

LittleBoard™ 735

Extreme Rugged™ EBX Single Board Computer
with Intel® Atom™ Processor



Features

- Legacy migration solution
- Dual Gigabit Ethernet
- 4x COM, 6x USB, audio
- SATA, IDE, Compact Flash
- PCIe Mini Card socket
- Full-featured Atom™ platform
- Extreme Rugged™ operating temperature: -40°C to +80°C

Specifications

Core System

CPU	Intel® Atom™ Processor N270 1.6GHz
Cache	512KB Level 2
Memory	Up to 2GB DDR2 667 SODIMM
Chipset	Mobile Intel® 945GSE Express Chipset
FSB	533MHz
System Controllers	PC-compatible DMA and interrupt controllers and timers
Real Time Clock	Battery-backed RTC / CMOS
Watchdog Timer	Yes
Powerfail Reset	Triggers when key voltage drops below predetermined threshold
BIOS	AMI with ACPI 2.0
Expansion Buses	PC/104-Plus (PCI and ISA)

I/O Interfaces

PATA	Single Ultra DMA
	CompactFlash socket
SATA	2 devices
	PCIe Mini Card socket
Serial	4 ports, two are RS-232/422/485
Parallel	Floppy shared
USB	6 USB 2.0 ports (7 th available through PCIe Mini Card socket)
Keyboard/Mouse	PS/2 interface
Audio	High Definition Audio
GPIO	Eight general-purpose digital I/O pins

Ethernet

Dual Intel® 82574IT Gigabit Ethernet

Video

Controller	Integrated
	Intel® GMA 950 core
	Dual Channel 18-bit LVDS
	Dual display with independent pipes
	VGA via chipset DACs
	TV-Out

Power

Power Requirements	2.4A @5V (with 2GB RAM, 100% loading)
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Mechanical and Environmental

Form factor	EBX
Dimensions	203 x 146 mm (8.00 x 5.75")
Board Thickness	2.36 mm (0.093")
Operating Temperature	Standard: -20°C to +70°C
(100 LFM system air flow)	Extreme Rugged™: -40°C to +80°C
Storage Temperature	-55°C to +85°C

Operating Systems

Standard Support	Windows XP, Linux
Extended Support (BSP)	Win XPe, WinCE 5.0/6.0, VxWorks 5.5/6.6, QNX 6.3/6.4

Ordering Information

Modules

Model Number	Description/Configuration
LB-735-R-18	LittleBoard™ 735, 1.6 GHz Atom™ N270, PC/104-Plus, Dual Ethernet, SATA, CompactFlash, Video, 0MB DDR RAM, passive heatsink, industrial operating temperature -20°C to +70°C, RoHS
LB-735-P-18	LittleBoard™ 735, 1.6 GHz Atom™ (clockdown to 800MHz) CPU, 0MB DDR RAM, video, Ethernet, passive heatsink, extreme rugged operating temperature -40°C to +80°C
LB-735-F-18	LittleBoard™ 735, 1.6 GHz Atom™ CPU, 0MB RAM, video, Ethernet, heatsink with fan for extreme rugged operating temperature -40°C to +80°C
LB-735-L-18	LittleBoard™ 735, 1.6 GHz QuickStart Kit, R-8 Board with 1GB DDR2 RAM, cables, passive heatsink documentation, software, RoHS

Accessories

Model Number	Description/Configuration
DDR2 Memory	Verified industrial grade 1GB, 2GB DDR2 SODIMM memory available

Recommended Configurations

Model Number	Description/Configuration
LB-735-R-18, 1G, 512MB CF (ETT), (CC)	LB-735-R-18, 1G industrial grade RAM, 512MB CF card installed, -20°C to +70°C (optional), coating (optional)
LB-735-R-18, 2G (ETT), (CC)	LB-735-R-18, 2G industrial grade RAM, -20°C to +70°C (optional), coating (optional)
LB-735-F-18, 2G (ETT)	LB-735-F-18, 2G industrial grade RAM, -20°C to +80°C (optional)

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