

PB-Vortex-DX3

DM&P Vortex86-DX3 based PC/104 board
with complete ISA and PCI bus interface



PC/104-Plus™

The PB Vortex DX3 with the dimensions 90x96mm is based on the DM & P Vortex86 DX3 system on chip (SoC). The clock frequency of the Vortex86 DX3 dual core processor is 1GHz. The soldered 2GB (DDR3L, 1333) memory allows the use in rough industrial environment. A complete ISA bus and PCI interface make the PC/104 board an all rounder and a perfect replacement of discontinued x86 based PC/104 boards. Serial bus interfaces are available via SM and I²C. The single 5V voltage power supply AT/ATX mode is via jumper settings. The power consumption TDP is about 6 watts, which allows passive cooling. Dual display via CRT and 18/24bit single channel LVDS is support. The board has 2x Ethernet (10/100 and 10/100/1000 Mbit) ports, one SATA connector for HDD and M.2 socket (2242, Socket for "B key"). Additional interfaces are 4x USB 2.0 and 2x COM, of which COM1 are designed as RS232 and COM2 as RS232/422/485. An absolute highlight is the soldered mass storage with up to 64GB eMMC Flash, as well as an I/O interface GPIO with 4 in & 4 out lines.

Technical Data	
CPU	DM&P Vortex86 DX3 Dual Core
CPU Clock Speed	Up to 1.0 GHz
System Chipset	Integrated SoC
BIOS	AMI® SPI Flash
Memory	2GB DDR3L 1067/1333 on board
Storage	1x SATA III (1.5 Gbit/s) / M.2 Socket (2242 only)
Expansion	1x PCI PC/104™, 1x ISA PC/104™
Serial	2x COM port (COM2 port is RS232/422/485)
Display	1x 18/24bit LVDS
USB	4x USB 2.0
Audio	reserved 26 pin connector
Ethernet	1x GbE (Intel® i211AT) 1x Fast Ethernet
Other	GPIO 4x in & 4x out
Power Input	5V DC (AT/ATX mode by jumper)
Power Consumption	5 – 7 Watt
Operation Temperature	-20°C to +70°C; -40°C to +70°C optional
Storage Temperature	-40°C to +85°C
Relative Humidity	95% @40°C, non-condensing
Dimension	96mm x 90mm PC/104 2.6 spec.

Features

- Vortex86 DX3 energy-efficient 32-bit CPU
- 6W TDP for fanless applications (CPU)
- 2GB DDR3L 1333 onboard
- Dual LAN connector (1 x GbE, 1 x Fast Ethernet)
- 1x M.2 socket (B key)
- 4GB eMMC Flash onboard
- GPIO 4x in & 4x out
- Supports PC/104+ and PC/104 connector

Order Information

Article	Part-No.	Description
PB-VORTEX-DX3	AB1-3G03	PB-Vortex-DX3 04GB eMMC, 1.0GHz, 512KB, 2GB
Accessories	Part-No.	Description
ATX-Power cable	B786T430	ATX Power cable 4x Phoenix
Dual GbE Card	AB9-3349	2x RJ45 1Gb/s & 100Mb/s Board
Dual GbE Cable	B504E710	2x RJ45 1Gb/s & 100Mb/s cable 14cm
SATA Signal cable	B6903690	SATA cable 20cm
SATA PWR cable	B6903720	SATA Power cable 18cm
VGA cable	B6903710	CRT cable 2mm 20 cm
KB/MS connector	B504E670	PS/2 KB/MS cable 18cm
2x typ A jack USB	B504E680	2x Type A Jack USB cable 2mm 24cm
COM1+COM2 Pinheader	B504E690	RS232 cable 2mm 14cm
Audio Daughter board	B4728130	Audio Daughter board & cable 18cm

