



Features

- Intel® Atom™ Processor N455/D525
- Up to 4GB Single Channel DDR3 SDRAM
- PC/104-Plus expansion
- Intel® 82574IT Gigabit Ethernet, 3 COMs, 4 USB, 4GB SSD onboard
- Integrated graphics DirectX 9 controller at 200MHz
- Single Channel 18-bit LVDS and analog VGA

Specifications

Core System

CPU – Intel® Atom™ N455, 1.66GHz, 6.5 W (1 core/2 threads)
 – Intel® Atom™ D525, 1.8GHz, 13 W (2 cores/4 threads)
 Cache – 1MB, 8-way L2 cache for D525 dual-core processor
 – 512KB, 8-way L2 cache for N455 single-core processor
 Chipset – Intel® ICH8-M I/O Control Hub
 Memory – Up to 2GB DDR3-667 (N455) or up to 4GB DDR3-800 (D525) on single SODIMM (Raw Card-A or Raw Card-B format only)
 FSB – 1066MHz
 BIOS – AMI with CMOS backup in 16Mbit SPI flash with ACPI 2.0
 Hardware Monitor – DC voltages, CPU temperature

Bus Interfaces

PC/104-Plus (ISA and PCI), SMBus, LPC

Multi I/O and Storage

SATA – 2 SATA 3 Gb/s
 Storage – Onboard 4GB industrial grade SSD
 USB – 4 USB 2.0 ports
 Serial – 2 RS-232 & 1 RS-232/422/485
 GPIO – 8

Ethernet

Intel® 82574IT Gigabit Ethernet Controller

Video

Intel® GMA 3150, DirectX 9 compliant Pixel Shader v2.0
 Single Channel 18-bit LVDS
 Analog VGA

Power

Input Power – AT mode (5V DC +/-5%)
 Power States – Supports S0

Mechanical and Environmental

Size – 106 mm x 96 mm, PC/104-Plus form factor
 Board Thickness – 0.093" (2.36 mm thick)
 Operating Temperature

- Standard: -20°C to +70°C
- Extended: -40°C to +85°C

 Storage Temperature: -55°C to +85°C
 Humidity – 90% at 60°C
 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

Operating Systems

Standard Support – Windows 7, Windows XP, Linux
 Extended Support (BSP) – WES 2009, WES 7, WEC 7, WinCE 6.0, VxWorks 6.7/6.9, QNX 6.4
 *Note: Available upon request or contact us for additional software support

Ordering Information Modules

Model Number	Description/Configuration
CM-745-R-27	CoreModule™ 745, Intel® Atom™ SC N455, 1.66GHz, 0MB RAM, 4GB SSD, Video, Gigabit Ethernet, PC/104-Plus
CM-745-R-29	CoreModule™ 745, Intel® Atom™ DC D525, 1.8GHz, 0MB RAM, 4GB SSD, Video, Gigabit Ethernet, PC/104-Plus
CM-745-L-27	1.66GHz QuickStart Kit (R-27 SBC, 1GB RAM, Cable kit, aluminum heatsink Software)
CM-745-L-29	1.8GHz QuickStart Kit (R-29 SBC, 2GB RAM, Cable kit, copper heatsink, Software)

Accessories

Model Number	Description/Configuration
CM-745-X-01	CM-745 cable kit (RoHS)
CM-745-TM-AL	CM-745 Aluminum Heatsink
CM-745-TM-CU	CM-745 Copper Heatsink
CM-745-TM-FAN	CM-745 Aluminum Heatsink with Fan
DDR3 memory	Verified industrial grade 1GB, 2GB, 4GB DDR3 SODIMM memory available