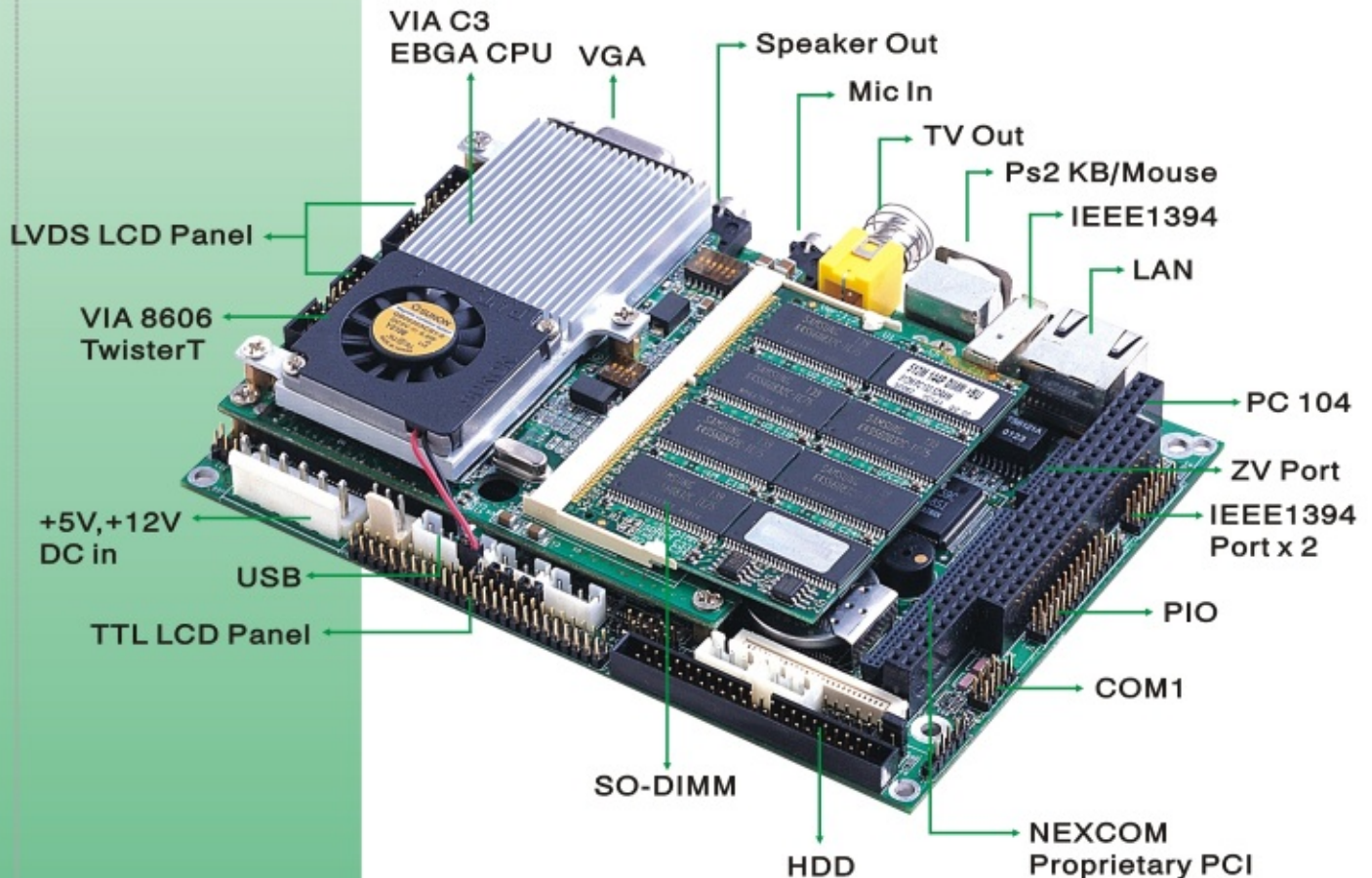


▶ Embedded Controller Series

# EBC 363

## 3.5" VIA C3 EPGA Low Power Embedded Controller w/CPU/Video/LAN/Audio/1394/TVout/LVDS LCD



### Features

- ◆ VIA C3 EPGA CPU 800+MHz on board, FSB 100/133MHz FSB
- ◆ CPU fan-less support by using VIA Eden series 400+MHz CPU
- ◆ Max. 512MB SDRAM, 168-pin DIMM Socket x 1
- ◆ VIA Twister T8606/686B chipsets w/ 4x AGP VGA built-in
- ◆ 3D graphic, LVDS/TTL LCD interface
- ◆ Realtek 8139C 10/100 Base T/TX LAN
- ◆ AC 97 ver. 2.0 Audio
- ◆ TV output/IEEE 1394/USB

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# EBC 363

## Specifications

### System Architecture

- 3.5" small form factor with Dimensions: 143 x 102 mm
- FSB 100/133MHz
- PCI V2.2 compliant

### CPU support

- Onboard VIA C3 Processor EBGA Package with 128KB Level 1 and 64KB Level 2 Cache
- 800MHz CPU on board by CPU FSB 100/133MHz
- Ultra Low Power CPU Fan-less feature at CPU speed 400MHz

### BIOS

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

### Memory

- One 144-pin SO-DIMM. Support Max memory size to 512MB

### BIOS

- Award system BIOS
- Optional ACPI Support
- Advanced power management support
- 4M bits flash ROM

### Chip Set

- VIA 8606 (Twister T) 100 /133 MHz North Bridge
- VIA VT82C686B PCI SUPER-I/O integrated peripheral controller
- PCI V2.2 compliant

### On Board LAN

- RealTek RTL8139C Ethernet Controller x1
- Single Chip 10 /100 Base 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 7.2 or later, FreeBSD®
- RJ45 with LED connector x1

### On Board Audio

- VT82C686B and AC97 ver. 2.0 compliant interface, Multi-stream Direct Sound and Direct Sound 3D acceleration
- Audio interface:  
CD audio in, Line in (Internal connector)  
Microphone in, Speaker out (with Amplifier)

### On Board VGA

- VIA 8606 Integrated Savage4 2D/3D/Video Accelerator
  - › Optimized Shared Memory Architecture (SMA)
  - › 8/16/32MB frame buffer using system memory
  - › Single cycle 128-bit 3D architecture
  - › Full internal AGP 4x performance
  - › Next generation, 128-bit 2D graphics engine
  - › High quality DVD video playback
  - › 2D/3D resolutions up to 1920x1440
  - › 3D Rendering Features
- Extensive LCD Support
  - › 36-bit DSTN/TFT flat panel interface with 256 gray shade support
  - › Integrated 110 MHz LVDS interface
  - › Support for all resolutions up to 1600x1200
- Drivers support: Windows® 95/98/2000, Windows® NT4.0/Winxp, Linux
- 15Pin D-Sub VGA Output
- LVDS Interface Connector x1
- TTL LCD Interface Connector x1

### On Board External TV Encoder Interface

- TV encoder
- Multiplexed for RCA TV out or S-Video output
- Supports NTSC, NTSC-EIA (Japan) and PAL TV formats

### On Board IEEE1394

- VIA Fire II V16306
- IEEE 1394-1394A compliant
- OHCI compatible programming interface
- 100/200/400 Mbps data transfer rates
- PCI 2.1 interface
- 1394 Port x3 (one direct output, 2 port by Pin Header reserved)

### On Board IDE Interface

- VIA 686B South Bridge Integrated UltraDMA-33/66/100 master mode EIDE controller
- Support UltraDMA-33/66/100 IDE with 44 pin connector x1
- Internal Compact Flash socket x 1

### On Board Bus Expansion

- NEXCOM PCI Proprietary Connector for PCI devices
- PC/104 connector: One 16-bit 104-pin connector onboard

### Dimensions

- 143mm(L) x 102mm(W)

### On Chip and On board I/O

- SIO x 2, with 4x16C550 UARTs, 10 pin header (2.0mm) x2 ; one for RS422/485
- PIO x 1, bi-directional, EPP/ECP support, 26 pin connector x1
- 6 pin mini DIN connector x1, for PS/2 keyboard/mouse
- On board USB port x2
- On Board buzzer x1
- Digital I/O TTL level (4 in 4 out)
- On board 3 pin header for I2C, one pin for GND;
- On board 5 pin header for IrDA
- On Board 2 pin header for Reset SW
- On Board 2 pin header for power SW (ATX Mode)
- On Board 2 pin Power LED Header
- 2 pin Power Header x1 for Panel (5V or 3.3V)
- 3 pin Power Connector x2 for CPU FAN and Chassis FAN
- 2 Pin IDE Active LED Header

### Real Time Clocker

- On chip RTC with battery back up
- External Li Battery x1

### Watchdog Timer

- Watchdog timeout can be programmable by Software

### System Monitor

- Derived from Super IO to support system monitor
- 5 voltage (For +3.3V, +5V, +5Vsb, +12V, Vcore and Vtt)
- Two Fan speed (For CPU and Chassis)
- Two temperature
- Drivers support: Windows® 95/98/2000, Windows® NT4.0

### Power Source & Power Requirements

- 6 PIN Power Input Connector

PIN Define	Voltage	Power Requirement
PIN 1	+5V	6A (typical)
PIN 2	+5V	
PIN 3	GND	--
PIN 4	GND	--
PIN 5	GND	--
PIN 6	+12V	1A (typical)

- Reserve 2 pin Header for +5Vsb to support ACPI function
- 3.3V is converted from +5V
- 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)

### Environments

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

### Certification

- CE approval
- FCC Class A

## Order Information

- EBC 363 - 3.5" Low Power Embedded Board with on board 800MHz CPU
- EBC 363LP - 3.5" Ultra Low Power Embedded Board with on board 400MHz CPU

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The Digital Infrastructure

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