LR905-B Series
Compact (Micro) COM Express Board

PROCESSOR
- **LR905-B18D**
  - Intel® Atom™ D525
  - Dual core CPU
  - Includes: heat sink with cooling fan
- **LR905-B18S**
  - Intel® Atom™ D425
  - Single core CPU
  - Includes: heat sink with cooling fan
- **LR905-B18M**
  - Intel® Atom™ N455
  - Single core CPU
  - Includes: 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
- DirectX 9 compliant Pixel Shader 2.0

ONBOARD AUDIO FEATURES
- Supports 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

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

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

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 1 Gigabit LAN interface
- Supports LPC (Low Pin Count) interface
- Supports SMBus interface
- Supports 3 SATA 2.0 interfaces
- Supports AC'97/HDA audio interface
- Supports 8 USB 2.0 interfaces
- Supports 5 PCIe x1 interfaces
- Supports LVDS 18-bit single channel interface
- Supports RGB, H-sync/V-sync VGA signals
- Supports 8-bit Digital I/O interface
- Supports 1 IDE interface
- Supports 4 PCI interfaces (PCI 2.3 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, VCC_RTC

TEMPERATURE
- 0ºC to 60ºC

HUMIDITY
- 10% to 90%

PCB
- Dimensions
  - Compact (Micro) COM Express form factor
  - 95mm (3.74") x 95mm (3.74")
- Compliance
  - PICMG COM Express R1.0 basic form factor, Type 2