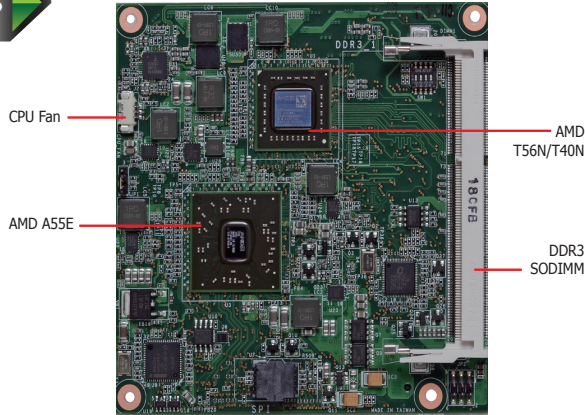




**AMD® Embedded G-Series  
COM Express® Compact**

**OT905-B Series**

**G-Series**

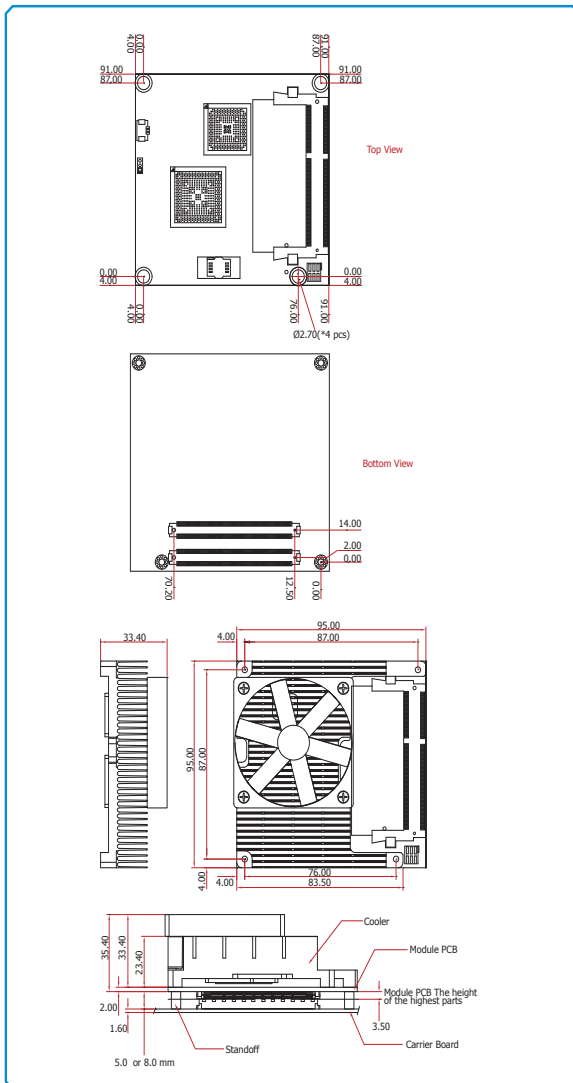


**Features**

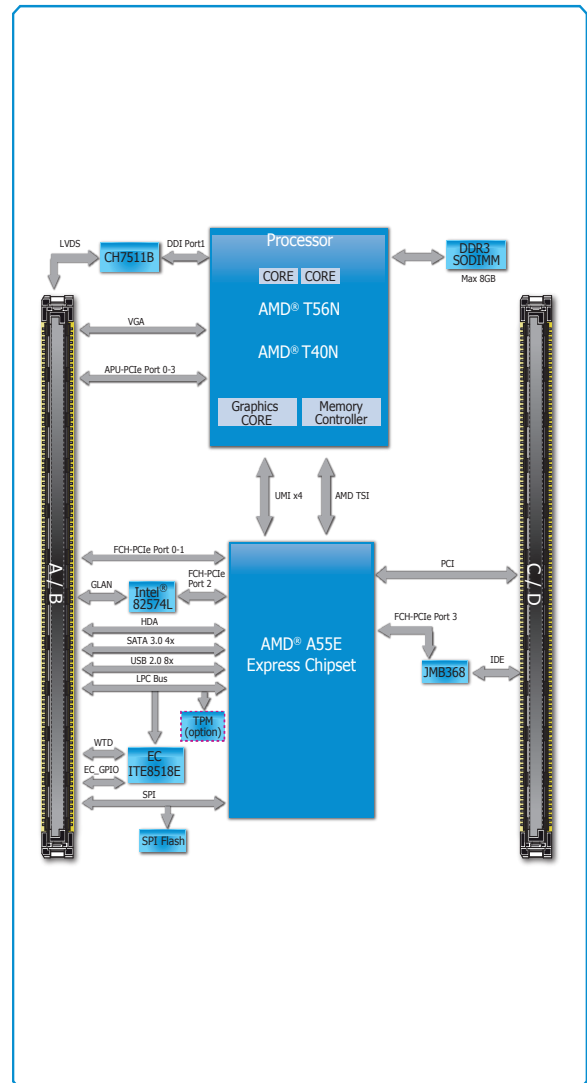
MEMORY	1 DDR3 SODIMM up to 8GB
EXPANSION	6 PCIe x1, 4 PCI 1 LPC, 1 SMBus, 1 IDE 1 VGA, 1 LVDS 8 USB 2.0 4 SATA 3.0 8-bit DIO
LAN	1 LAN
DIMENSIONS	COM Express® R2.0 Compact, Type 2 95mm x 95mm (3.74" x 3.74")



**Mechanical Drawing**



**Block Diagram**





# OT905-B Series

## Specifications

\* Optional and is not supported in standard model. Please contact your sales representative for more information.

### APU (Accelerated Processing Unit)

- OT905-BT56N:
  - AMD® T56N, 1.65GHz, 2x 512KB L2, 18W TDP, dual-core
  - Cooling option: heat sink with cooling fan
- OT905-BT40N:
  - AMD® T40N, 1.0GHz, 2x 512KB L2, 9W TDP, dual-core
  - Cooling option: heat sink with cooling fan

### CHIPSET

- AMD® A55E Controller Hub

### SYSTEM MEMORY

- One 204-pin DDR3 SODIMM socket
- Supports DDR3 1066/1333MHz (OT905-BT56N)
- Supports DDR3 1066MHz (OT905-BT40N)
- Supports single channel memory interface
- Supports up to 8GB system memory
- DRAM device technologies: 1Gb, 2Gb and 4Gb DDR3 DRAM technologies are supported for x8 and x16 devices, unbuffered, non-ECC

### ONBOARD GRAPHICS FEATURES

- Advanced discrete-level GPU integrated in the processor
  - AMD Radeon™ HD 6320 (OT905-BT56N)
  - AMD Radeon™ HD 6290 (OT905-BT40N)
- Supports LVDS and VGA interfaces
- LVDS: Chronitel CH7511B, 24-bit, dual channel, resolution up to 1920x1200 @ 60Hz
- VGA: resolution up to 2048x1536 @ 60Hz (OT905-BT56N); resolution up to 1920x1200 @ 60Hz (OT905-BT40N)
- Supports AMD Turbo Core 2.0 technology
- Supports DirectX 11, OpenGL 3.2 and OpenCL 1.1
- Supports Hardware H.264, MPEG4 Part 2, VC-1, and MPEG2 decode

### ONBOARD AUDIO FEATURES

- Supports High Definition Audio interface

### ONBOARD LAN FEATURES

- Intel® 82574L Gigabit Ethernet Controller
- Integrated 10/100/1000 transceiver
- Fully compliant with IEEE 802.3, IEEE 802.3u, IEEE 802.3ab

### SERIAL ATA (SATA) INTERFACE

- Supports 4 Serial ATA interfaces
- SATA 3.0 with data transfer rate up to 6Gb/s
- Integrated Advanced Host Controller Interface (AHCI) controller
- Supports RAID 0/1/5/10

### IDE INTERFACE

- JMicron JMB368 PCI Express to PATA host controller
- DMA mode: Ultra ATA up to 100MB/s
- PIO mode: up to 16MB/s

### TRUSTED PLATFORM MODULE (TPM)\*

- Provides a Trusted PC for secure transactions
- Provides software license protection, enforcement and password protection

### WATCHDOG TIMER

- Watchdog timeout programmable via software from 1 to 256 seconds

### EXPANSION INTERFACES

- Supports 8 USB 2.0 ports
- Supports 6 PCIe x1 interfaces
- Supports 4 PCI interfaces
- Supports 8-bit Digital I/O
- Supports 1 IDE interface
- Supports LPC interface
- Supports SMBus interface

### DAMAGE FREE INTELLIGENCE

- Monitors CPU temperature and overheat alarm
- Monitors CPU fan speed and failure alarm
- Monitors Vcore/Vnb/1.5V voltages and failure alarm
- Watchdog timer function

### BIOS

- 32Mbit SPI BIOS

### POWER CONSUMPTION

- 17.21 W with T40N at 1.0GHz and 1x 2GB DDR3 SODIMM

### OS SUPPORT

- Windows XP Professional x86 & SP3 (32-bit)
- Windows XP Professional x64 & SP2 (64-bit)
- Windows 7 Ultimate x86 & SP1 (32-bit)
- Windows 7 Ultimate x64 & SP1 (64-bit)

### TEMPERATURE

- Operating: 0°C to 60°C
- Storage: -20°C to 85°C

### HUMIDITY

- 10% to 90%

### POWER INPUT

- 12V, 5VSB, VCC\_RTC (ATX mode)
- 12V, VCC\_RTC (AT mode)

### PCB

- Dimensions
  - COM Express® Compact
  - 95mm (3.74") x 95mm (3.74")
- Compliance
  - PICMG COM Express® R2.0, Type 2

### CERTIFICATION

- CE
- FCC Class B
- RoHS
- UL

## Ordering Information

Model Name	Part Number	Description
OT905-BT56N	770-OT9051-000G	AMD® T56N, 1.65GHz, 18W TDP
OT905-BT40N	770-OT9051-500G	AMD® T40N, 1.00GHz, 9W TDP

## Packing List

- 1 OT905-BT56N/OT905-BT40N board
- 1 DVD
- Heat sink with fan: 761-011004-000G

## Optional Items

- COM330-B carrier board kit: 770-COM330-000G
- Heat spreader: A71-011014-000G
- Heat spreader with heat sink and fan: 761-OT9050-000G

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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