

CoreModule® 86DX2 PC/104 Single Board Computer with Vortex86DX2 System-on-Chip

NEW



Features

- Ultra low power, DM&P Vortex86DX2 SoC
- Full ISA bus support with built in redundancy
- 1 GB onboard DDR2 memory
- 2x Ethernet ports
- 8x GPIO
- VGA and 18/24-bit single channel LVDS
- HD Audio
- PCI Express Mini Card and MicroSD slot
- -40°C to +85°C operating temperature range
- Supports Smart Embedded Management Agent (SEMA) functions

Specifications

Core System

CPU	Vortex86DX2 SoC, 800/1000 MHz
Memory	1GB DDR2 soldered on board
BIOS	AMI BIOS, integrated in SoC
SEMA	Yes
Hardware Monitor	2x LAN, watchdog
Watchdog Timer	Yes, 3 different
Expansion Busses	PC/104 (ISA) PCI Express Mini Card slot

Video

VGA Interface	Yes
LVDS Interface	18/24 bit single channel

Audio

Chipset	ALC886
Audio Codec	HD Audio

Ethernet

Chipset	1x Integrated PHY
Speed	10/100 Mbit
Chipset	1x i210IT
Speed	10/100/1000 Mbit

Multi I/O and Storage

USB	4x USB 2.0 host ports (3x I/O header, 1x MiniPCI Express slot)
SATA	SATA 1.0
MicroSD	1x standard slot for micro SD and micro SDHC, UDMA-2 mode
Serial	4x RS-232/RS-485
PS2	Keyboard and mouse
LPT	Yes
GPIO	8 (alternative TTL level COM Port or PWM)
A/D	8x Input

Power

Input Power	5V only
Power Consumption	TBD (estimated ~ 6 to 7 W)
Power States	no ACPI

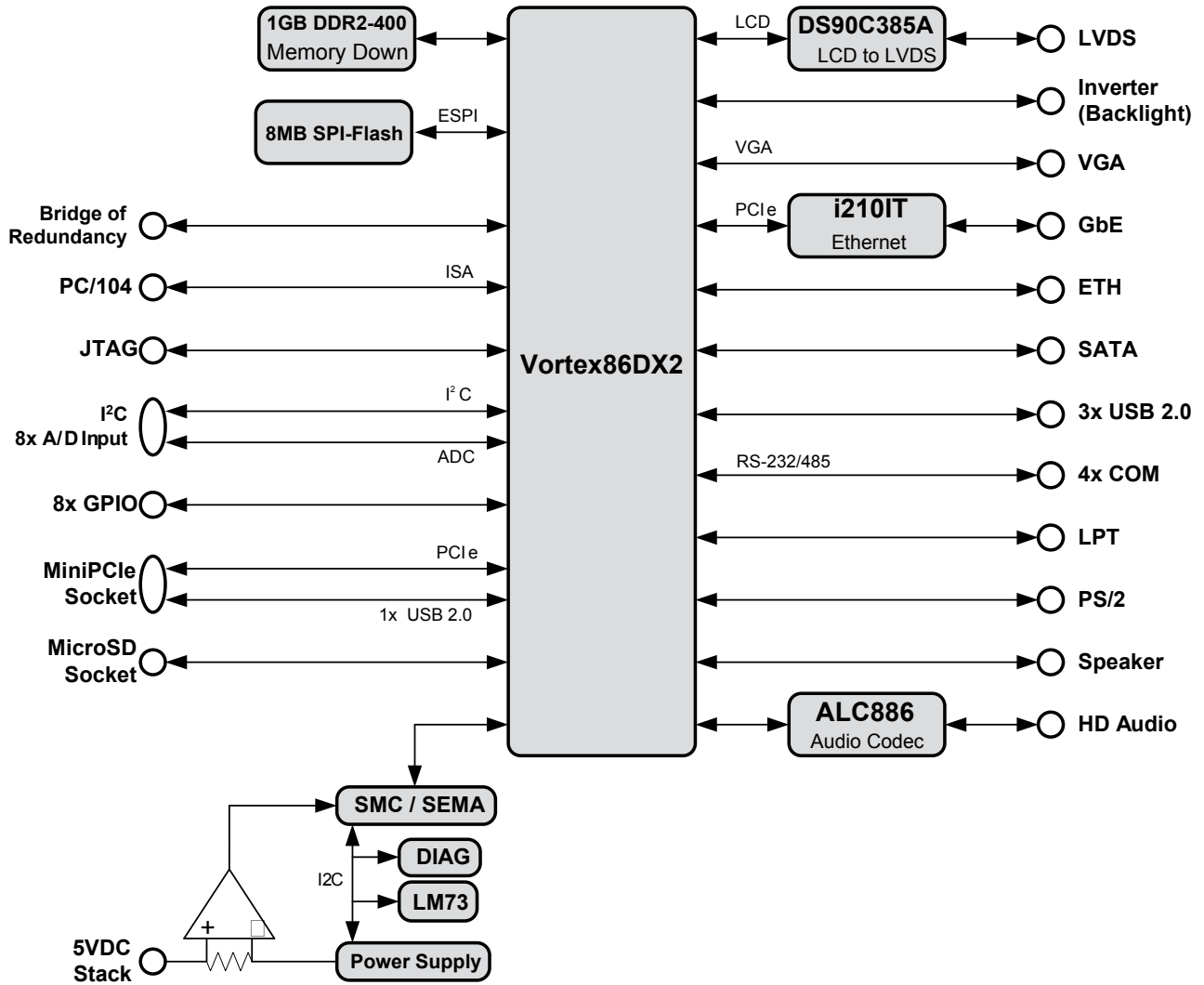
Mechanical and Environmental

Dimensions	96 mm x 90 mm (3.775" x 3.550")
Operating Temperature	Standard: 0°C to 60°C Industrial: -20°C to 70°C Extended: -40°C to 85°C
Storage Temperature	-55°C to 85°C
Cooling	TBD
Humidity	10% to 90% (non-condensing)
Shock	Non-operating: 50G peak-to-peak, 11ms duration, MIL-STD-202G Method 213B
Vibration	Operating: 11.95 Grms, 50-2000 Hz, each axis, MIL-STD-202G Method 214A
MTBF	TBD

Operating Systems

Standard Support	Windows XP, Windows XPe, Win CE 6.0, Linux
------------------	--

Functional Diagram



Ordering Information

Modules

Model Number	Description/Configuration
702-0018-10	PC/104, CM-86DX2, Vortex86DX2, 1GHz, 1GB RAM, 0°C to +60°C
802-0018-10	PC/104, CM-86DX2, Vortex86DX2, 1GHz, 1GB RAM, -20°C to +70°C
902-0018-10	PC/104, CM-86DX2, Vortex86DX2, 800MHz, 1GB RAM, -40°C to +85°C