



CM = CoreModule®



### Features

- Intel® Atom™ N455/D525 Processor
- Up to 4GB Single Channel DDR3 SDRAM
- Intel® 82574IT Gigabit Ethernet, 3 COMs, 4 USB, 4GB SSD onboard
- Integrated graphics controller at 200MHz w/ DirectX 9
- Single Channel 18-bit LVDS and analog VGA
- Extreme Rugged™ operating temperature: -40°C to +85°C

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

#### I/O Interfaces

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

Form Factor	PC/104-Plus
Size	116 mm x 96 mm
Board Thickness	2.36mm (0.093")
Operating Temperature	Standard: -20°C to +70°C Extreme Rugged™: -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 6.7/6.8/6.9, 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

### Recommended Configurations

Model Number	Description/Configuration
CM-745-R-27, 1G (ETT), (CC)	CM-745-R-27, 1G industrial grade RAM, -40°C to +85°C (optional), coating (optional)
CM-745-R-27, 2G (ETT), (CC)	CM-745-R-27, 2G industrial grade RAM, -40°C to +85°C (optional), coating (optional)
CM-745-R-29, 1G (ETT)	CM-745-R-29, 1G industrial grade RAM, -40°C to +85°C (optional)
CM-745-R-29, 2G (ETT), (CC)	CM-745-R-29, 2G industrial grade RAM, -40°C to +85°C (optional), coating (optional)
CM-745-R-29, 4G (ETT), (CC)	CM-745-R-29, 4G industrial grade RAM, -40°C to +85°C (optional), coating (optional)