

PC104Board DX3

Product overview

The PC104Board DX3 is an industrial CPU module according to the PC/104-Plus standard based on the latest DM&P Vortex86 DX3 Dual core System-on-Chip with core frequencies up to 1GHz.

DM&P Vortex DX3 processor

Ultra low Power x86 Dual Core Processor up to 2x1GHz with up to 2GB soldered DDR3 memory

Legacy interfaces

Native ISA support without a bridge
PATA, PCI, LPT, COM, PS/2 and Fast Ethernet support

Mass storage

SATA, 2x SD Card or PATA for boot devices

Long time availability

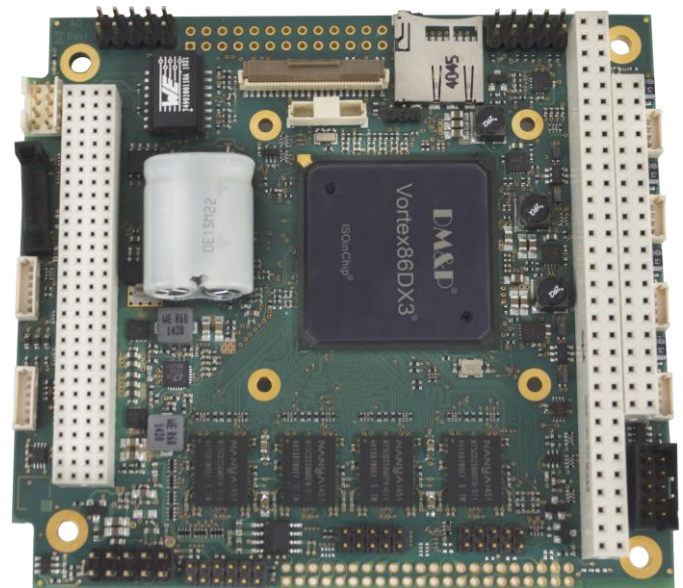
Industrial design with 10 years + long time availability

Dual independent display

VGA and LVDS, resolutions up to 1920x1440

PC/104-Plus standard

Standardized module for a wide compatibility with other PC/104-Plus extensions



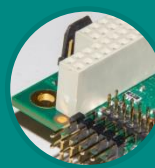
Highlights



Extended operating temperature range



10 years +
Long-term availability



Legacy interfaces:
ISA-Bus, PCI Bus, COM,
PATA and LPT



Wide range software support
due to x86 architecture

Technical information

Processor

- DM&P Vortex86DX3 SOC
- 2x32KB L1 Cache - 512KB L2 Cache
- Dual Core Processor 600 - 1000 MHz

Memory

- 1GB or 2GB DDR3-1600 soldered memory

Graphics

- 2D Graphics engine with Dual Display Support
- VGA Resolutions up to 1920x1440@60Hz
- H.264 1080p Video decode support
- 1x VGA
- 1x Single Channel LVDS 18/24bit up to 1280x768

Interfaces

- 32 Bit PCI Interface @ 33MHz
- Full 8/16 Bit ISA Bus @ 16MHz
- 10/100 Mbit Fast Ethernet
- 4x USB 2.0 Host
- PS/2 Keyboard/Mouse
- LPT (SPP/EPP/ECP Mode Support)
- 2x Serial RS-232
- Connectors for external RTC battery
- 8x GPIO Feature connector
- I²C Master and SPI Master Feature connector

Storage

- 1x μ SD Card socket
- 1x SD pin-header
- 1x SATA 1.5Gpbs
- 1x PATA optional

Optional Interfaces

- PATA alternatively to μ SD and LPT
- Industrial HDAudio Codec with Line In/Out and Mic

Dimensions

- 90mm x 99mm

supported Operating Systems

- Windows 7 SP1 (32Bit)
- Windows Embedded Standard 7 – WES7 (32 Bit)
- WEC7 / CE 6.0
- Embedded Linux (32Bit)
- Windows XP/XPe
- VxWorks 5.5 / 6.8 / 6.9
- DOS

Power

- 5V Single Supply
- Power consumption 5 - 7W
- APM Support (Power / Reset Button)
- Pin-Header for external RTC Battery
- 1F Goldcap or onboard Li-Battery

Operating temperature range

- 20°C up to +70°C
- 40°C up to +70°C on demand

Cooling

- Passive CPU cooling

Name

Order-no.

Description

PC104Board DX3 Migration Kit	B13604-PD3-001-000S	PC/104+ Module with 2x 1GHz, 2GB DDR3, 8GB μ SD Card with Linux pre-installed and Cable Accessory Kit
PC104Board DX3 2GB PCI	B13604-PD3-001-0003	PC/104+, 2x 1000MHz, 2GB DDR3, ISA, PCI, SATA, μ SD, LAN, PS/2, Goldcap, LVDS, Audio
PC104Board DX3 1GB PCI	B13604-PD3-001-0002	PC/104+, 2x 800MHz, 1GB DDR3, ISA, PCI, SATA, μ SD, LAN, PS/2, Goldcap
PC104Board DX3 1GB	B13604-PD3-001-0001	PC/104, 1x 600MHz, 1GB DDR3, ISA, SATA, μ SD, LAN, PS/2, Li-Battery