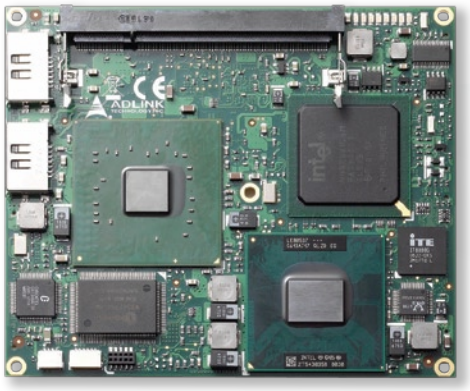
ETX-NR667

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

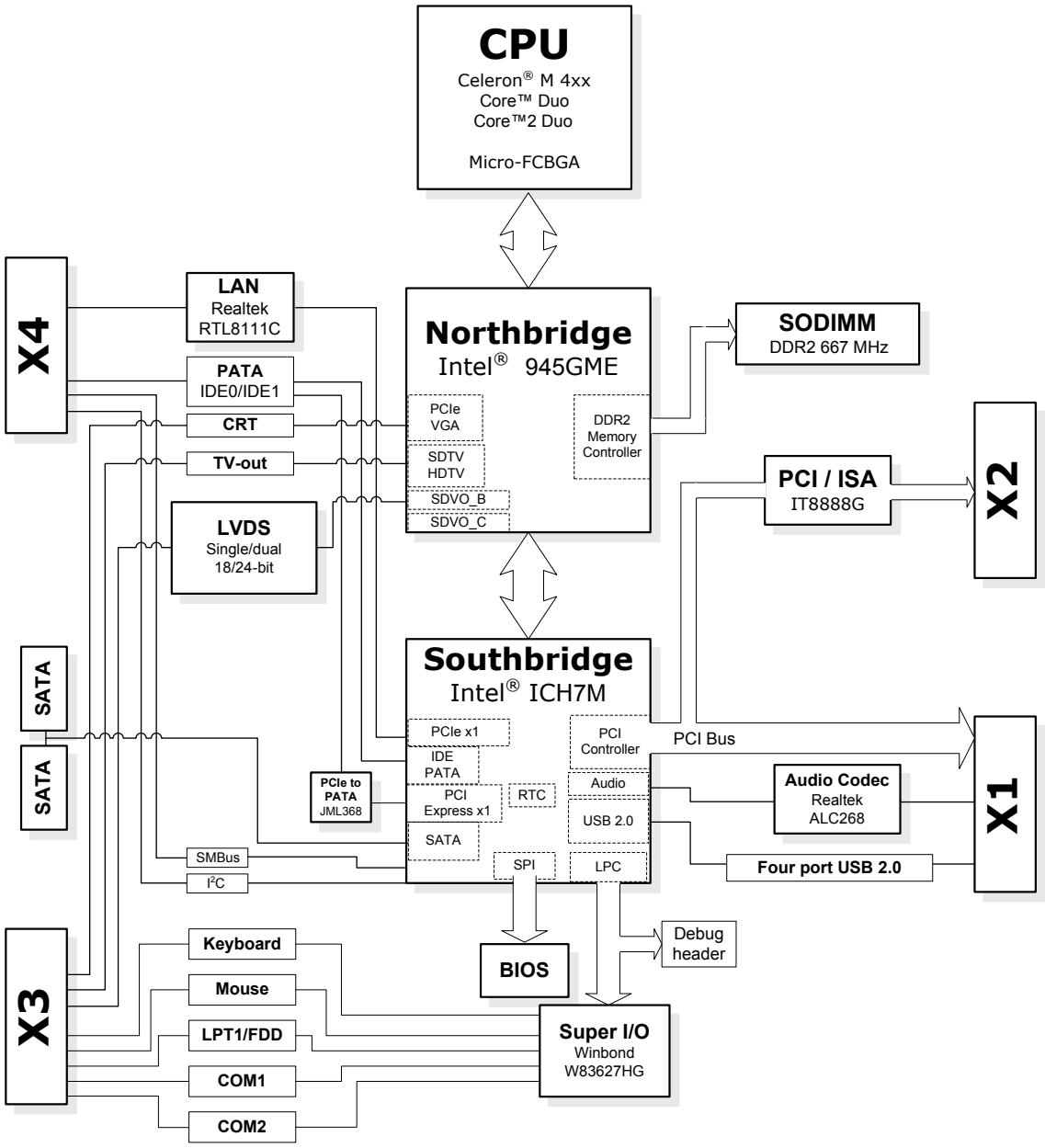
Operating Temp.	0°C to 60°C
Storage Temp.	-20°C to 80°C
Humidity	5% to 95% relative humidity, non condensing
Shock	15G peak-to-peak, 11ms duration, non-operation
Vibration	Non-operating: 1.88 Grms, 5-500 Hz, each axis
	Operating: 0.5 Grms, 5-500 Hz, each axis
Form Factor	ETX® rev. 3.02, size 95 mm x 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®

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Functional Diagram



Ordering Information

Modules

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

Accessories

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

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