

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Visit our website - *Click HERE*

VIPer830

Maximum performance Minimal size

The most powerful in the VIPer family, Kontron's high performance VIPer830 SBC combines Intel Pentium III processor capabilities with full-featured functionality onto a half-size board format to enable use of all slots on standard PICMG-compliant passive backplanes.



High performance full-featured SBC

The VIPer830 half-size SBC features a Intel Pentium III processor with on-die 256 KB L2 pipelined burst cache (full CPU core speed, ECC capable). It supports up to 256 MB memory, high performance PCI Ultra DMA/33 IDE and CompactFlash™.

It also comes with a 64-bit AGP SVGA CRT and Flat Panel controller with 2 MB SDRAM.

Onboard support for Universal Serial Bus (USB) ports, serial/parallel ports, and a floppy interface is standard. The PC/104-Plus expansion header provides access to ISA and PCI bus PC/104 peripheral modules such as LAN and video controllers.

The VIPer830 also offers an optional 10Base-T/100Base-TX Ethernet controller, and its feature-set and target applications can be extended by employing the use of Kontron's T8501 PC/104+ mezzanine which adds Ultra-2 SCSI and a second Ethernet port.

These new features enables the VIPer830 to become an ideal engine for a communications appliance.

Features include:

- **Pentium III 600 MHz and Pentium III Low Power - 500 MHz**
- **Celeron™ processor 300, 566 MHz in PPGA370 Package with 128 KB L2 Cache**
- **Intel 440BX AGPset with 66/100 MHz FSB**
- **Up to 256 MB SDRAM/RSDRAM**
- **Ultra DMA/33 IDE (Dual) & CompactFlash™ Disk Support**
- **10/100Base-TX Ethernet support**
- **64-bit AGP CRT and Flat Panel Video with 2 MB SDRAM**
- **PC/104-Plus, ISA Passive Backplane or Stand-Alone Operation**

kontron

VIPer830 - Technical Specifications

CPU
- Intel® Pentium III 600 MHz
- Intel® Pentium III - Low Power 500 MHz
- Celeron™processor 300, 566 MHz in PPGA370 Package
- Celeron™ - Low Power 400 MHz
- Intel 440BX AGP set
- 66/100 MHz system/memory bus

Bus Interface
- Front Side Bus (66/100 MHz)
- AGP bus
- PCI Bus (33 MHz)
- ISA Bus (8.33 MHz)
- PC/AT ISA bus or stand-alone operation
- PC/104-Plus VIPci compatible

Cache
- 16/16 KB Instruction / Data Level 1
- 128/256 KB Advanced Transfer Cache (on-die, full speed L2 cache with ECC)

Memory
- One 168-pin latching DIMM socket, 64/72-bit
- Up to 256 MB with 1, 2, 4, 8, 16 or 32M x 64/72, 66/100 MHz Synchronous
- DRAM / Registered SDRAM non ECC / ECC mode (single bit error correction, double bit detection via Intel 440BX chip set); all 256 MB cacheable

Data Path
- 64-bit CPU bus; 32-bit AGP bus; 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
- 4 KB Serial EEPROM for user configuration

I/O
I/O: SMC FDC37C672 Super I/O
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 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 1.44 MB)
PCI EIDE: Two EIDE drives; PIO Mode 4, Bus Master IDE or Ultra DMA/33
CompactFlash™ Module: Optional bootable CompactFlash™ module interfaces to secondary IDE channel, user upgradeable, master/slave
Ethernet: One PCI 10Base-T/100Base-TX (Intel 82559)

Video
- Integrated Frame Accelerated Graphics Port (AGP) 64-bit CRT/Flat Panel controller with 2 MB 83 MHz SDRAM memory (C&T 69000)
- Supports CRT with resolution up to 800 x 600, 16.8 M colors; 1024 x 768, 64K colors; or 1280 x 1024, 256 colors, non-interlaced

Flat Panel Support
- Supports monochrome & color Plasma, EL, DSTN, SSTN, TFT/CRT panels with resolution up to 800 x 600, 16.8M colors; 1024 x 768, 64K colors; or 1280 x 1024, 256 colors, non-interlaced
- Compatible with CGA, EGA, Hercules, MDA, VGA, SVGA, XGA and SXGA

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

Connectors
Faceplate: CRT (female DB-15 slim); Ethernet (RJ-45 with link/activity indicators); PS/2 mouse and keyboard (two 6-pin mini-DIN)
Headers: USB (10-pin shrouded); serial ports (two 10-pin shrouded); parallel port (26-pin shrouded); floppy (34-pin shrouded); EIDE (one 40-pin shrouded); PS/2 mouse (4-pin locking); flat panel display (50-pin and 20-pin high density shrouded); CompactFlash™ Module header; CPU fan (2-pin locking); PC/104 header (104-pin); PC/104-Plus expansion header (120-pin); external power source (6-pin locking); power-down connector (2-pin locking); external battery (3-pin locking); AT keyboard, speaker, and EIDE activity LED (16-pin shrouded)

BIOS
- Award Elite BIOS in Boot Block Flash with recovery code; save CMOS in Flash option, and boot from LAN capability
- Auto configuration, extended setup
- CC00-E000 address blocking; PnP tables
- Setup console redirection to serial port (VT100 mode) with CMOS setup access
- Software enable/disable of onboard Ethernet
- Diskless, keyboardless, and videoless operation extensions
- System, video and LAN BIOS shadowing
- Programmable bus and I/O speeds, and memory wait states
- Advanced security feature for floppy and HDD; DMI and HDD S.M.A.R.T support
- Advanced Configuration and Power Interface (ACPI 1.0), Advanced Power Management (APM 1.2), advanced thermal management (resume, overheat alarm and auto slow down), and Green support

Supervisory
- Two-stage software programmable watchdog timer drives NMI on 1ststage, system reset on 2nd stage
- Time out from 16 msec to 4.25 min
- CPU temperature monitor/alarm; power failure/low battery detector

OS Compatibility
- PC and MS-DOS™; Windows® 3.X; Windows® 95; Windows® 98;Windows® CE; Windows® NT 4.0, Windows® 2000; QNX™; LINUX

Mechanical
- 181 x 122 x 36 mm at CPU / fan (7.125 x 4.80 x 1.40 in. at CPU / fan)
- Conforms to IEEE P996 PC/AT bus, PCI Rev. 2.1, & PC/104-Plus Rev. 1.0 specifications

Power Requirements

Supply Voltage	Vcc = +5V -5%		
CPU:	**300**	**566**	**500 (PIII LP)**
ICC typ.* +5V	3.69A	3.10A	2.76A
ICC Susp.* +5V	1.64A	1.63A	1.44A

** Measured with 32 MB SDRAM, PCI 10/100Base-TX Ethernet, keyboard, floppy and hard disk installed.*

Environmental

Temperature:	Operating	Storage and Transit
Celeron / PIII	0° to 50°C/32° to 122°F (w/airflow)	-40° to +85°C/-40° to 185°F
Celeron LP	0° to 60°C/32° to 140°F (w/airflow)	-40° to +85°C/-40° to 185°F
PIII LP	0° to 60°C/32° to 140°F (w/airflow)	-40° to +85°C/-40° to 185°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: >75,000 hours @ 20°C / 68°F (MIL-HDBK-217F)
- USB and 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

kontron

www.kontron.com

Corporate Offices

US / Canada
616 Curé-Boivin
Boisbriand (Québec) Canada J7G 2A7
Tel. (450) 437-5682
Fax (450) 437-8053
sales@us.kontron.com

Europe, Middle East and Africa
Oskar-von-Miller-Strafle 1
85386 Eching/Munich Germany
Tel. +49 81-65 77 0
Fax +49 81-65 77 219
sales@de.kontron.com

Asia Pacific
6F, No.9, Lane 235, Pao-Chiao Rd.,
Hsin-Tien, Taipei Hsien, 231 Taiwan
Tel. +886-2-2910 3532
Fax +886-2-2910 3482
sales@tw.kontron.com

VIPer830.3_10/2001 Rep.0_10/2001

The latest version of this document may be found on our web site. Specifications subject to change without notice. Some products may not be available in all regions. Kontron and the Kontron logo are registered trademarks of Kontron Embedded Computers. All other trademarks are the property of their respective owners. Copyright 2001 by Kontron Embedded Computers. All rights reserved.

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP