EmbATX 400

High performance Pentium 4 platform

- Kontrons Motherboard EmbATX 400 is the optimal solution for performance and graphic driven applications offering improved connectivity



Kontron's high end EmbATX platform based on mobile or desktop Pentium 4 processor

Embedded ATX (EmbATX) is a new embedded motherboard form factor developed to satisfy the needs of applications requiring a motherboard with a constrained height.
Main benefits are the current processor technologies combined with ATX family backwards-compatible rear I/O panel and Low-profile PCI expansion via PCI riser. For seamless integration the Embedded ATX formfactor offers the same dimensions and mounting hole locations as microATX.
Kontron offers an extended lifetime for the EmbATX 400.

Features include:

- Pentium® 4 up to 2.4 GHz (400 or 533 MHz PSB)
- Mobile Pentium® 4 support
- EmbATX size
- ATX-12V Power connector
- PCI-slot
- MiniPCI socket
- Dual Network

kontron
... always a Jump ahead!

EmbATX 400 - Technical Specification

Processor

- Intel® Pentium® 4 up to 2.4 GHz supports 400 or 533 PSB or higher
- Intel® mobile Pentium® 4

L2 Cache (Internal)

- 512KB ECC 64-bit wide

Chipset

- Intel 845E combined with ICH4

Memory

- Up to 2GB DDR-SDRAM support with ECC option

Busses

- 400 or 533MHz system bus, 200 or 266 MHz Memory-interface 33MHz PCI

Interrupts

- 4 PCI level sensitive, configurable to any interrupt vector for PnP compatibility

I/O LPC47M107S, LPC47N227 and ICH4

- Serial Ports: Four RS-232 (16C550) with 16 byte FIFO
- Parallel Port IEEE 1284 support
- Floppy Disk: Up to two drives (360 KB to 2.88 MB)
- EIDE: PCI EIDE Ultra DMA/100, support for four EIDE drives (master/slave configuration)
- USB: Six USB 2.0 ports (2* powered USB)
- Audio: AC97 codec

Ethernet

- First channel 10/100Base-T (Intel 82562 EX)
- Optional second channel 10/100/1000Base-T (Intel 82540 EM)

Video

- Integrated SMI730 AGP 4x 64-bit CRT controller with 8 or 16 MB memory
- Supports CRT and panels up to 1280 x 1024 at 16.8M colors, 1600x1200 at 64K, non-interlaced
- Compatible with CGA, EGA, Hercules, MDA, VGA, SVGA, XGA, and SXGA
- TTL, LVDS or Panellink display-interface

Clock / Calendar

- Real-time clock with 256 byte battery backup CMOS RAM

BIOS

- Phoenix BIOS; save CMOS in Flash option
- Auto configuration, extended setup
- Advanced Configuration and Power Interface (ACPI 1.0)
- USB Legacy and boot support

Interface Rear side

- Audio: Line in, MIC and headphone, Dual Network (RJ45), Printer, Dual COM, Quad USB 2.0 (Dual Powered USB), DVI, TV output (S-Video)

Interface internal

- PCI-Slot and MiniPCI (IIIA), Dual 44 Pin IDE (ATA 100), Amplified Audio and CD-ROM audio, Dual USB 2.0, FDD interface, Additional Dual COM , Aux Connectors: Power- and Reset- button, Power-, Network- and HDD-LED, IRDA header, Chassis and CPU fan, LCD, Photo-sensor, ATX-12V Power-Supply

OS Compatibility

- Windows ® 2000/XP; Linux; others on request

Environmental

	Operating	Storage and Transit
Temperature:	0° to 55° C/32° to 131° F	
Humidity (RNC):	5% to 95% @ 40° C/104° F non-condensing	0% to 95% @ 40° C/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	

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

Mechanical

Corporate Offices

US/Canada
6260 Sequence Drive
San Diego, CA 92121-4371
Phone: +888-294-4558
Fax:+858-677-0898
sales@us.kontron.com

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

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

kontron
... always a Jump ahead!

Our worldwide sales representatives and partners can be found on our websites.

www.kontron.com

Publication Number EmbATX 400 11_07_2002

The latest verson of this document may be found on our web site. Specifications subject to change without notice. Kontron Embedded Computers and the Kontron logo are registered trademarks of Kontron Embedded Computers. All other trademarks are the property of their respective owners. Copyright 2002 by Kontron Embedded Computers. All rights reserved.