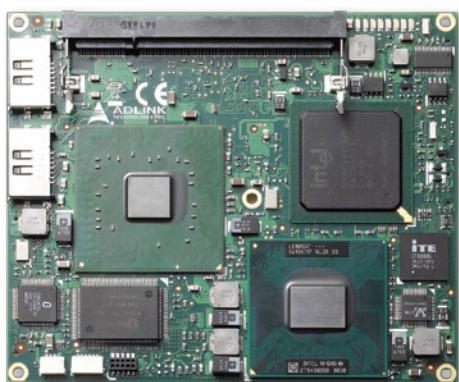


ETX-NR667

ETX® Module with Intel® Core™2 Duo Processor
and 945GME / ICH7-M Chipset



Features

- Intel® Core™ Duo/Core™2 Duo processor
- Intel® 945GME/ICH7-M chipset
- Maximum 2 GB DDR2 667 MHz SDRAM
- Single, dual 18/24-bit LVDS, TV out
- SATA, PATA, LAN, USB 2.0, and ISA

Specifications

Core System

CPU (BGA type)

Merom Core BGA type

Intel® Core™2 Duo L7400, 1.5 GHz with 4MB L2 cache, 17 W
Intel® Core™2 Duo U7500, 1.06 GHz with 2MB L2 cache, 10 W

Yonah Core BGA type

Intel® Core™ Duo L2400, 1.66GHz with 2MB L2 cache, 15 W
Intel® Core™ Duo U2500, 1.2 GHz with 2MB L2 cache, 9 W
Intel® Celeron® M 423, 1.06GHz with 1MB L2 cache, 5.5 W

Memory

Single SODIMM socket memory, max 2 GB of non-ECC,
533/667 MHz DDR2

Chipset

Intel® 945GME Express Graphic Memory Controller Hub
Intel® I/O Controller Hub 7 Mobile (ICH7-M)

BIOS

AMIBIOS®8 with CMOS backup

Hardware Monitor

Supply voltages and CPU temperature

Watchdog Timer

Programmable timer ranges to generate RESET

Expansion Busses

32-bit PCI 2.3 Masters at 33 MHz

ISA 16-bit

SMBus/I²C

Video

Chipset

945GME GMCH integrated chipset supports dual
independent displays

CRT Interface

Analog VGA support up to 2048 x1536 resolution

LVDS Interface

Dual channel 18/24-bit

TV-out

NTSC/PAL up to 1024x768 resolution, HDTV
480p/720p/1080i/1080p modes supported (without
Macrovision)

Audio

Chipset

Integrated on Intel® ICH7-M

Audio Codec

Realtek ALC 268 HDA compatible

LAN

Chipset

PCIe x1 Realtek RTL8111C

Interface

10/100 Mbps

Multi I/O

IDE (PATA)

Dual channel IDE with UDMA 33 support

SATA

Two SATA ports on module

USB

Up to four ports USB 2.0

Serial

Two high speed RS-232C ports (COM1/COM2)

IrDA

Supports SIR IrDA 1.1 compliant

Parallel

SPP, EPP, and ECP mode (pin out shared with FDD)

FDD

One drive (pin out shared with LPT)

Keyboard & Mouse

One PS/2 keyboard and one PS/2 mouse

Power Specifications

Input Power

AT mode (5 V only) and ATX mode (5 V and 5 Vsb)

Power States

Supports S0, S1, S3, S4, S5

Power Consumption

18 W typical (with Core™2 Duo U7500 and 1 GB memory)

Mechanical and Environmental

Operating Temp.

0°C to 60°C

Storage Temp.

-20°C to 80°C

Humidity

5% to 95% relative humidity, non condensing

Shock

15G peak-to-peak, 11ms duration, non-operation

Vibration

Non-operating: 1.88 Grms, 5-500 Hz, each axis

Operating: 0.5 Grms, 5-500 Hz, each axis

Form Factor

ETX® rev. 3.02, size 95 mm x 114 mm

Certifications

CE, FCC

Operating Systems

Standard Support

Windows® Vista 32/64-bit

Windows® XP 32/64-bit

Linux® 2.6.x

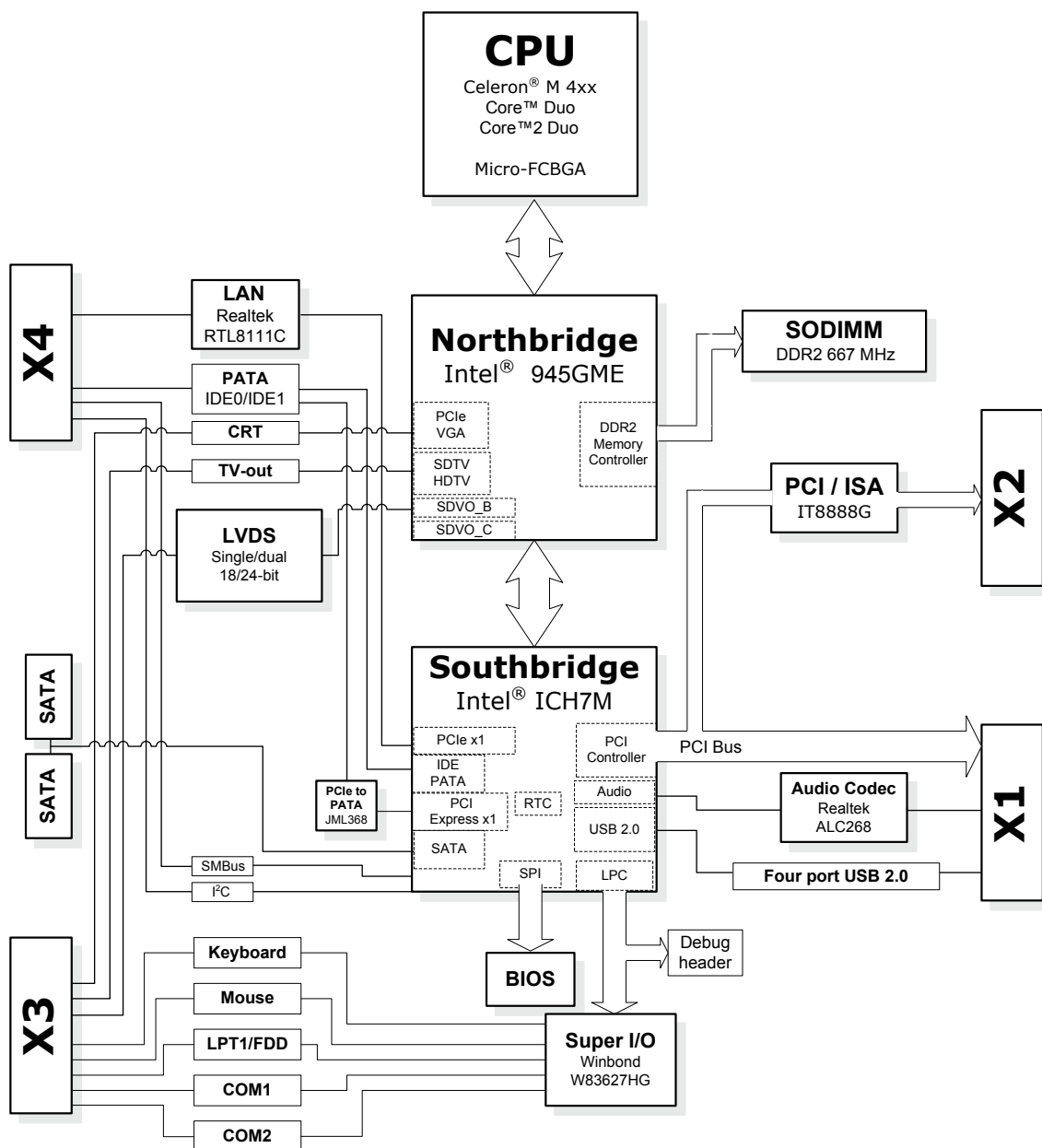
Extended Support

Embedded XP BSP

Windows® CE 6.0 BSP

Linux® 2.6.x BSP

AIDI Library for Win32, WinCE and Linux®



100

Model Number	Description/Configuration
ETX-NR667-L7400	ETX® Module with Intel® Core™2 Duo L7400 processor at 1.5 GHz
ETX-NR667-L2400	ETX® Module with Intel® Core™ Duo L2400 processor at 1.66 GHz
ETX-NR667-U7500	ETX® Module with Intel® Core™2 Duo U7500 at 1.06 GHz
ETX-NR667-423	ETX® Module with Intel® Celeron® M 423 processor at 1.06 GHz

1. *What is the purpose of this study?*

Model Number	Description/Configuration
Heat Spreaders	
HTS-NR667-B	Heatspreader for ETX-NR667 (BGA CPU) with threaded standoffs
Passive Heatsinks	
THS-NR667-B	Low Profile Heatsink for ETX-NR667 (BGA CPU) with threaded standoffs
Heatsink with Active Cooling	
THSF-NR667-B	High Performance Heatsink with Fan for ETX-NR667 (BGA CPU) with threaded standoffs