PEAK 603P

Half-size EBGA VIA C3 Processor on board CPU Card with VGA / LAN / LVDS / LCD Support

Keyboard Connector

Extermal keyboard

Serial Port 1

LAN Port

VGA

Floppy Disk

USB

IDE 40pin

LAN Chip RTL8139C

IDE 44pin

VIA 8606(Twister-T)

168 pin SDRAM
DIMM x1 up to 512MB

VIA VT 82C686B

PC104 Interface

NEXCOM Proprietary PCI Interface

PCI and ISA Interface

ATX 5V Stand by Connector

LCD Panel Interface

LVDS Panel Interface

On Board VGA C3
Processor w/Cooler
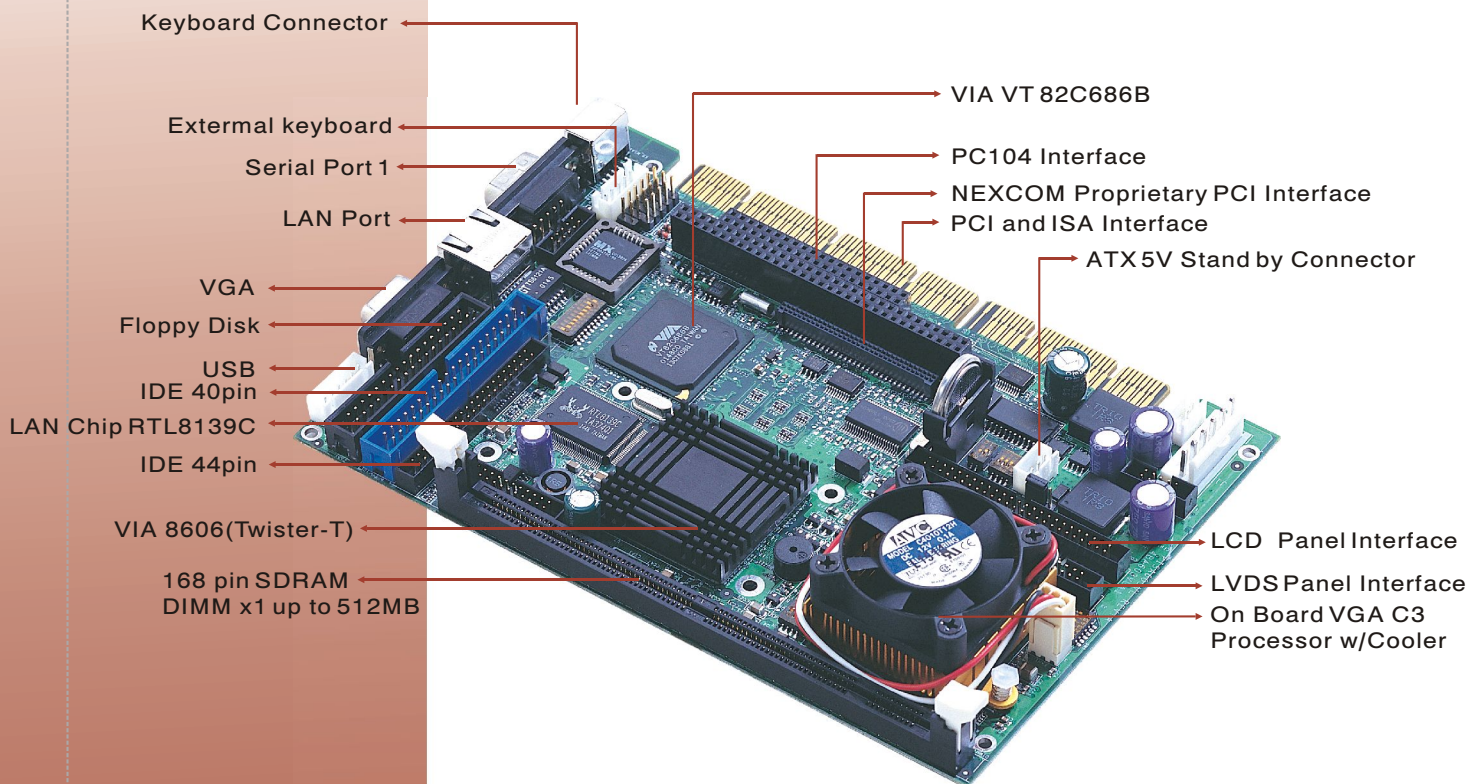
Features

◆ 800MHz CPU on board with EBGA package speed up to 1GHz or above
◆ VIA VT8606 chipset with integrated Savage4 2D/3D/Video Accelerator
◆ VIA VT82C686B super I/O controller
◆ 168-pin DIMM socket x 1, Max. 512MB
◆ LVDS/TTL LCD interfaces support
◆ Realtek 8139C LAN x 1
◆ Via optional EBK SCSI/SCSI2/SCSI 160D module
◆ NEXCOM proprtertary PCI expansion
◆ PCI & ISA Interface

NEXCOM

http://www.nexcom.com

CE

ISO 9001
Certified Firm

TÜV
CERT
DIN EN ISO 9001
Certificate 09 100 99242

PEAK 603P

Specifications

System Architecture

- Half-size SBC with PCI-ISA Golden finger
- Small Form Factor with 4 screw holes for Embedded Application
- PCI V2.2 compliant

On Board CPU

- Onboard VIA C3 Processor EBGA Package with 128KB Level 1 and 64KB Level 2 Cache
- 800MHZ CPU speed up to 1GHz or above in the future
- CPU FSB 100/133MHz

Main Memory

- Support up to 512MB (Max.)
- 168pin DIMM socket x 1
- PC133 SDRAM Interface

BIOS

- Award System BIOS
- Plug & Play support
- Advanced Power Management support
- Advanced Configuration & Power Interface support
- 4Mb bits flash ROM

Chip Set

- VIA 8606 (Twister T) 100/133 MHz North Bridge
- VIA VT82C686B PSIPC PCI SUPER-I/O INTEGRATED PERIPHERAL CONTROLLER

On Chip VGA

- VIA 8606 Integrated Savage4 2D/3D/Video Accelerator
  - Optimized Shared Memory Architecture (SMA)
  - 8 / 16 / 32 MB 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, Linux.
- 15 pin D-Sub VGA Output,
- 16-pin Box Header for LVDS Interface Connector x 1
- 50-pin Box Header for TTL LCD Interface support for Long Distance Cable x 1

On Board LAN

- RL 8139C Ethernet Controller
- 10 Base T/100 Base TX support, full duplex
- Compliant with PCI V2.1, IEEE802.3, IEEE 802.3U
- Drivers support: DOS/Windows, Windows 95/98/2000, Windows NT, Netware, SCO Open Server 5.0, Linux
- RJ45 connector x 1

On Board I/O

- 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 (Pitch: 2.00mm), with 2 x 16C550 UARTs, 10 pin header x 1 (RS-232/422/485), D-Sub x 1
- PIO x 1 (Pitch: 2.00mm), bi-directional, EPP/ECP support, 26 pin connector x 1
- Floppy Disk controller: 34 pin connector x 1
- UltraDMA-33/66/100 IDE with 40 pin connector x 1; 44 pin connector x 1
- Support 2.5" or 3.5 " HDD and DOM (Disk on Module)
- Support Compact Flash Module
- External Keyboard 5 pin connector x 1; 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/out)
- On board 5 pin header for IrDA
- On Board 2 pin header for reset SW / 2 Pin for Power LED / 2 pin power SW
- 3 Pin Jst (5Vsb, PS-On, GND) for connect to Back plane support the ATX Power Mode
- On board buzzer x 1
- Power Input Connector for standalone operation

On Board NEXCOM proprietary PCI / PC104 interface

- Reserved 32 bit PCI interface for NEXCOM EBK module
- PC104 Interface

On Chip RTC

- On chip RTC with battery back up

System Monitor

- VT82C686B Integrated Voltage, Temperature, Fan Speed Monitor and Controller
- 5 positive voltage (one internal), 3 temperature (one internal) and 2 fan-speed monitoring

ISAMAX Support

- Maximize ISA signals to support 20 ISA cards

Watchdog Timer

- 1,2,4,8,16,32,64 seconds time-out intervals

Dimensions

- 186.5mm(L) x 127.57mm(W)

Power Requirements (Testing at CPU 800MHz; Memory: 512MB)

- +5V: 8A(Max.)
- +12V: 500mA(Max.)

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

PEAK 603P

- Half-size Embedded on board EBGA VIA C3 On Board 800MHz or above microprocessor Processor CPU Card with VGA/LAN/LVDS/LCD Support

NEXCOM

The Digital Infrastructure

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- All specifications are subject to change without notice.

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