

Cool LiteRunner-86DX PC/104 Single Board Computer with Vortex86DX SoC

PC/104 and PC/104-Plus

NEW



Features

- Vortex86DX SoC with built in redundancy
- 256/512 MB soldered DDR2 RAM
- 100 Mbit LAN
- 4x USB 2.0, 2x RS-232/422/485
- Integrated FPGA (optional)
- Integrated GPS receiver (optional)
- Power consumption: 3.5 to 5.5 W
- Extended temperature range: -40°C +85°C
- Supports Smart Embedded Management Agent (SEMA) functions

Specifications

Core System

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|-----------|---|
| Processor | Vortex86DX SoC |
| BIOS | AMI BIOS, integrated in CPU |
| RAM | Max. 512 MB DDR2 |
| RAM Clock | 333 MHz |
| Speed | Adjustable, 600 to 1000MHz |
| Watchdog | Yes |
| PCI Bus | MiniPCI type 3A slot Standard PC Cards |
| ISA Bus | PC/104 |
| FPGA | Xilinx Spartan-3A with 200K gates, connected to CPU via SPI Usable as master or slave device |
| SEMA | Yes |

Multi I/O and Storage

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|----------|---|
| USB | 4x USB 2.0 host ports |
| Ethernet | 10/100 MBit Integrated PHY |
| Serial | 2x RS-232/422/485 |
| MicroSD | 1 standard slot for micro SD and micro SDHC UDMA-2 mode |
| GPS | uBlox LEA-5H, Galileo-Ready Supports active and passive antennas |
| IDE | 1x UDMA2 (ATA-4, 33 MB/s) IDC44 header |

Power

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|-------------------|--|
| Power Consumption | 3.5 W max. (512 MB RAM) 3.0 W max. (256 MB RAM) |
| Power Supply | 5V only ATX 1.3 compatible |
| RTC Backup | Integrated battery |

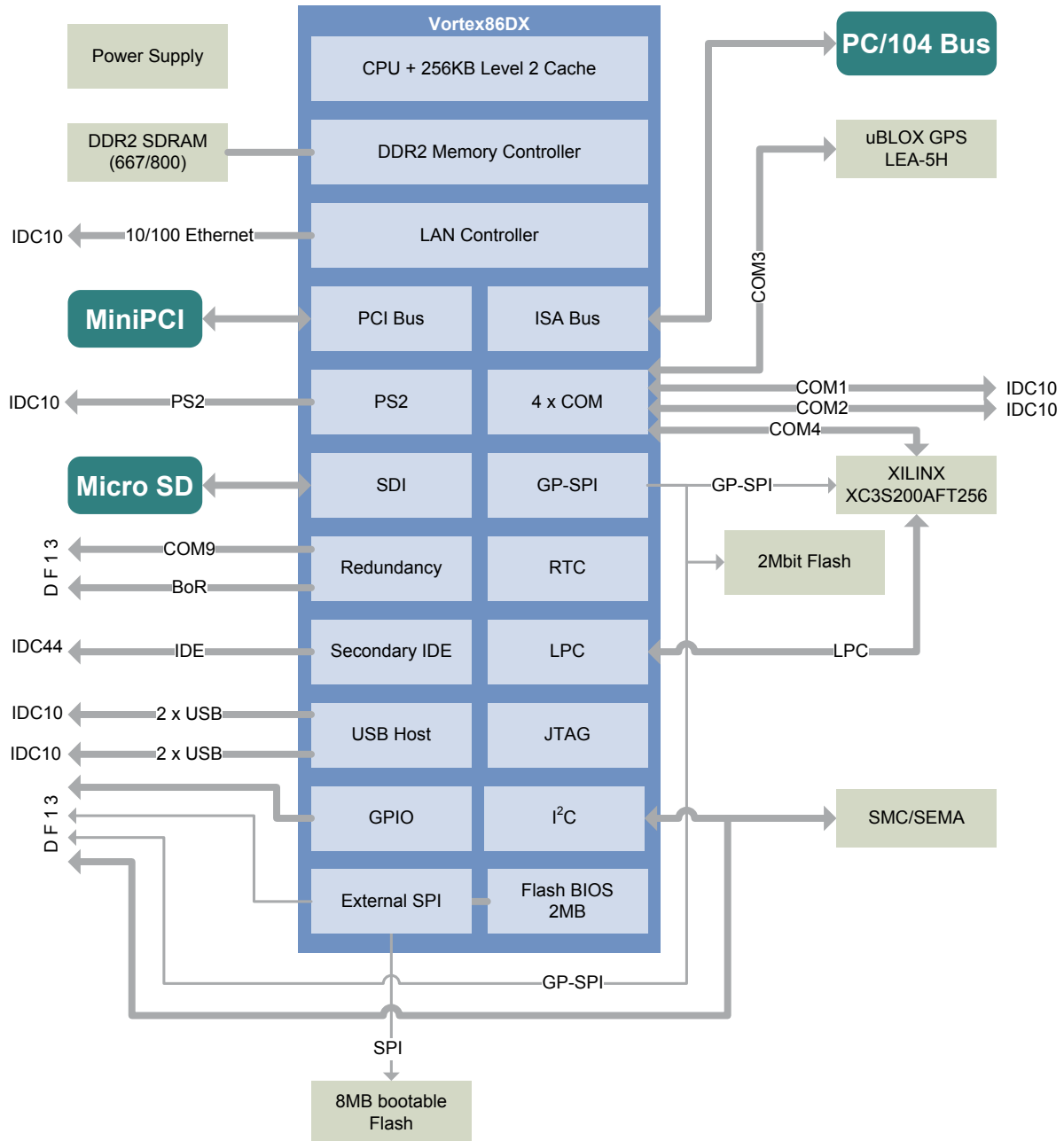
Mechanical and Environmental

| | |
|-----------------------|--|
| Operating Temperature | 0°C to +60°C (Standard all versions) -20°C to +60°C (industrial, all versions) -40°C to +85°C (extended, optional) |
| Storage Temperature | -40°C to +85°C |
| MTBF | 296,665 hours at 25 °C |
| Cooling | None @ 1 GHz & 60°C max. None @ 600 Mhz & 85°C max. Passive @ 1 GHz & 85° max. |
| Dimension | 96 mm x 90 mm (3.775" x 3.550") |
| Status LED | HDD/micro SD, 2x LAN, 3x FPGA, watchdog, 3x SMC, 2x COM |

Operating Systems

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|--------------|---|
| Supported OS | Windows XP, XP Embedded, Windows CE, Linux, DOS |
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Functional Diagram



Ordering Information

Modules

| Model Number | Description/Configuration |
|--------------|--|
| 702-0011-10 | PC/104, CLR-86DX, 0.6-1GHz, 512MB RAM, FPGA, GPS, 0°C to +60°C |
| 802-0011-10 | PC/104, CLR-86DX, 0.6-1GHz, 512MB RAM, FPGA, GPS, -20°C to +60°C |
| 902-0011-10 | PC/104, CLR-86DX, 600MHz, 512MB RAM, FPGA, GPS, -40°C to +85°C |
| 702-0017-10 | PC/104, CLR-86DX, 0.6-1GHz, 512MB RAM, no FPGA, no GPS, 0°C to +60°C |
| 802-0017-10 | PC/104, CLR-86DX, 0.6-1GHz, 512MB RAM, no FPGA, no GPS, -20°C to +60°C |
| 902-0017-10 | PC/104, CLR-86DX, 600MHz, 512MB RAM, no FPGA, no GPS, -40°C to +85°C |

Accessories

| Model Number | Description/Configuration |
|--------------|---------------------------|
| 763-0020-10 | Cable set, CLR-86DX |