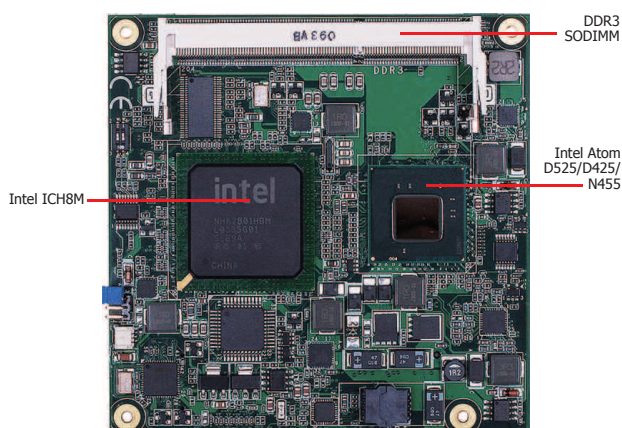
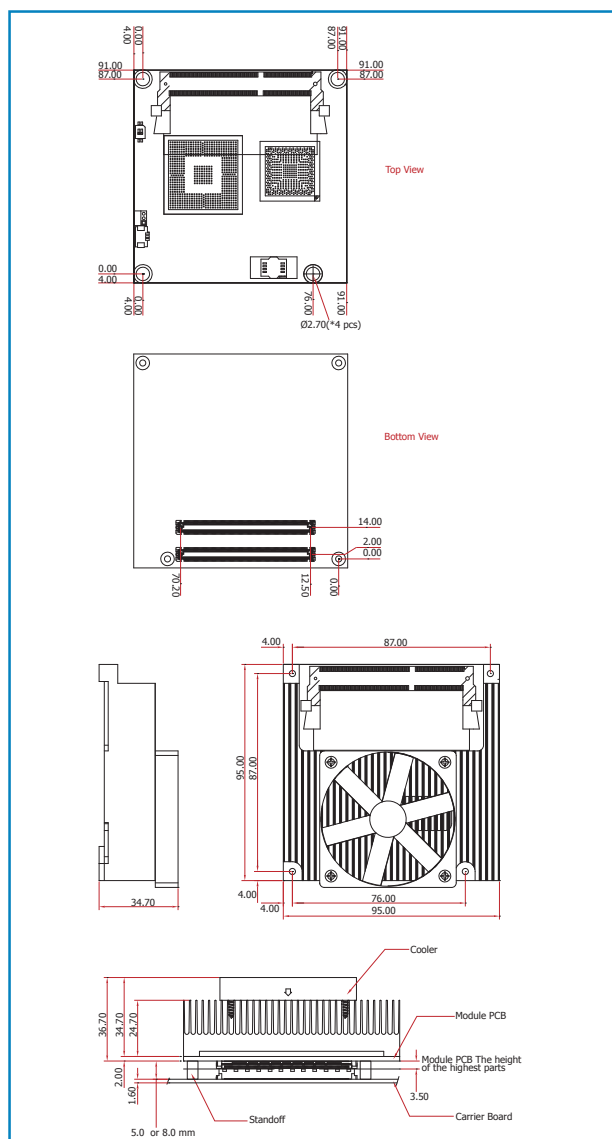




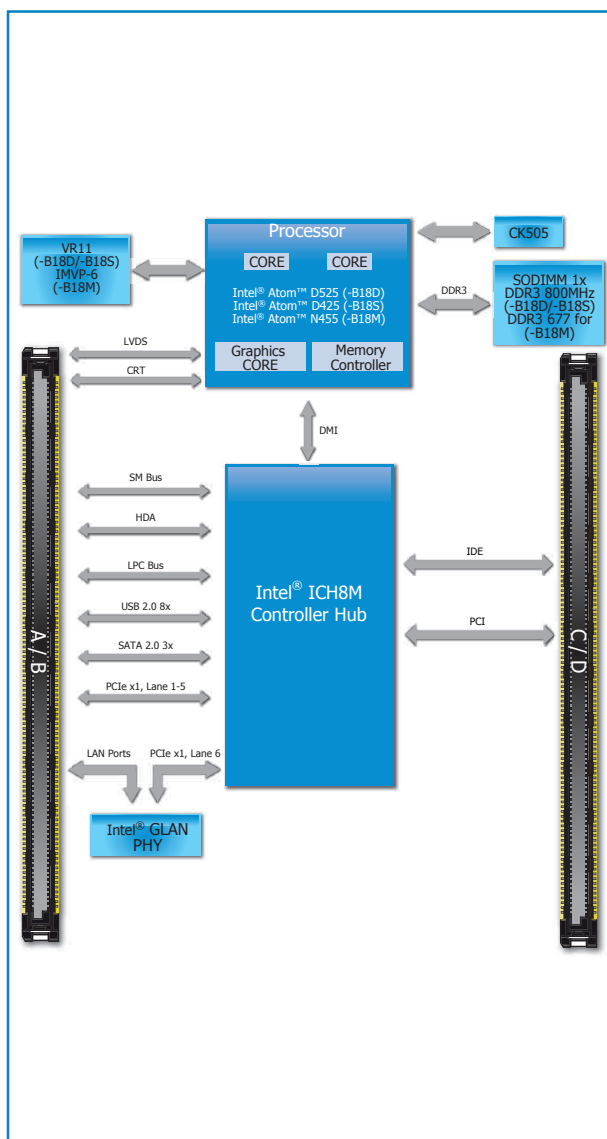
Features

CHIPSET	Intel® ICH8M
CPU	Intel® Atom™ D525 (-B18D) Intel® Atom™ D425 (-B18S) Intel® Atom™ N455 (-B18M)
MEMORY	1 DDR3 SODIMM - 677MHz up to 2GB (-B18M) - 800MHz up to 4GB (-B18D/-B18S)
EXPANSION	5 PCIe x1, 4 PCI 1 LPC, 1 SMBus, 1 IDE 1 VGA, 1 LVDS 8 USB 2.0 3 SATA 2.0 8-bit DIO
LAN	1 Gigabit LAN interface
DIMENSIONS	95mm x 95mm (3.74" x 3.74")

Mechanical Drawing



Block Diagram



LR905-B18D/S/M COM Express® Compact



Specifications

PROCESSOR

- LR905-B18D
 - Intel® Atom™ D525
 - Dual core CPU
 - Cooling option: heat sink with cooling fan
- LR905-B18S
 - Intel® Atom™ D425
 - Single core CPU
 - Cooling option: heat sink with cooling fan
- LR905-B18M
 - Intel® Atom™ N455
 - Single core CPU
 - Cooling option: heat sink (fanless solution)

CHIPSET

- Intel® ICH8M I/O Controller Hub

SYSTEM MEMORY

- One 204-pin DDR3 SODIMM socket
- LR905-B18D/B18S
 - Supports DDR3 800MHz only
 - Supports up to 4GB system memory
- LR905-B18M
 - Supports DDR3 667MHz only
 - Supports up to 2GB system memory

	DDR3	Max. Memory
-B18D	800MHz	4GB
-B18S	800MHz	4GB
-B18M	667MHz	2GB

ONBOARD GRAPHICS FEATURES

- Intel® GMA 3150
 - Contains a refresh of the 3rd generation graphics core
- 400MHz render clock frequency (LR905-B18D/B18S)
200MHz render clock frequency (LR905-B18M)
- Supports VGA display
 - Resolution up to 2048x1536 (LR905-B18D/B18S)
 - Resolution up to 1400x1050 (LR905-B18M)
- Supports LVDS display
 - Resolution up to 1366x768, 18bpp, single channel
- DirectX 9 compliant Pixel Shader 2.0

ONBOARD AUDIO FEATURES

- Supports AC'97/High Definition Audio interface

ONBOARD LAN FEATURES

- Intel® 82567V Gigabit Ethernet Phy
- Supports 10Mbps, 100Mbps and 1Gbps data transmission
- IEEE 802.3 (10/100Mbps) and IEEE 802.3ab (1Gbps) compliant

SERIAL ATA (SATA) INTERFACE

- Supports 3 Serial ATA interfaces compliant with SATA 1.0 specification
- SATA speed up to 3Gb/s (SATA 2.0)

IDE INTERFACE

- Supports up to two IDE devices
- DMA mode: Ultra ATA up to 100MB/s
- PIO mode: up to 16MB/s

CONNECTORS

- COM Express connectors
 - Two 220-pin COM Express 1.0 Type II connectors
 - Module connector pin: Tyco 4H3-1827231-6

EXPANSION INTERFACES (Type II)

- Supports 8 USB 2.0 interfaces
- Supports 5 PCIe x1 interfaces
- Supports 4 PCI interfaces (PCI 2.3 interface)
- Supports LPC (Low Pin Count) interface
- Supports SMBus interface
- Supports 8-bit Digital I/O interface

BIOS

- Award BIOS
- 8Mbit SPI BIOS

ENERGY EFFICIENT DESIGN

- Supports ACPI 2.0/1.0 specification
- Enhanced Intel® SpeedStep Technology

POWER

- Input: 12V, 5VSB (optional), VCC_RTC

POWER CONSUMPTION

- 18.95 W with D525 at 1.80GHz and 1x 1GHz DDR3 SODIMM

TEMPERATURE

- 0°C to 60°C

HUMIDITY

- 10% to 90%

PCB

- Dimensions
 - COM Express® Compact
 - 95mm (3.74") x 95mm (3.74")
- Compliance
 - PICMG COM Express® R1.0, Type 2

CERTIFICATION

- CE
- FCC Class B
- UL
- RoHS

Ordering Information

Model Name	Part Number	Description
LR905-B18D	770-LR9051-000K	Intel® Atom™ D525, dual core
LR905-B18S	770-LR9051-300K	Intel® Atom™ D425, single core
LR905-B18M	770-LR9051-600K	Intel® Atom™ N455, single core

Packing List

- 1 LR905-B18D or 1 LR905-B18S or 1 LR905-B18M board
- 1 QR (Quick Reference)
- 1 Drivers/utilities disk

Optional Items

- COM630-B carrier board kit
- Heat sink with fan: A71-111003-000G
- Heat sink: A71-111004-000G