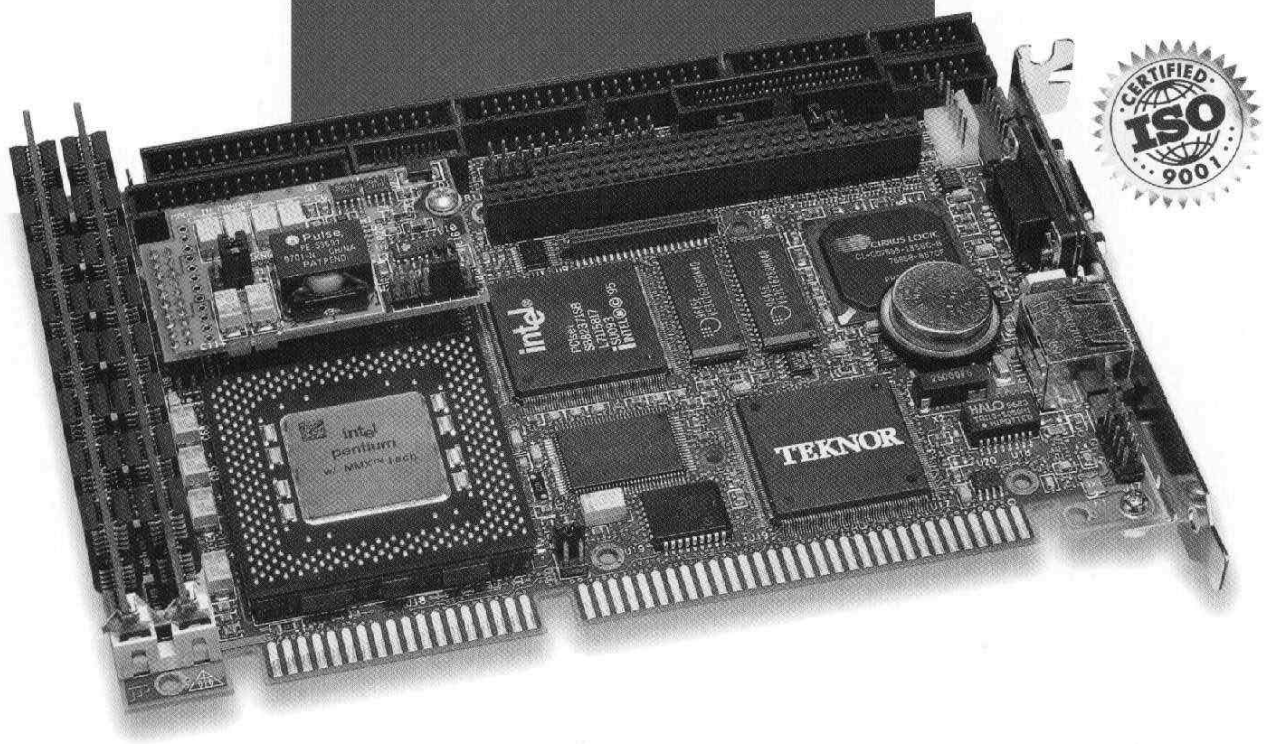
VIPer821

TEKNOR

Small Wonder!

Visualize... Communicate... and go to Market Faster with this Half-Size Industrial SBC.



Teknor's state-of-the-art VIPer821 integrates the latest Intel Pentium® processors with MMX™ technology, Cirrus Logic 64-bit PCI Flat Panel / CRT video processor and Intel PCI 10/100Base-TX Ethernet controller on a half-size industrial single board computer.

When you combine the 2MB of onboard video memory, 512KB L2 cache, up to 256MB DRAM and PCI EIDE, with optional CompactFlash™ card technology, things really get interesting. But, there's more! Serial, parallel and USB ports, advanced power management and revolutionary Boot Block Flash technology are all standard onboard features.

Designed to meet the demands of next generation embedded systems or portables, the VIPer821 also includes a PC/104 interface, ISA bus connector and the ability to run in stand-alone mode. Whew!

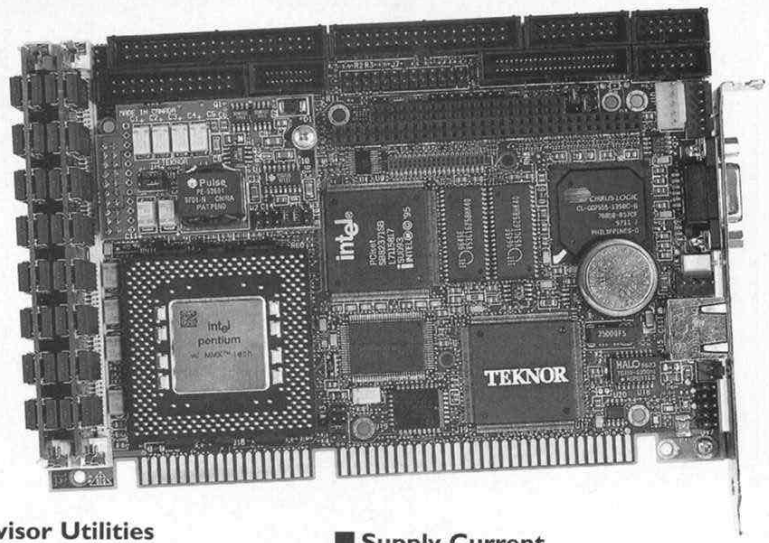
All this on a half-size industrial SBC from **Teknor**, designer and manufacturer of the world's most advanced and reliable industrial single board computers and systems. **No wonder!**

- **Up to 233 MHz Pentium® processor with MMX™ and 512KB L2 Cache**
- **Intel 82430HX Chip Set**
- **Up to 256MB FPM or EDO DRAM**
- **PCI EIDE and Optional CompactFlash™ Module**
- **PCI Flat Panel / CRT 64-bit Video**
- **PCI 10/100Base-TX Ethernet**
- **PC/104, ISA Bus and stand-alone operation**

TEKNOR
INDUSTRIAL COMPUTERS INC.

VIPer 821

HALF-SIZE PC/AT INDUSTRIAL SBC



TECHNICAL SPECIFICATIONS

Bus Interface
- PC/AT ISA bus or stand-alone operation
- 100% IBM PC/AT compatible
- PC/104 compatible
- Internal Rev. 2.1 PCI Bus

CPU Type & Speed
- Intel 133 & 166MHz Pentium® processor
- Intel 166, 200 & 233MHz Pentium® processor with MMX™
- Intel 82430HX Chip Set
- Socket-7 compatible

Memory
- DRAM: up to 256MB FPM or EDO using two 72-pin SIMMS
- Parity / non-parity & ECC support
- L2 Cache: 512KB Pipelined Burst
- CompactFlash™ Module: up to 24MB
- Unique silicon serial number
- 4KB user EEPROM

Data Path
- 64-bit on CPU bus
- 16-bit on ISA bus
- 32-bit on PCI bus (internal)
- 64-bit on Video bus

Video
- Cirrus Logic 64-bit CL-GD7555 PCI videoprocessor chip
- 2MB EDO video memory
- PCI local bus interface, with burst transfer support
- Flat panel support for monochrome, S/S and D/D STN, EL and TFT displays
- 24-bit flat panel interface
- CRT resolutions to 1024 x 768 x 64K colors or 1280 x 1024 x 256 colors
- Direct support of 1024 x 768 XGA panels
- GUI & Video acceleration
- Simultaneous CRT / FP support
- V-PORT™ (Asynchronous Digital Video) inter face supporting video on graphics and graphics on video overlays
- Provides sequenced 3.3V or 5V flat panel power
- Compatible with Teknor's TEK-380 VIPerVision Real-Time Digital Video Module

I/O
- SMC FDC37C932 Ultra I/O

Serial:
- Two RS-232 ports configurable as COM1-4; COM2 can be RS-422/485 configured by BIOS software

Parallel:
- 1 bi-directional port with all IEEE 1284 protocols supported (compatibility, nibble, byte, EPP, and ECP)

Hard disk:
- PCI Enhanced IDE supporting up to two drives

Floppy disk:
- Support for two 2.88MB floppy drives

Universal Serial Bus:
- Two USB ports

Clock / Calendar
- Real-time clock with battery backup

Supervisor Utilities
- Watchdog timer
- Power failure / low battery detector
- CPU temperature sensor / alarm

Ethernet
- PCI 10/100Base-TX interface
- Intel 82558 Ethernet controller
- PCI Rev. 2.1 compliant bus master
- Integrated link and activity LEDs

CompactFlash™ Module
- IDE compatible CompactFlash™ Technology
- Supported by all O/S and Real-Time O/S with no extra drivers required
- User upgradable
- Bootable using any O/S

BIOS
- AWARD BIOS
- Updatable BIOS in Boot Block Flash
- Auto configuration and extended setup
- Programmable CPU and memory wait states
- BIOS shadowing in RAM
- Extensions for diskless, keyboardless and videoless operations
- Advanced power management support
- CPU thermal management
- Plug and Play peripheral support

External Connectors
- IDE hard disk, floppy disk, parallel & serial ports (2): individual shrouded headers
- AT keyboard, speaker, reset port: combo shrouded header
- CRT: DB-15
- Flat Panel display: 50-pin and 20-pin high density shrouded header
- V-PORT™: 26-pin header
- Ethernet: shielded RJ-45
- USB: 10-pin header
- PS/2 mouse: 4-pin locking header
- 5V DC Fan: 2-pin locking header
- Power: 6-pin and 5-pin locking header
- PC/104 expansion header

Operating Temperature
- 0° to 62°C / 32° to 143°F (with airflow)
- CPU case temperature: 70°C / 158°F
- Consult factory for high speed processor temperature specs
- Extended temperature range available

Noncondensing Relative Humidity
- 5% to 95%

Electrical / Mechanical
- Conforms to the IEEE P996 PC/AT bus specifications

Supply Voltage
- Vcc = +5V ±5%

Supply Current

Pentium:	133	166	
ICC typ.*: @+5V	2.50A	2.86A	
ICC susp.: @+5V	1.52A	1.54A	
MMX:	**166**	**200**	**233**
ICC typ.*: @+5V	3.14A	3.42A	4.02A
ICC susp.: @+5V	1.59A	1.75A	1.92A

* Measured with PCI 10/100Base-TX Ethernet, 2MB video memory, 512KB Cache and 8MB DRAM installed.

Board Dimensions
- 7.125 in. x 4.80 in. / 181 mm x 122 mm

MTBF
- > 100,000 hrs (MIL-HDBK-217F)

* Based on Ground Benign Environment, operating ambient: 20°C / 68°F; temperature rise: 10°C / 50°F

Operating Systems Compatibility
- PC and MS-DOS™
- Windows® 3.X
- Windows®95
- Windows® NT
- OS/2® Warp
- SCO UNIX™
- QNX™
- NOVELL™
- UnixWare™

Warranty Period
- Two years

ORDER GUIDE

Configurations:

1: **SBC with:**
2MB video memory
512KB L2 Cache
PCI 10/100Base-TX Ethernet

CPU: *(selection required)*
133 & 166MHz Pentium® processor
166, 200 & 233MHz Pentium® processor with MMX™

Options:

DRAM: Up to 256MB EDO or FPM

CompactFlash™: 0, 4, 10, 15, 24MB*

*Consult factory for highest density

For more information or to order, please call

1-800-387-4222

Fax Order Hotline

514-437-5254

All products are shipped FOB factory (Canada).

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CE All **TEKNOR** standard products are CE marked

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