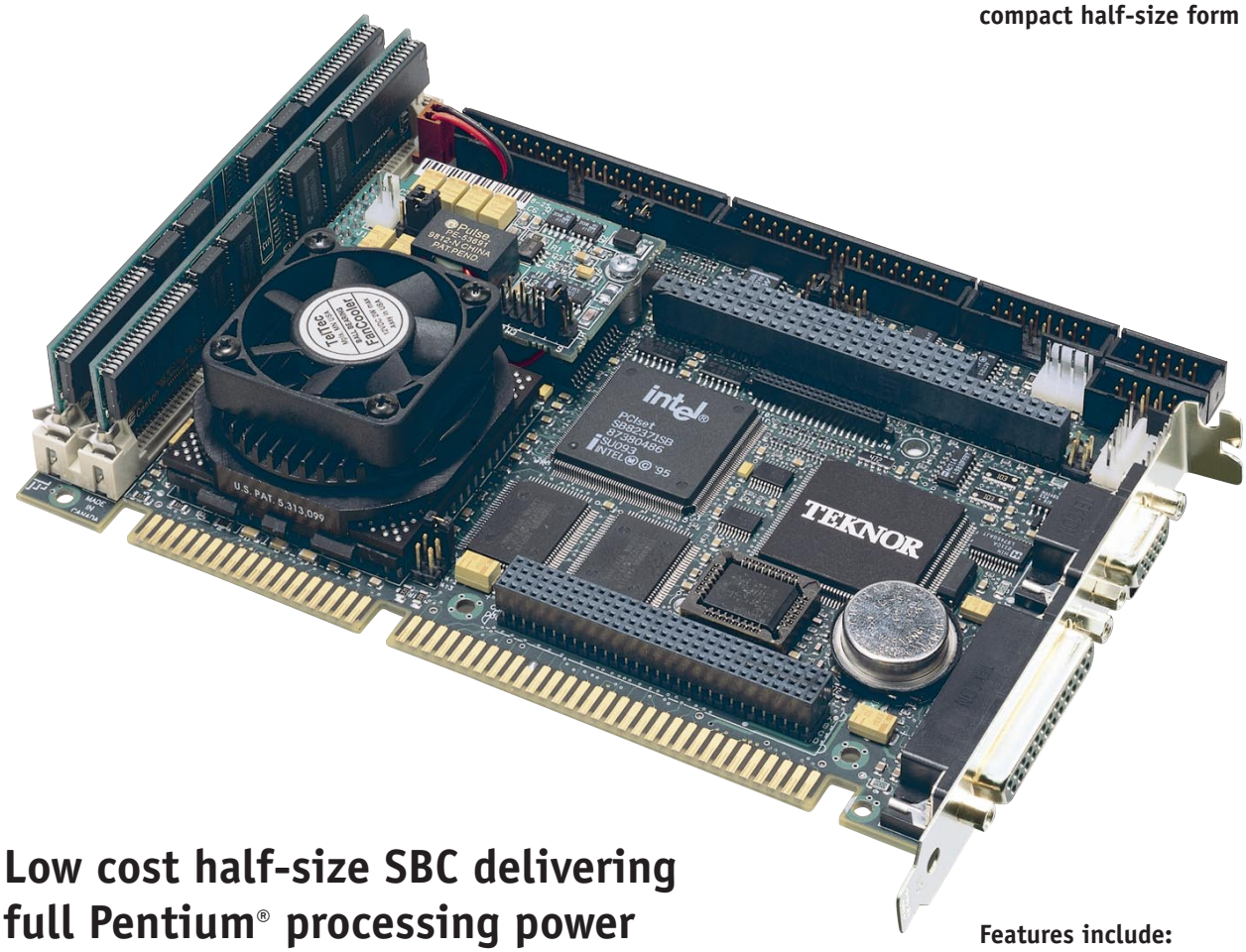
VIPer825

Cost effective Pentium® power

With advanced power management features, the VIPer825 ensures optimal system efficiency and cost effectiveness delivering full processing power in a reliable, compact half-size form factor.



Low cost half-size SBC delivering full Pentium® processing power

The VIPer825 is an entry-level Pentium®-based half-size SBC providing a Pentium® or Pentium® with MMX™ technology processor, 512 KB L2 cache, up to 256 MB memory (parity/non-parity or ECC), PCI EIDE and CompactFlash™ disk support.

It also provides serial/parallel ports, AT keyboard and PS/2 mouse and a floppy disk interface.

The PC/104-Plus expansion header provides access to ISA and PCI bus PC/104 peripheral modules such as LAN and video controllers.

Features include:

- **Pentium® or Pentium® MMX™ processor with 512KB L2 cache**
- **Intel 430HX chipset**
- **Floppy Disk, Serial and Parallel Ports**
- **Up to 256 MB FPM or EDO DRAM**
- **PCI EIDE and CompactFlash™ Disk Support**
- **Advanced Power Management Features**
- **PC/104-Plus, ISA Passive Backplane or Stand-Alone Operation**

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VIPer825- Technical Specifications

CPU
- Pentium® 100, 133 & 166 MHz; Pentium® processor with MMX™ technology 200, 233 MHz
- Intel 430HX chipset

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

Cache
- 8/8 KB Instruction / Data Level 1
- 512 KB external 64-bit wide pipelined burst non-blocking ECC Level 2

Memory
- Two 72-pin latching SIMM sockets, one bank (must fill)
- Up to 256 MB with 1, 2, 4, 8, 16, 32 M x 32/36, FPM or EDO DRAM (parity/non-parity and ECC support) with all 256 MB cacheable

Data Path
- 64-bit on CPU; 32-bit on PCI bus (PC/104-Plus); 16-bit on ISA bus

Interrupts
- 11 edge sensitive and configurable
- 4 PCI level sensitive, configurable to any interrupt vector for PnP compatibility
- All ISA onboard interrupts are PnP compliant

DMA Channels (ISA)
- Four 8-bit, three 16-bit
- Supports scatter / gather, Fast Type-F DMA

Flash Memory
- 2 Mb (256 KB) Boot Block for BIOS field upgrade

I/O
I/O: SMC FDC37C932

USB Ports: Two

Serial Ports: Two RS-232 (16C550) with 16 byte FIFO as COM1-4 with BIOS selectable IRQs and addressing; serial port 2 BIOS configurable as RS-422/485

Parallel Port: One bi-directional with all IEEE 1284 protocols supported and BIOS selectable IRQs and addressing

Floppy Disk: Support for two drives (360 KB to 2.88 MB)

PCI EIDE: Support for two EIDE drives (master/slave configuration); PIO Mode 5, Bus Master IDE

CompactFlash™ Module: Optional bootable CompactFlash™ module interfaces to secondary IDE channel, user upgradeable

Clock / Calendar
- Real-time clock with 256 byte battery backup CMOS RAM

Connectors
Rear I/O Bracket: COM1 (DB-9); parallel port (DB-25)

Headers: Serial ports (two 10-pin shrouded); floppy (34-pin shrouded); EIDE (one 40-pin shrouded); PS/2 mouse (4-pin locking); CPU fan (2-pin locking); PC/104-Plus (120-pin); external power source (6-pin & 5-pin locking); AT keyboard, speaker, reset, EIDE activity LED (16-pin shrouded)

BIOS
- Award Elite BIOS in Boot Block Flash with emergency recovery code; save CMOS in Flash option
- Auto configuration, extended setup; PnP tables
- Setup console redirection to serial port (VT100 mode) with CMOS setup access
- Diskless, keyboardless and videoless operation extensions; system and BIOS shadowing
- Programmable bus and I/O speeds, and memory wait states
- CC00-E000 address blocking
- Advanced Power Management (APM 1.2, SMI/SMM) support with programmable resume by alarm and wake-up events

Supervisory
- Watchdog timer (1.6 sec. typ.)
- Power failure/low battery detector

OS Compatibility
- PC and MS-DOS™; Windows® 3.X; Windows® 95; Windows® 98; Windows® CE, Windows® NT 4.0/5.0; QNX™

Mechanical
- 181 x 122 x 32 mm at CPU / fan (7.125 x 4.80 x 1.25 in. at CPU / fan)
- Conforms to IEEE P996 PC/AT bus & PC/104-Plus Rev 1.0 specifications

Power Requirements

Supply Voltage	Vcc = +5V ±5%		
Pentium MMX:	**200**	**233**	
ICC typ.* +5V	2.34A	2.62A	
+12V	148mA	165mA	
Pentium:	**100**	**133**	**166**
ICC typ.* +5V	1.71A	1.79A	2.05A
+12V	40mA	161mA	111mA

** Measured with 16 MB DRAM, 512 KB cache, keyboard, floppy and hard disk.*

Environmental

	Operating	Storage and Transit
Temperature:	0° to 60°C/32° to 140°F (w/airflow)	-40° to +85°C/-40° to 158°F
Humidity (RNC):	5% to 95% @ 40°C/104°F non-condensing	5% to 95% @ 40°/104°F non-condensing
Altitude:	4,572 m / 15,000 ft	15,240 m / 50,000 ft
Shock:	5 G, each axis	
Vibration:	1.5 G, each axis	

Reliability
- MTBF: >120,000 hours @ 20°C / 68°F (MIL-HDBK-217F)
- Mouse / keyboard voltage protected by self-resetting fuses
- Unique silicon serial number accessible via software
- 2 year limited warranty

Designed to meet or exceed:

Safety: UL 1950; CSA C22.2 No 950; EN 60950; IEC950

EMI/EMC: FCC 47 CFR Part 15/CISPR22; CE Mark to EN55022 / EN50082

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