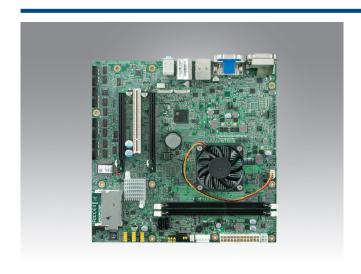
# GMB-A75

#### **AMD® R-series Micro-ATX Motherboard**



#### **Features**

- AMD R-Series dual/quad core platform
- Max. 6 display with micro-ATX single board
- Integrated AMD Radeon™ HD 7000 series GPU for 4 display
- Built-in SM 750 GPU to support extension 2 display
- Extended up to 2 PClex16 slot
- System memory up to 16 GB (DDR3)
- Comprehensive I/O: 2 x RJ45, 10 x USB (2.0/3.0), 8 x COM, 3 x VGA, 3 x DVI-D, CF card, and audio











#### Introduction

The GMB-A75 is a complete AMD embedded platform. The 35W APU is integrated Radeon™ HD 7000 series GPU and support dual/quad core processor. With micro-ATX form factor, GMB-A75 supports 6 displays for flexible output combinations. We also provide 2 PClex16 slot to meet vary extension display requirements. A full feature set of I/O and COMs (maximum 10x USB 2.0/3.0, 8x COM port, and 1x CF slot) is an ideal replacement of your existing solution. GMB-A75 is your best choice of multiple display applications in gaming, amusement, signage, advertisement, kiosk, retail and surveillance markets.

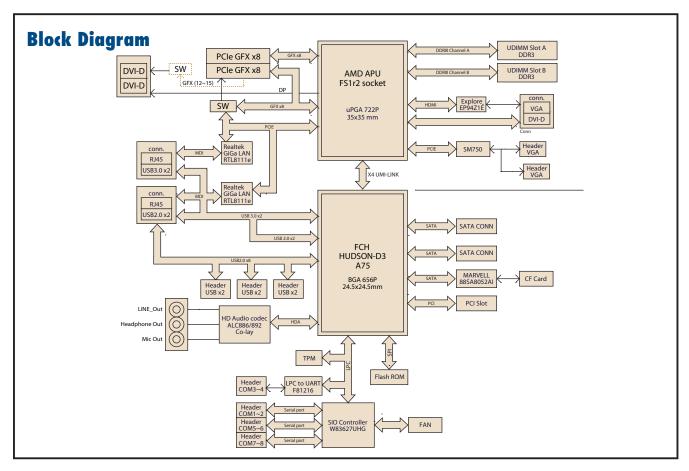
## **Specifications**

APU R-464L R-460H R-272F R-268D 2.3 GHz 1.9 GHz 2.7 GHz 2.5 GHz  Processor System 4 4 2 2 2  Processor System 1.2 Cache 2 MB x2 2 MB x2 1MB 1MB	
12 Cache 2 MB x2 2MB x2 1MR 1MR	
E HID AL LIND AL HID	
Power Consumption TDP 35 W	
Package FS1r2 (PGA)	
Fusion Controller Hub AMD A75	
Technology DDR3 1066/1333/1600 (non-ECC support)	
System Memory Socket 2 x UDIMM 240 pin/dual channel	
Max. Capacity 16 GB (8 GB/per DIMM)	
PCI 1 slot	
Expansion Slot PCle x1 (Gen2)* 1 slot (through PCle x16 slot)	
PCle x8 (Gen2)* 1 slot (through PCle x16 slot)	
Integrated Graphic Controller AMD Radeon™ GPUs (Radeon™ HD 7000 series), support DX11, UVD3	
HW Decoder H.264, VC-1, MPEG-2, DivX	
Integrated 3D Feature Direct X® 11, Open CL ™ 1.1, OpenGL 4.2	
2D/3D Display DVI-D x 3, supports up to 1920 x 1200 @ 60 Hz	
VGA x 1, supports up to 1920 x 1200 @ 60 Hz	
Dual Display Extend and clone mode	
Integrated Graphic Controller Silicon Motion SM750	
128-bit 2D graphic engine	
Extension 2D Display (optional) VGA x 2, from pin header type supports up to 1920 x 1440 @ 60 Hz	
Dual Display Extend and clone mode	
Chip Realtek RTL8111E (LAN1 and LAN2) Gigabit Ethernet controller	
Gigabit Ethernet Interface RJ-45 x 2	
Boot from LAN Yes	
BIOS BIOS Core AMI 4MB SPI	
Security HDD password Yes (optional)	
DVI-D 3 x 24-Pin female D-sub connector	
VGA 1 x 15pin DSUB Connector	
Real I/O USB 2 x Type-A connectors with USB2.0	
2 x Type-A connectors with USB3.0 /USB2.0	
LAN 2 x RJ-45	
Audio Triple STACK HD AUDIO JACK	
COM 8 port, 2 x 10 pin header (2.0 mm)	
USB 6 port, 5 x 2 pin header (2.54 mm) , USB 2.0 support	
SATA 2 x SATA connector (support SATADOM power pin with Jumper) 1 x SATA PWR connector (1 x 5pin; 12 V/5 V/3.3 V)	
PCI-Express 2 PCIe x16 slot	
PCI 1 PCI slot	
Compact Flash 1 CF card connector	

## **Specifications Cont.**

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Power	Power Requirement (max.)	+12 V	+5 V	+3.3 V	5 VSB	
		12 A	10.5 A	12.5 A	1 A	
	Power Type	ATX (supports AT mode)				
	Power Connector	1 x 24-pin ATX Power Connector 1 x 4-pin ATX 12V Power Connector				
	Dimension	244 x 244 mm				
Environment	Operating Temperature	0 ~ 60° C				
	Storage Temperature	-20 ~ 80° C				

<sup>\*</sup>GMB-A75 could support two PCle x8 with Jumper setting but there will only 3 display output available (2 DVI-D + 1 VGA)



# **Ordering Information**

Part Number	Chipset	Memory	Extension Display	DVI-D	VGA	USB	COM	GbE LAN
	A75	Non-ECC	SMI 750	3	3	10	8	2
	A75	Non-ECC	w/o SMI 750	3	1	10	8	2

## **Packing List**

Part Number	Description	Quantity
	COM port Cable	4
	VGA Cable	1
1703150102	SATA power Cable	1
	SATA cable	2
	I/O port bracket	1
	Startup manual	1

## **Optional Accessories**

Part Number	Description
1700002204	Dual port USB cable (27 cm) with bracket
1960055684N00	35W CPU cooler



## **Design & Manufacturing Services**

ODM products are designed for customers with consistent order 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.

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