

# LittleBoard™ 735

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
- PC/104-Plus expansion
- Full-featured Atom™ platform

## Specifications

### Core System

CPU – Intel® Atom™ Processor N270 1.6GHz  
Cache – 512KB Level 2  
DRAM – 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  
Powerfail Reset – Triggers when key voltage drops below predetermined threshold  
BIOS – AMI with ACPI 2.0

### Bus Interface

PC/104-Plus (PCI and ISA)

### Multi I/O and Storage

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<sup>th</sup> 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)

### Mechanical and Environmental

Size – 203 x 146 mm (8.00 x 5.75"); EBX form factor  
Board Thickness – 0.093" (2.36 mm)  
Operating Temperature (100 LFM system air flow)

- Standard: -20°C to +70°C
- Extended: -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, 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 -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 -40°C to +80°C
LB-735-F-18	LittleBoard™ 735, 1.6 GHz Atom™ CPU, 0MB RAM, video, Ethernet, heatsink with fan for -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