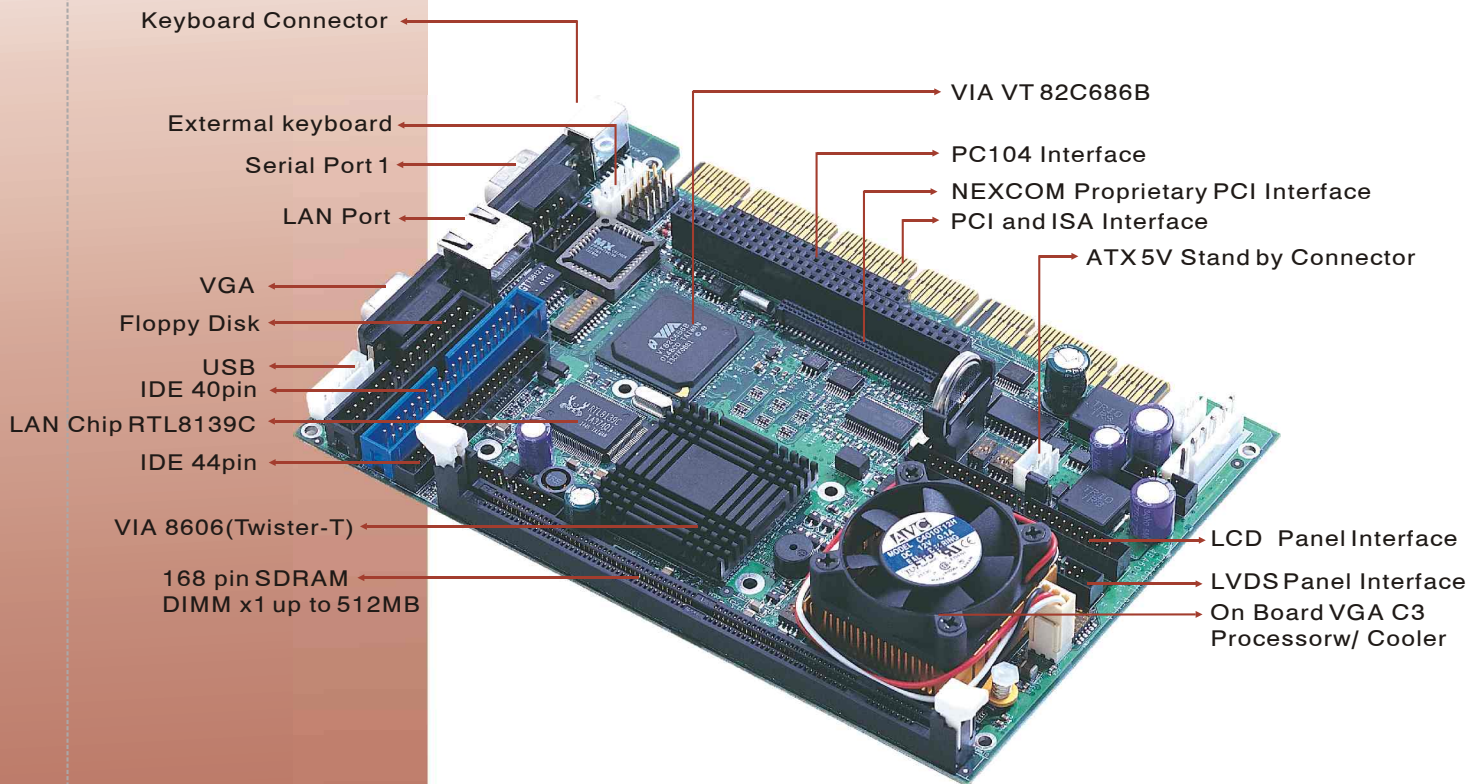


PEAK 603P

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



Features

- ◆ 800MHz CPU on board with EPGA 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 proprietary PCI expansion
- ◆ PCI & ISA Interface



<http://www.nexcom.com>



ISO 9001
Certified Firm

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PEAK 603P

Specifications

System Architecture

- Half-size SBC with PCI-ISA Golden finger
- Small Form Factor with 4 screwholes 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 PS/PC 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, IEEE 802.3, 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°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

PEAK 603P

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



The Digital Infrastructure

- All brand name and registered trademarks referred to in this datasheet are the property of their respective owners.
- All specifications are subject to change without notice.