Express bus interface for your high performance applications requiring high-speed and greater stability. It offers flexibility and time-to-market advantages over a fully customized platform. It supports 18-bit dual-channel LVDS interface and supports one DDRII 400 / 533 SODIMM memory module up to 2GB. Moreover, one PATA and two SATA interfaces are featured giving the user flexibility in storage choices.

Specifications

CPU

>Onboard Intel Atom™ N270 1.6GHz processor

Main Memory

>One un-buffered non ECC DDR-II SO-DIMM 400/533 up to 2GB
>Onboard 512MB or 1GB DDR-II SDRAM

Chipset

>Intel 945GSE and ICH7M DH chipsets.

BIOS

>Award 4Mbit FWH BIOS

Ethernet

>Chipset: PCI Express Gigabit Ethernet /82573L
>Ethernet Interface: IEEE 802.3U compatible
built-in boot ROM in flash.

I/O Interface

>PATA: 1x EIDE(UDMA 100)
>SATA: 2 x SATA,data transfer rates up to 3Gb/s (300MB/s)
>USB : 8 x USB 2.0 compliant ports
>Audio: High definition(HD) audio interface

Display

>Chipset : LCD panel up to 166 MHz pixel clock supported.
>Display Method:
1. CRT Display Mode:
support max DAC frequency up to 400MHz RAMDAC (THREE 8-bit DACs) support, DDC2B compliant and up to QXGA 2048x1536 @75Hz mode support.
2. LCD Display Mode:
support 25 to 112MHz singal /dual channel 18 bit LVDS interface. Maxium panel size supported up to UXGA (1600x1200) TFT panel type.
3. One SDVO port support for expansion (HDTV,HDMI...)

Hardware Monitor

>Onboard CPU temperature monitor

Watchdog Timer

>256 levels timer internal,from 0 to 255 sec or min setup by software ,jumperless selection, generated system reset.

Certifications

>CE approval FCC Class A

Power Supply Voltage

>+12V,+5VSB

Dimensions

>95(W) x 125 mm(L)

Environment

>Operating temperature: 0°C ~ 60°C (32°F ~ 140°F)

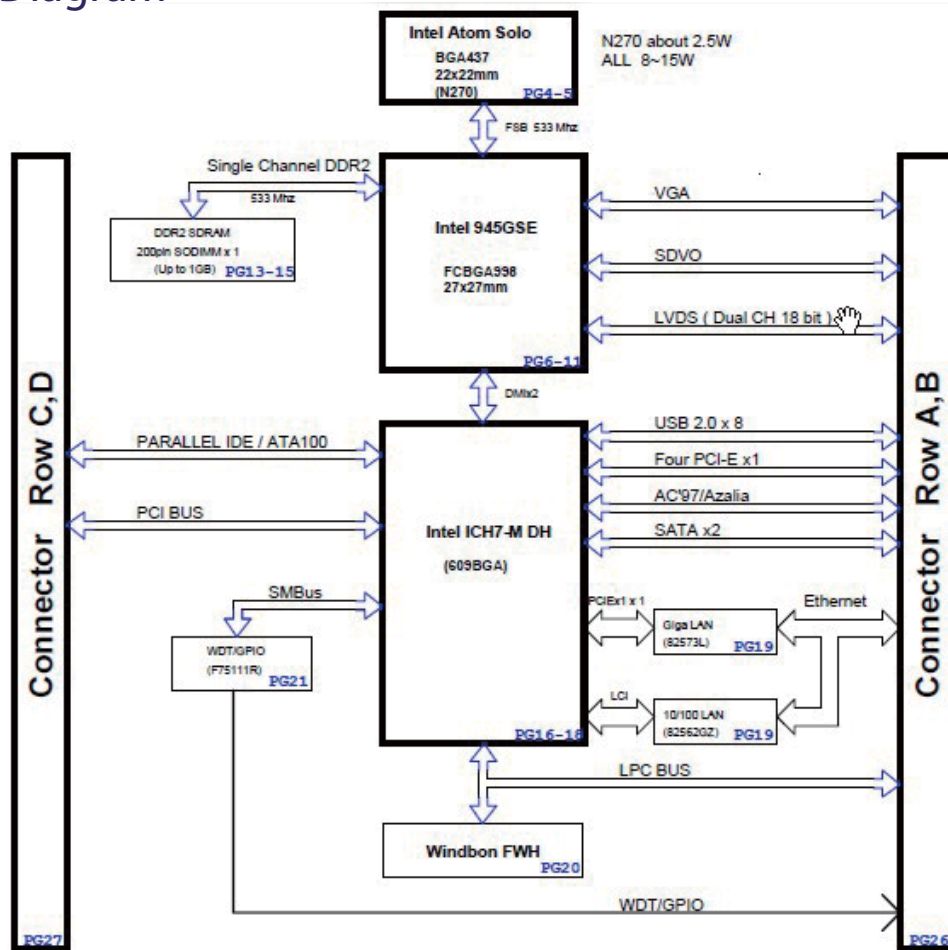
>Storage temperature: -20°C ~ 80°C(-4°F~ 176 °F)

>Relative humidity:

10% to 90% (operating , Non-condensing)

5 % to 95% (Non-condensing , non-operating)

Block Diagram



Ordering Information

Part	Description
NCEX-945GS-N2705M	Intel® Atom™ Processor N270 (512K Cache ,1.60 GHz, 533 MHz FSB) DDR-II 512M DRAM onboard
NCEX-945GS-N2701G	Intel® Atom™ Processor N270 (512K Cache ,1.60 GHz, 533 MHz FSB) DDR-II 1G DRAM onboard
NCEX-945GS-N270SK	Intel® Atom™ Processor N270 (512K Cache,1.60 GHz, 533 MHz FSB) DRAM socket type