

Blue Chip  
MAGNUM



Technology

Single Board Computer

# MAGNUM

- Ultra low power 300MHz Celeron or low power 700MHz Pentium® III CPU
- Up to 512MB SDRAM
- SST ATA-Disk Chip and Compact Flash support
- Integrated AGP (x4) S3 Savage for LCD, CRT and PDP
- Hardware Accelerated MPEG2/DVD decoding
- 10/100Base-T Ethernet
- Soundblaster™ compatible Audio
- Integrated hardware monitor
- ATA 100/66/33 EIDEHDD
- PC/104+ (PCI) expansion (optional)
- 16 Digital I/O channels
- 4 USB channels
- Dual FDD
- 2 RS232 Serial ports
- Bi-directional EPP/ECP parallel port
- Real-time clock with on-board battery
- Watchdog timer
- PS/2 Keyboard and Mouse

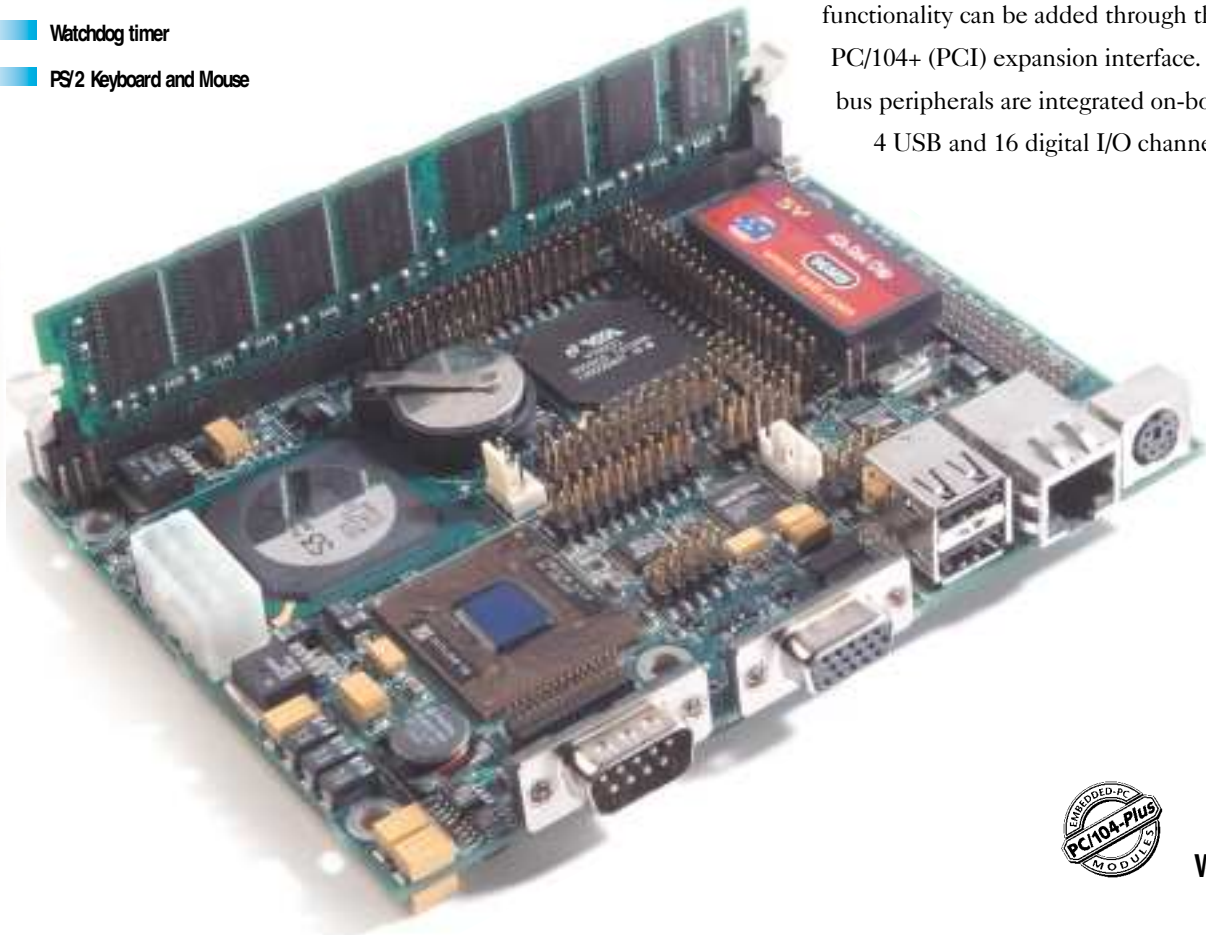
## Pentium® III 3½" format Single Board Computer for High Performance Multimedia Applications

Blue Chip Technology's MAGNUM is a highly integrated Pentium® III based single board computer in a 3½" format. Combining high performance graphics, ethernet and audio, it is an ideal platform for space constrained yet demanding multimedia applications.

Based on the Via PN133T chipset, MAGNUM is available with either a low power Pentium® III 700MHz CPU or an ultra low power 300MHz Celeron, the latter ideal for applications which require both high performance and low power consumption. The Pentium® III CPU includes 256KB L2 Cache and the Celeron option includes 128KB L2 Cache. There are SDRAM options ranging from 16MB to 512MB, and for applications requiring solid state disk, both SST ATA-Disk Chip and Compact Flash are supported.

The integrated S3 Savage 4 AGP (x4) Graphics controller supports a wide variety of CRT, LCD and Plasma resolutions.

Other on-board features include 10/100Base-T Ethernet, Audio and MPEG2/DVD playback. Further functionality can be added through the optional PC/104+ (PCI) expansion interface. Standard ISA bus peripherals are integrated on-board along with 4 USB and 16 digital I/O channels.



**3**  
YEAR  
WARRANTY



# Blue Chip Technology

MAGNUM Single Board Computer

# MAGNUM

Pentium® III 3½" format Single Board Computer for High Performance Multimedia Applications

## TECHNICAL SPECIFICATION

### PROCESSORS SUPPORTED & SPEED

Intel low power BGA CPU  
300MHz Celeron or Pentium® III  
700MHz CPU options

### MAIN CHIP SET

Via PN133T Chipset

### SDRAM

16MB to 512MB via one 168 pin  
DIMM  
Support for parity memory

### CACHE (L2)

128KB integrated in 300MHz  
Celeron  
256KB integrated in 700MHz  
Pentium® III

### FLASH MEMORY

SST ATA Disk Chip  
Compact Flash via EIDE channel

### BIOS

Phoenix BIOS  
Ethernet Boot Rom option  
Customer Splash screen option

### VIDEO

Integrated AGP (x4) S3 Savage 4  
Supports CRT, LCD and PDP 4:3  
Resolutions to 1600 x 1200\*  
3.3V and 5V panel power support  
BIOS set up for LCD panels  
Hardware Accelerated  
MPEG2/DVD decoding  
36 bit LCD interface for DSTN and  
TFT

\* Full list of supported display  
modes available on request.

### ETHERNET

Integrated 10/100Base-T  
Wake On Lan option  
Boot ROM option

### AUDIO

Integrated Soundblaster™  
compatible AC97  
Line In/Out, Microphone and CD  
in

### HARDWARE MONITOR

CPU Core Logic  
3V3, 5V and 12V Voltage Monitors  
2 Fan Monitors  
1 x External Thermister for remote  
thermal monitoring  
CPU On die thermal diode monitor

### HARD DISK

ATA 100/66/33 EIDE HDD  
Dual drives, single connector

### FLOPPY DISK

Floppy Disk Controller for 2 FDD  
to 2.88MB

### DIGITAL I/O

16 Channels

### BUS INTERFACE

PCI Local Bus Interface (version  
2.2 compliant) via PC/104+

### REAL TIME CLOCK

Battery backed via on-board  
Lithium coin cell

### WATCHDOG

Software enabled/disabled

### SERIAL PORTS

2 x RS232

### PARALLEL PORT

1 x Enhanced Bi-Directional  
EPP/ECP

### USB

4 USB Channels Version 1.x Compliant

### KEYBOARD PORT

PS/2 compatible

### MOUSE PORT

PS/2 compatible

### RESET PORT

Via I/O port or reset switch

### PERIPHERALS HEADER

Speaker, reset switch, power switch,  
HDD activity led, suspend switch  
and external battery

### BATTERY

On-board 3 Volt Lithium coin cell  
Supports Real Time Clock and  
CMOS RAM  
Field replaceable

### BOARD DIMENSIONS

146mm x 111mm

### MOUNTING

Via 6 x 3mm holes

### ENVIRONMENTAL

Temperature 0°C to 55°C  
Operational  
-25°C to 85°C Storage  
Non-condensing Relative Humidity  
10% to 90%

### POWER MANAGEMENT

Standby and suspend modes

### SUPPLY VOLTAGE

Reduced ATX Power Connector  
On-board switching regulators for  
low voltage devices

### EMC

Compliant with EN55022 (A) and  
EN50082-2

### OPERATING SYSTEMS

MS-DOS  
Windows 98, ME 2000, NT, XP,  
Windows XP Embedded  
Please call for details of Real Time  
Operating Systems supported

### WARRANTY

3 years

### DEVELOPMENT KITS

MAGNUM pre-installed with  
Operating System, PSU and mains  
cable, Mouse, All interface cables,  
Software and Documentation on  
CD, TFT Flat Panel Display  
(optional), Touchscreen (optional),  
Carrying case.

\* Please call for details of operating  
systems

### CPU OPTIONS

300MHz Celeron  
700MHz Pentium®III



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