ETX270

ETX Embedded Computer Module

The ETX270 from Diversified Technology, Inc. is an ETX® 3.0 Embedded Computer Module. This Low power and performance is what customers are looking for in today's market. DTI's ETX270 addresses embedded requirements for time-to-market sensitive applications in commercial arenas. The small thin form factor and scalable performance configurations support both the PCI and PCI Express architectures.

Highly configurable. Embedded application robustness. Diversified Technology's ETX270 embedded computer module is a versatile processor solution with its System-On-Module (SOM) design. It will meet the cost-effective and space-limited requirements of the embedded market.

Product Features

Form Factor
ETX® 3.0 Computer Module based on the Intel® ATOM™N270 processor

CPU/Chipset
• Intel® ATOM™N270 processor operating at 1.6GHz
• Intel® 945GSE chipset and ICH7-M I/O controller

Bus Interfaces
• 533MHz Front Side Bus
• 400/533MHz DDR2 SDRAM bus

Memory
• Single SO-DIMM up to 2GB
• PC2-4200/5300 non-ECC DDR2 SDRAM

I/O
• 4 USB 2.0 Ports
• 2 SATA 150 Ports
• Ultra ATA/100 EIDE
• Realtek RTL8102E(L) 10/100 Ethernet
• 32-bit/33MHz PCI 2.3 bus

Video
• Single channel LVDS
• Analog TV-Out
   (composite, component, or S-Video output)
• Analog CRT
• SDVO port
• DAC Frequency up to 400MHz

Audio
• Realtek High-Definition Audio

BIOS
• Field-upgradeable Award BIOS
• Plug and Play (PnP)
• ACPI
• SMBIOS 2.3
• LAN boot

Physical Dimensions
114mm(L) x 95mm(W)

OS Support
Windows® XP Embedded, Windows® XP, Windows® 7 and Linux®

Warranty
• Parts and labor covered for 2 years

www.dtims.com/sff • **sales@dtims.com** • **1.800.443.2667**

Diversified Technology®
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CPU / Cache
• 1.6GHz ATOM™N270, 512MB cache, 533MHz FSB
• Intel® 945GSE chipset and ICH7-M I/O Controller

Bus Interface
• 533MHz Front Side Bus
• Supports 400/533MHz DDR2 SDRAM, non-ECC only

Memory
• One 200-pin latching right-angle 1.8V DDR2 SO-DIMM socket
• 2GB Max. memory supported
• PC2-4200/5300 non-ECC DDR2 SDRAM

Data Path
• 64-bit, 533/667MHz on CPU
• 64-bit, 533/667MHz on memory bus

Peripherals and I/O Interfaces
• Four USB 2.0 ports
• Two SATA 150 ports
• EIDE: Ultra ATA/100, support for two drives, EIDE and
  PIO modes, synchronous DMA mode, transfers up to 100 MB/s
• Ethernet: Realtek RTL8102E(L) 10/100M
  (with link/activity and speed signals)
• One 32-bit/33MHz PCI 2.3 bus, supports up to 4 slots/devices

Video
• Intel Gen 3.5 Integrated Graphics Engine
• Dynamic Video Memory Technology (DVMT 3.0)
• Share system memory up to 224MB
• Intel Display Power Saving Technology 2.0 (Intel DPST 2.0)
• Intel Smart 2D Display Technology (Intel S2DDT)
• Intel Automatic Display Brightness
• Single-channel LVDS flat panel
• Analog TV-Out and CRT output
• One SDVO port
• Analog monitor resolution up to 2048 x 1536 85Hz refresh
• Flat panel resolution up to 1600 x 1200

Audio
• Realtek High-Definition Audio ALC662

Clock / Calendar
• Real-time clock with battery-backed CMOS RAM

OS Compatibility
• Microsoft Windows® XP Embedded SP2, Windows® XP,
Windows® 7 and Linux

Supervisory
• Hardware system monitor (CPU temperatures and voltages)

BIOS
• Award removable BIOS
• Field upgradeable
• Multiboot support with boot from HD, CD-ROM, and USB
• ACPI Rev. 1.0b, 2.0, and 3.0 compliant
• LAN boot (PXE 2.0)
• PnP
• PCI 2.3 compliant
• SMBIOS V2.3.3
• BIOS Boot Specification (BBS)
• S.M.A.R.T. support

Mechanical
• Dimensions are ETX compatible
• 4.488" L x 3.937" H x 0.315" W
  (not including baseboard)
• 114mm L x 100mm H x 8mm W
  (not including baseboard)

Power Requirements

Board Version	ICC (typical)	Power (typical)
1.6GHz ATOM™	2.62A	13.1W

Environmental
Operating
• Temperature: -0°C to 60°C / 32F° to 140°F

 Storage and Transit (in approved packaging)
• Temperature: -20°C to 80°C / -4° to 176°F
• Humidity (RNC) : 5 to 90% @ 40°C / 104°F

Reliability and Serviceability
• MTBF: 159,983.578 (hrs.) @ 40°C Level 1
  (computed using Bellcore SR-332 Issue 1)
• 1 year limited warranty

Regulatory Compliance
• TBD

Ordering Information *
ETX270
1.6GHz ATOM™N270, 512MB cache, 533MHz FSB

* *Contact a DTI Sales Representative about other SKUs.*

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www.dtims.com/sff

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BSI
ISO 9001:2008
FM 65275