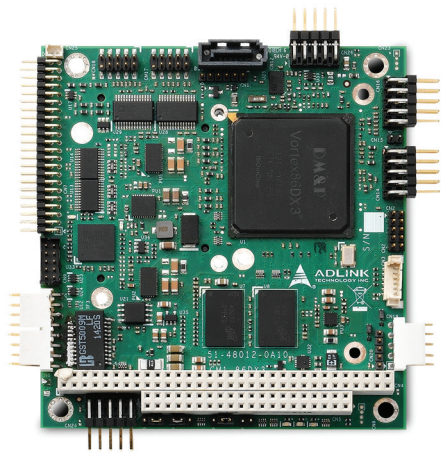


CM1-86DX3

Extreme Rugged™ PC/104 Single Board Computer with Vortex86DX3 System-on-Chip



Features

- Ultra low power, DM&P Vortex86DX3 SoC
- Full ISA bus support
- 2GB soldered DDR3L
- 1x GbE, 1x Fast Ethernet
- SATA, CFast
- VGA and 18/24-bit single channel TTL/TFT
- Supports Smart Embedded Management Agent (SEMA) functions

Specifications

Core System

| | |
|------------------|-----------------------------|
| CPU | Vortex86DX3 SoC, 1.0 GHz |
| Memory | 2GB soldered DDR3L |
| BIOS | AMI BIOS, integrated in SoC |
| SEMA | Yes |
| Hardware Monitor | 2x LAN, watchdog |
| Watchdog Timer | Yes, 3 different |
| Expansion Busses | PC/104 (ISA) |

Video

| | |
|---------------|--------------------------|
| VGA Interface | Yes |
| TTL/TFT | 18/24-bit single channel |

Ethernet

| | |
|----------|--|
| Standard | 1x integrated PHY (10/100 Mbit) 1x Intel® i210IT (10/100/1000 Mbit) |
|----------|--|

I/O Interfaces

| | |
|--------|---|
| USB | 2x USB 2.0 |
| SATA | 1x SATA |
| Serial | 2x RS-232/422/485 serial ports, 2x RS232 serial ports |
| PS2 | Keyboard and mouse |
| GPIO | 8x |

Power

| | |
|-------------------|----------------------|
| Input Power | AT mode (5VDC +/-5%) |
| Power Consumption | Approx. ~ 6 to 7 W |
| Power States | No ACPI |

Operating Systems

| | |
|------------------|------------------------------|
| Standard Support | WES2009, WES7, Linux, QNX |
| Extended Support | WEC7, WinCE 6.0 (on request) |

Mechanical and Environmental

| | |
|-----------------------|--|
| Form Factor | PC/104 Specification 2.6 |
| Dimensions | 96 mm x 90 mm (3.775" x 3.550") |
| Operating Temperature | Standard: 0°C to +60°C |
| Storage Temperature | -55°C to +85°C |
| Cooling | Passive |
| Humidity | 10% to 90% (non-condensing) |
| Shock | Non-operating: 50G peak-to-peak, 11ms duration, MIL-STD-202G Method 213B |
| Vibration | Operating: 11.96 Grms, 50-2000 Hz, each axis, MIL-STD-202G Method 214A |

Ordering Information

Modules

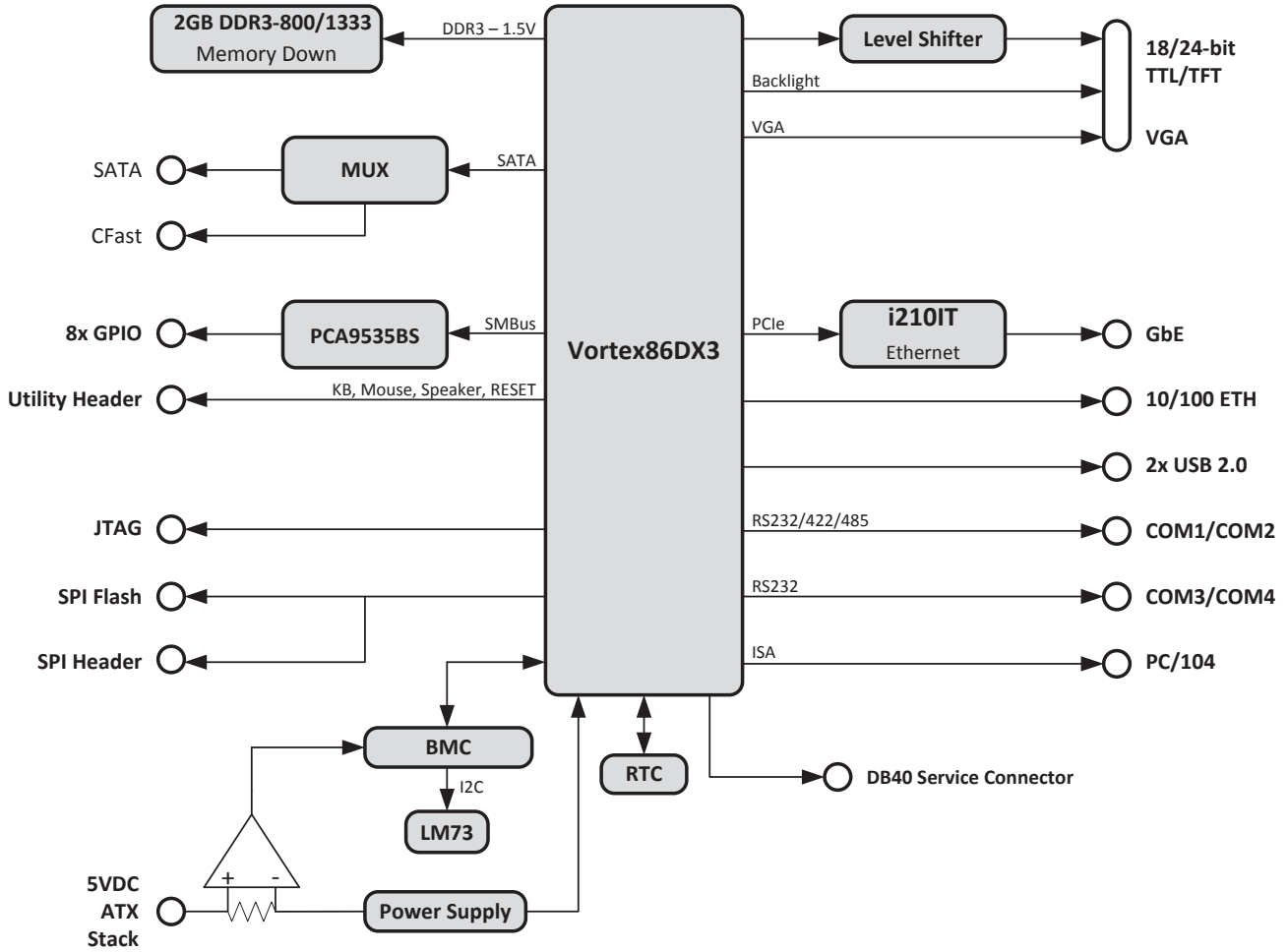
| Model Number | Description/Configuration |
|------------------|--|
| CM1-86DX3 | PC/104 with Vortex 86DX3, 2GB soldered DDR3, 10/100 Ethernet, GbE, CFast socket, TTL LCD and VGA display |

Accessories

| Model Number | Description/Configuration |
|------------------------|-----------------------------|
| CM1-86DX3-X-01 | CM1-86DX3 cable kit |
| CM1-86DX3-TM-10 | CM1-86DX3 Aluminum heatsink |

Functional Diagram

CM1-86DX3



Note: All specifications are subject to change without further notice.