# **GMB-U75**

# **AMD® R-series Multi-display System**



#### **Features**

- All-in-one high performance system
- Built-in micro-ATX Motherboard with AMD Dual/Quad core Processor
- Integrated AMD Radeon<sup>™</sup> HD 7000 series GPU Core and SM750 GPU to support multiple displays
- Supports 2 PCle x16 slots and 1 PCl slot for external feature use
- Comprehensive I/O: 2 x RJ45, 10 x USB (2.0/3.0), 8 x COM, 3 x VGA, 3 x DVI-D, CF and audio











### Introduction

The GMB-U75 is a high performance embedded system that offers the best graphic performance in a long-lived, multi-display solution. Multiple display I/Os can support up to 6 independent display outputs. Comprehensive I/Os support gaming, amusement, signage, kiosk and retail applications.

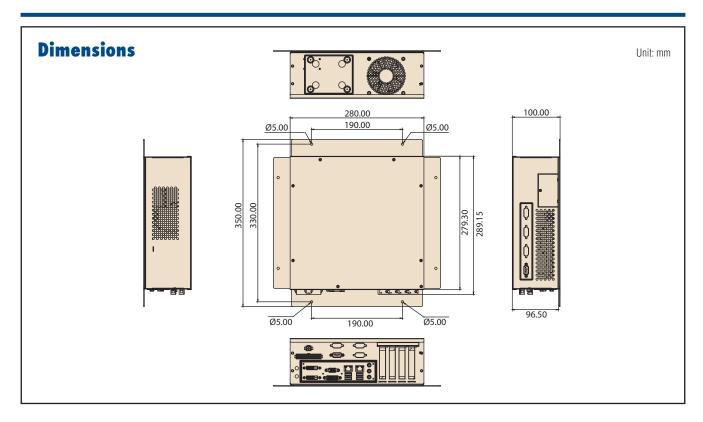
## **Specifications**

| =                         |                        |                                                                                                                |
|---------------------------|------------------------|----------------------------------------------------------------------------------------------------------------|
| Processor System          | CPU                    | AMD R-series Processor<br>R-464L (2.3 GHz QC) / R460H (1.9 GHz QC) / R-272F (2.7 GHz DC) / R-268D (2.5 GHz DC) |
|                           | Chipset                | AMD A75 Controller Hub                                                                                         |
|                           | BIOS                   | AMI 4 MB SPI Flash                                                                                             |
| Memory                    | Technology             | Dual Channel DDR3 1600/1333/1066 MHz (non-ECC support)                                                         |
|                           | Max. Capacity          | Up to 166B                                                                                                     |
|                           | Socket                 | 2 x 240-pin UDIMM                                                                                              |
| Graphics (AMD)            | 2D/3D Engine           | AMD Radeon 7000 series GPU Core, support DX11                                                                  |
|                           |                        | VGA: 1920 x 1200 @ 60 Hz                                                                                       |
|                           | Resolution             | DVI-D: up to 1920 x 1200 @ 60 Hz                                                                               |
|                           | Dual Display           | Independent / Clone Mode                                                                                       |
| Graphics (SMI) (Optional) | 2D Engine              | Silicon Motion SM750                                                                                           |
|                           | VRAM                   | 16 Mb of dedicated DDR memory                                                                                  |
|                           | Resolution             | VGA: 1920 x 1440 @ 60 Hz                                                                                       |
|                           | Dual Display           | VGA + VGA                                                                                                      |
|                           | ' '                    | Support: Direct Draw (2D only), Couldn't support 3D, Direct X & Open VG                                        |
| Ethernet                  | LAN1                   | 10/100/1000 Mbps Realtek 8111E support Wake On LAN                                                             |
|                           | LAN2                   | 10/100/1000 Mbps Realtek 8111E support Wake On LAN                                                             |
| Audio                     | Phone Jack             | Mic-in, Line-in, Line-out                                                                                      |
| SATA Storage              | Max Data Transfer Rate | 600 MB/s (SATA 3.0)                                                                                            |
|                           | HDD/SSD                | Supports one drive bay space for SATA 2.5" HDD/SSD                                                             |
| IDE Storage               | CF                     | Supports Compact Flash Type I/II                                                                               |
| Expansion                 | PCI                    | x 1 Slot                                                                                                       |
|                           | PCIe x1(Gen 2)*        | x 1 Slot (through PCle x16 slot)                                                                               |
|                           | PCIe x8(Gen 2)*        | x 1 Slot (through PCle x16 slot)                                                                               |
| Rear IO                   | VGA                    | х3                                                                                                             |
|                           | DVI-D                  | x3                                                                                                             |
|                           | RJ-45                  | х2                                                                                                             |
|                           | USB2.0                 | х2                                                                                                             |
|                           | USB2.0/3.0             | х2                                                                                                             |
|                           | Audio                  | x 3 (Line out , Line in , Mic in)                                                                              |
|                           | COM                    | x 8 (max.)                                                                                                     |
| Software Support          | Microsoft Windows      | XP Professional, XP Embedded , Win7 , Win7 Embedded                                                            |
| Power                     | Power Type             | ATX 24+4 Pin Power connector with external PSU**                                                               |
| Power Consumption         | Max.***                | < 250 W (Depend on System configuration )                                                                      |
| Mechanical                | Construction           | SECC housing                                                                                                   |
|                           | Mounting               | wall-mounting (optional)                                                                                       |
|                           | Dimensions (W x H x D) | 280 x 280 x 100 (mm)                                                                                           |
|                           | Weight                 | 4kg (8.8 lb)                                                                                                   |
| Environment               | Operating Temperature  | 0~40°C(32~104°F)                                                                                               |
|                           | Storage Temperature    | - 20 ~ 70° C (-4 ~ 158° F)                                                                                     |
|                           | Relative Humidity      | 10 ~ 85% @ 40° C, non-condensing                                                                               |
|                           | EMC                    | CE, FCC, CCC (by request)                                                                                      |
|                           | Safety Certifications  | CB, UL ,CCC(by request)                                                                                        |

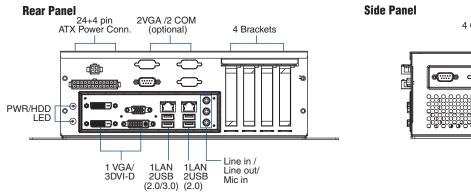
<sup>\*</sup> GMB-u75 could support two PCIe x8 with jumper setting but there will only support 3 display output (2 DVI-D + 1 VGA)

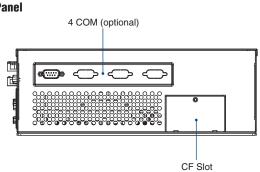
<sup>\*\*</sup> Suggest using Advantech-recommended power supply.

\*\*\* Max power consumption is base on Advantech's test configuration and is subject to change.



# Rear and Side Panel I/O Drawing





# **Design & Manufacturing Services**

ODM products are designed for customers with consistent orders and specific design requirements. ODM products are subject to minimum annual order quantities and engineering charges. Evaluation units are available without such restrictions. Advantech has a dedicated project team to serve ODM customers.

#### For sales inquiries and further information, please contact:

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