PEAK 639VL2

Full-size VIA C3/Eden Processor on Board CPU Card w/VGA/LVDS/TTL LCD, Support Dual LAN

VIA 8606
(Twister-T)

168 pin SDRAM
DIMM Socket x 2

LVDS Panel Interface
LCD Panel Interface
USB

Compact Flash Socket x 1

OnBoard VGA C3/ Eden
Processor w/ cooler

LAN 2
VGA

LAN 1
PS2 Mouse/
Keyboard

ATX 5V Stand
by Connector

LAN Chip RTL 8139C
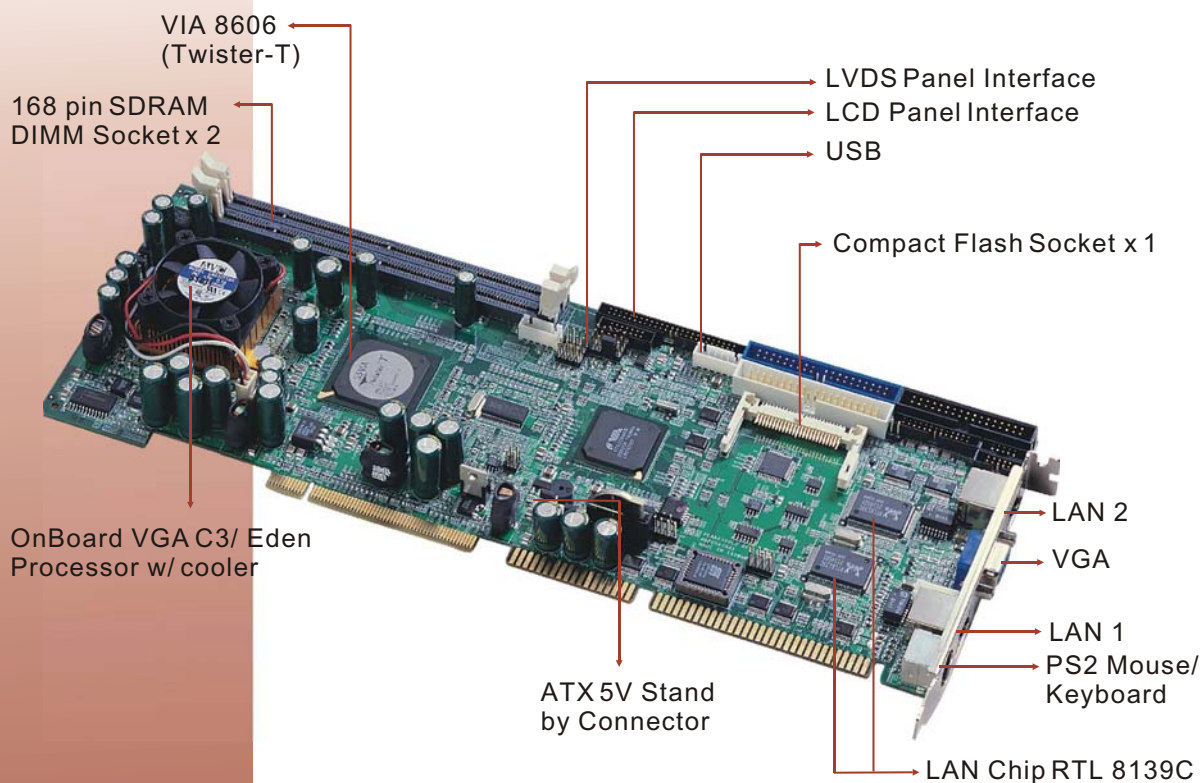
Features

◆ On board VIA C3 800MHz/1GHz or Eden 667MHz processor
◆ VIA 8606 Chipset with intergrated Savage4 2D/3D/Video Accelerator
◆ VIA VT82C686B Super-I/O controller
◆ Realtek 8139C LAN x2
◆ 168 pin SDRAM DIMM Socket x 2, Max.1GB
◆ LVDS/TTL LCD interfaces support, compact flash support

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Platform
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TÜV
CERT
DIN EN ISO 9001
Certificate:09 100 99248

**ISO 9001
Certified Firm**

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Specification

System Architecture

- Full size SBC with PICMG (PCI+ISA) Golden finger
- PCI V2.2 compliant
- PICMG 1.0 (Rev.2.0) compliant

On Board CPU

- Onboard VIA C3/Eden Processor EBGA Package with 128KB Level 1 and 64KB Level 2 Cache
- Support 667MHZ/800MHz/1GHz on-board processor
- CPU FSB 133MHz

Main Memory

- Support 168 pin DIMM Socket x 2, up to 1GB
- PCI 133 SDRAM types

BIOS

- Award System BIOS
- Plug & Play support
- Advanced Power Management support
- Advanced Configuration & Power Interface support
- 2Mb flash ROM (Design for 4Mb or above)

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 x 1

On Board Dual LAN

- RTL8139C Ethernet Controller x2
- 10 Base T/100 Base TX support, full duplex
- Complied with PCI V2.1, IEEE802.3, IEEE802.3U
- Drivers support: DOS/Windows, Windows 95/98/2000, Windows NT, Netware, SCO Open Server 5.0, Linux
- RJ45 connector 2 (Pin-header for LED)

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 2x16C550 UARTs, 10 pin header x 2 (For RS-232) (Back-Side Reserved for 422/485)
- 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 2 (2pin power header for DOM)
- On board Compact Flash x 1
- 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
- GPIO (4 in/ 4 out)
- On board buzzer x 1
- 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
- AC 97 Pin Header Reserved

On Chip RTC

- On chip RTC with battery back up

System Monitor

- VT82C686B Integrated Voltage, Temperature, Fan Speed Monitor and Controller
- 5 positive voltage , 2 temperature (one internal) and 1 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

- 338.58mm(L) x 122mm(W)

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

- +5V : 8A (Max.)
- +12V: 500mA (Max.)
- +5Vsb: 800mA (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 639VL2
- Full-size On Board 800MHz CPU Card with LVDS/TTL LCD, Dual Realtek 8139C LAN

PEAK 639VL2-1
- Full-size On Board 1GHz CPU Card with LVDS/TTL LCD, Dual Realtek 8139C LAN

PEAK 639VL2-LP6
- Full-size On Board 667MHz CPU Card with LVDS/TTL LCD, Dual Realtek 8139C LAN

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