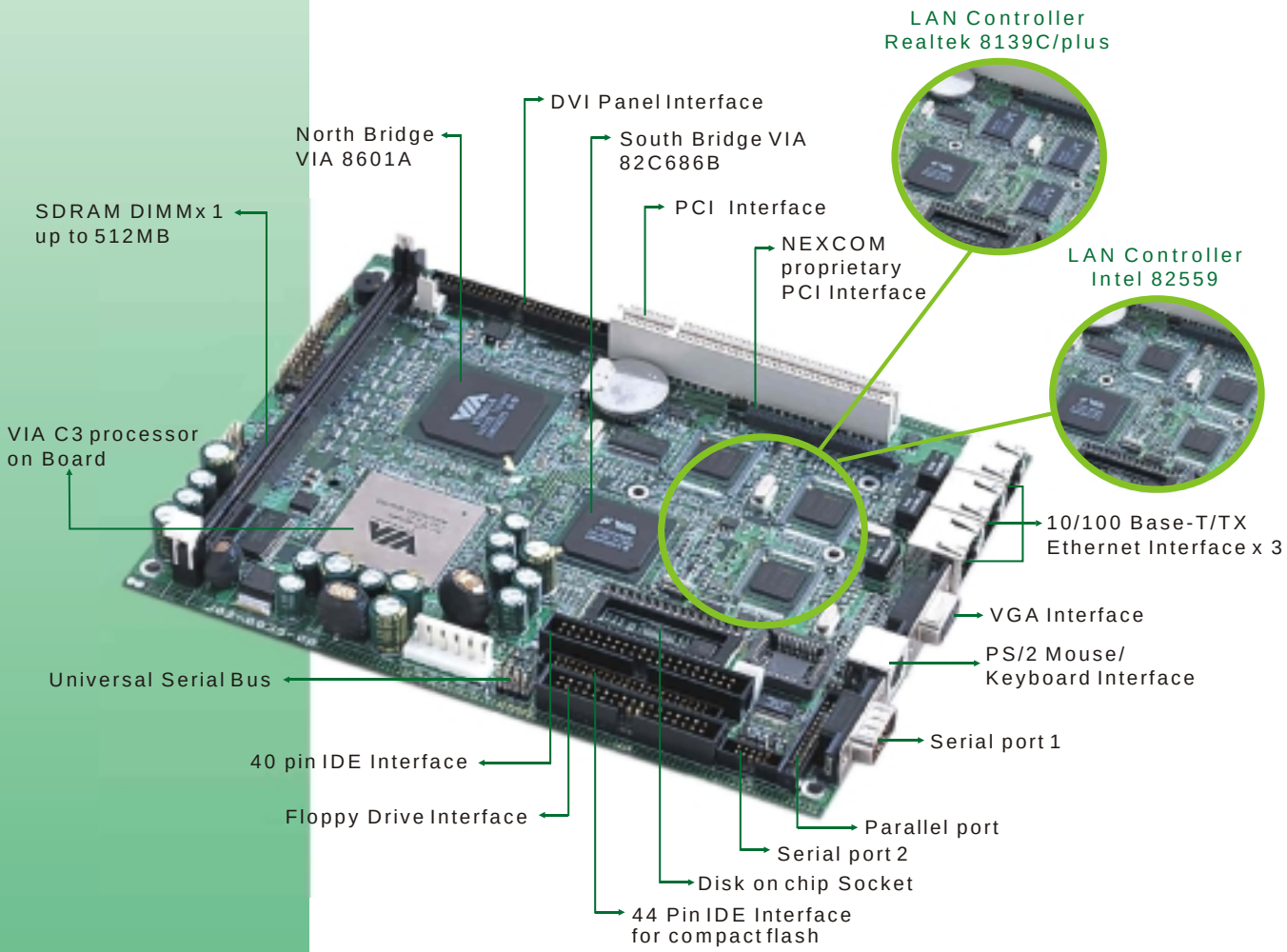
Embedded Controller Series

# EBC 563

## 5.25" Pentium III Class Low Power Embedded Controller w/CPU/VGA/LAN/Audio




## Features

- 100/133MHz FSB, VIA C3 EBGA 800MHz+ on board CPU
- Max. 512MB SDRAM, DIMM x1
- VIA 8601/686B Chipsets w/4X AGP VGA , 2/4/8MB memory, DVI Panel Interface LCD support ( optional )
- 3x 10/100 Base T/ TX LAN (Intel® 82559 or Realtek 8139C)
- DOC and AT/ATX power supply support, Audio module optional

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ISO 9001 Certified Firm


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# EBC 563

## Specifications

### On Board CPU

- Onboard VIA C3 Processor EBGA Package with 128KB Level 1 and 64KB Level 2 Cache
- FSB 100/133MHz
- CPU Support
  CPU on board 800MHz and future CPU higher speed

### Main Memory

- One 168-pin DIMM. Support Max memory size to 512MB

### BIOS

- Award System BIOS
- Advanced Power Management support
- 4M bits flash ROM

### Chip Set

- VIA 8601 100/133MHz North Bridge
- VIA VT82C686B PSIPC PCI SUPER-I/O INTEGRATED PERIPHERAL CONTROLLER
- PCI V2.2 compliant

### On Board LAN

- RealTek RTL8139C Ethernet Controller x3 (Intel 82559 LAN x 3) optional
- 10/100 BaseT/TX support, full duplex
- Compliant with IEEE802.3X
- Boot From LAN function
- Drivers support: DOS/Windows, Windows 95/98/2000, Windows NT, Netware, SCO Open Server 5.0, Linux, FreeBSD
- RJ45 with LED connector x 3

### On Chip VGA

- VIA Apollo PLE133 Graphics Controller
- 64-bit Single Cycle 2D/3D Graphics Engine, Supports 2 to 8 Mbytes of Frame Buffer, Real Time DVD MPEG-2 and AC-3 Playback, Integrated 24-bit 230MHz True Color DAC Extended Screen Resolutions up to 1600 x 1200
- Allows external TMDS transmitter for advanced panel interfaces
- Drivers support: Windows 95/98/2000, Windows NT4.0, Linux
- 15Pin D-Sub VGA Output; 50 pin connector x 1

### On Board Solid State Disk Socket

- On board reserved socket for DOC of M-systems: 2MB~144MB or above

### On Chip and On Board I/O

- On Chip VT82C686B INTEGRATED Super I/O:
  - Integrated ISA Bus Controller with integrated DMA, timer, and interrupt controller
  - Integrated Keyboard Controller with PS2 mouse support
  - Integrated DS12885-style Real Time Clock and Day/Month Alarm for ACPI
  - Integrated USB Controller with root hub and four function ports
  - Integrated UltraDMA-33/66/100 master mode EIDE controller with enhanced PCI bus commands
  - Distributed DMA support for ISA legacy DMA across the PCI bus
- SIO x 2, with 2 x 16C550 UARTs, 10 pin header x 1, D-Sub x 1
- PIO x 1, bi-directional, EPP/ECP support, 26 pin connector x 1
- Floppy Disk controller: 34 pin connector x 1

Support UltraDMA-33/66/100 IDE with 40 pin connector x 1, 44 pin connector x 1
Optional Compact Flash Module on the 44 pin IDE Connector to support Compact Flash
Optional Disk On Module on the 44 pin IDE Connector to support DOM
6 pin mini DIN connector x 1, for PS/2 keyboard/mouse
On board USB port x 2
On Board buzzer x 1
GPIO (4 in 4 out)
On board 2 pin header for $I^2C$
On board 5 pin header for IrDA
On Board 2 pin header for reset SW/2 pin power SW
AC97 interface for optional audio module

### Real Time Clocker

- On chip RTC with battery back up
- External Li Battery x 1

### Watchdog Timer

- Watchdog timeout can be programmable by Software

### On Board Bus Expansion

- NEXCOM PCI Connector
- Standard PCI Slot

### Dimensions

- 203mm(L) x 146mm(W)

### Power Source & Power Requirements

- 6 PIN Power Input Connector

| PIN Define | Voltage | Power Requirement |
|---|---|---|
| PIN 1 | +5V | 6A |
| PIN 2 | +5V | |
| PIN 3 | GND | -- |
| PIN 4 | GND | -- |
| PIN 5 | GND | -- |
| PIN 6 | +12V | 200mA |

- Accessory Power Converter Cable:
  1. Two 4P to 6P (For AT Power Supply)
  2. ATX Power Connector to 6P+ 2 Pin Power SW (For ATX Power Supply)
  3. Optional Power Module to support NoteBook Type Adapter (16Vdc~24Vdc input)
- On Board Power LED

### Environments

- Operating temperatures: 0 ℃ to 60 ℃
- Storage temperatures: -20 ℃ to 80 ℃
- Relative humidity: 10% to 90% (Non-condensing)

### Certification

- CE approval
- FCC Class A

## Order Information

EBC 563R
5.25" Pentium III Low Power Embedded Board with on board 800MHz Low Power CPU w/ VGA AGP 4X / 3x RealTek 8139C 10/100 LANs

EBC 563I
5.25" Pentium III Low Power Embedded Board with on board 800MHz Low Power CPU w/ VGA AGP 4X / 3x Intel 82559 10/100 LANs

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The Digital Infrastructure


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