CM-435

Extreme Rugged™ PC/104 Single Board Computer with low power Vortex86SX/86DX System-on-Chip

CM = CoreModule®

EXTREME RUGGED

Features

- Extreme Rugged™ operating temperature: -40°C to +85°C
- 10/100 Ethernet, Gigabit Ethernet, 3D Video
- 4x Serial, 2x USB, 8x GPIOs
- Ultra Low Power
- 486 migration

Specifications

Core System

CPU	300MHz Vortex86SX or 800MHz Vortex86DX
Cache	16kB I-cache, 16kB D-cache
Memory	256MB soldered DDR2
System Controllers	PC-compatible DMA and interrupt controller and timers
Real Time Clock	Battery-backed RTC/CMOS
Powerfail Reset	Triggers when key voltage drops below predetermined thresholds
BIOS	AMI BIOS
BUS	ISA

I/O Interfaces

PATA	DMA 100 IDE interface supports up to two hard drives
Storage	CompactFlash socket
Serial	2x RS-232, 2x RS-232/422/485
USB	2x USB 2.0 ports
KB/MS	PS/2 interface
GPIO	Eight general-purpose digital I/O pins

Ethernet

Ethernet	1x integrated Vortex86 10/100 port and 1x Intel® 82541PI Gigabit Ethernet

Video

Graphics Engine	Integrated 2D, 64-bit, single-cycle, 100MHz
Resolution	1600 x 768
Video Memory	32/64MB DDR2
VGA	Yes
TTL/TFT	Dual Channel 12-bit or Single Channel 18-bit color depth
	Supports 3.3V, 5V flat panels

Power

Power Requirement	1.3A @5V

Mechanical and Environmental

Form Factor	PC/104
Size	90 x 96 mm (3.6 x 3.8")
Board Thickness	2.36 mm (0.093")
Operating Temperature	(100 LFM system air flow) • Standard: -20°C to +70°C • Extreme Rugged™: -40°C to +85°C
Storage Temperature	-55°C to +85°C

Operating Systems

Extended Support (BSP) Win XPe, WinCE 5.0/6.0, QNX 6.3/6.4/6.5, Linux

Ordering Information

Modules

Model Number	Description/Configuration
CM-435-R-10	CoreModule® 435, 300MHz Vortex CPU, 256MB RAM, Video, 10/100 & Gigabit Ethernet
CM-435-R-12	CoreModule® 435, 800MHz Vortex CPU, 256MB RAM, Video, 10/100 & Gigabit Ethernet

Accessories

Model Number	Description/Configuration
CM-435-L-10	300MHz QuickStart Kit (CM-435-R-10 SBC, cable kit, software, documentation)
CM-435-L-12	800MHz QuickStart Kit (CM-435-R-12 SBC, cable kit, software, documentation)

Recommended Configurations

Model Number	Description/Configuration
CM-435-R-10 (ETT)	CM-435-R-10, -40°C to +85°C (optional)
CM-435-R-12 (ETT)	CM-435-R-12, -40°C to +85°C (optional)

Mouser Electronics

Authorized Distributor

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ADLINK Technology:

CM-720-L-06 CM-435-L-12 CM-435-R-10 CM-435-L-10 CM-435-R-12