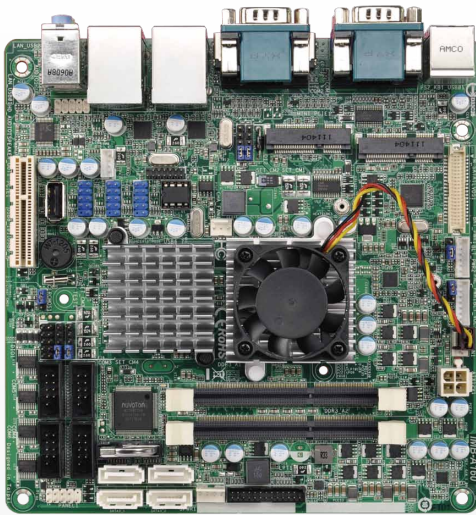


# IMB-A160

Mini-ITX Motherboard



## Spotlight Features

- AMD Embedded G-Series APU T56N/T48E/T40E
- AMD A50M Express Chipset
- Integrated AMD Radeon HD 6320 (T56N)/ HD 6250 (T48E, T40E) Graphics
- Supports DDR3 1333MHz, 2 x SO-DIMM, up to 8GB system memory
- 2 x COM (RS-232/422/485), 4 x COM (RS-232)
- 1 x D-Sub, 1x HDMI, 1 x Dual Channel 24-bit LVDS
- 6 x USB 2.0, 4 x SATA3
- 1 x mini-PCIe, 1 x mSATA, 1 x PCIe x4(x16)
- Gigabit LAN : 2 x Realtek RTL8111E
- 1 x TPM Header

## Specifications

Processor System	
Dimension	Mini-ITX (6.7-in x 6.7-in)
CPU	AMD Embedded G-Series APU T56N/T48E/T40E Supports AMD Virtualization Technology (AMD-V)
Core Number	2
Max Speed	T56N : 1.65GHz (w/ Fan) / T48E : 1.4GHz (w/ Fan) T40E : 1.0GHz (Fanless)
L3 Cache	0
Chipset	AMD A50M
BIOS	UEFI
Expansion Slot	
PCI	0
Mini-PCIe	1 (Half size)
mSATA	1 (with USB 2.0)
PCIe	1 (x4), x16 add on card compliant
CFast Card Socket	0
Memory	
Technology	Single Channel DDR3 1066/1333 MHz SDRAM
Max.	8GB
Socket	2 x SO-DIMM
Graphics	
Controller	T56N : AMD Radeon HD 6320 / T48E : AMD Radeon HD 6250 T40E : AMD Radeon HD 6250
VRAM	Shared Memory
VGA	Supports max resolution 1920 x 1200
LVDS	Supports Dual Channel 24-bit, max resolution 1920 x 1200
HDMI	Supports HDMI 1.3, max resolution 1920 x 1080
DVI	No
Display Port	No
Multi Display	Yes
Ethernet	
Interface	10/100/1000 Mbps
Controller	Realtek RTL8111E
Connector	2 x RJ-45
SATA	
Max Data Transfer Rate	4 x SATA3 (6.0Gb/s)

Rear I/O	
VGA	1
HDMI	1
DVI-I/D	0
Display Port	0
Ethernet	2
USB	6 (USB 2.0 compliant)
Audio	2 (Mic-In, Line-Out)
Serial	2 (RS-232/422/485)
PS/2	1 (Combo)

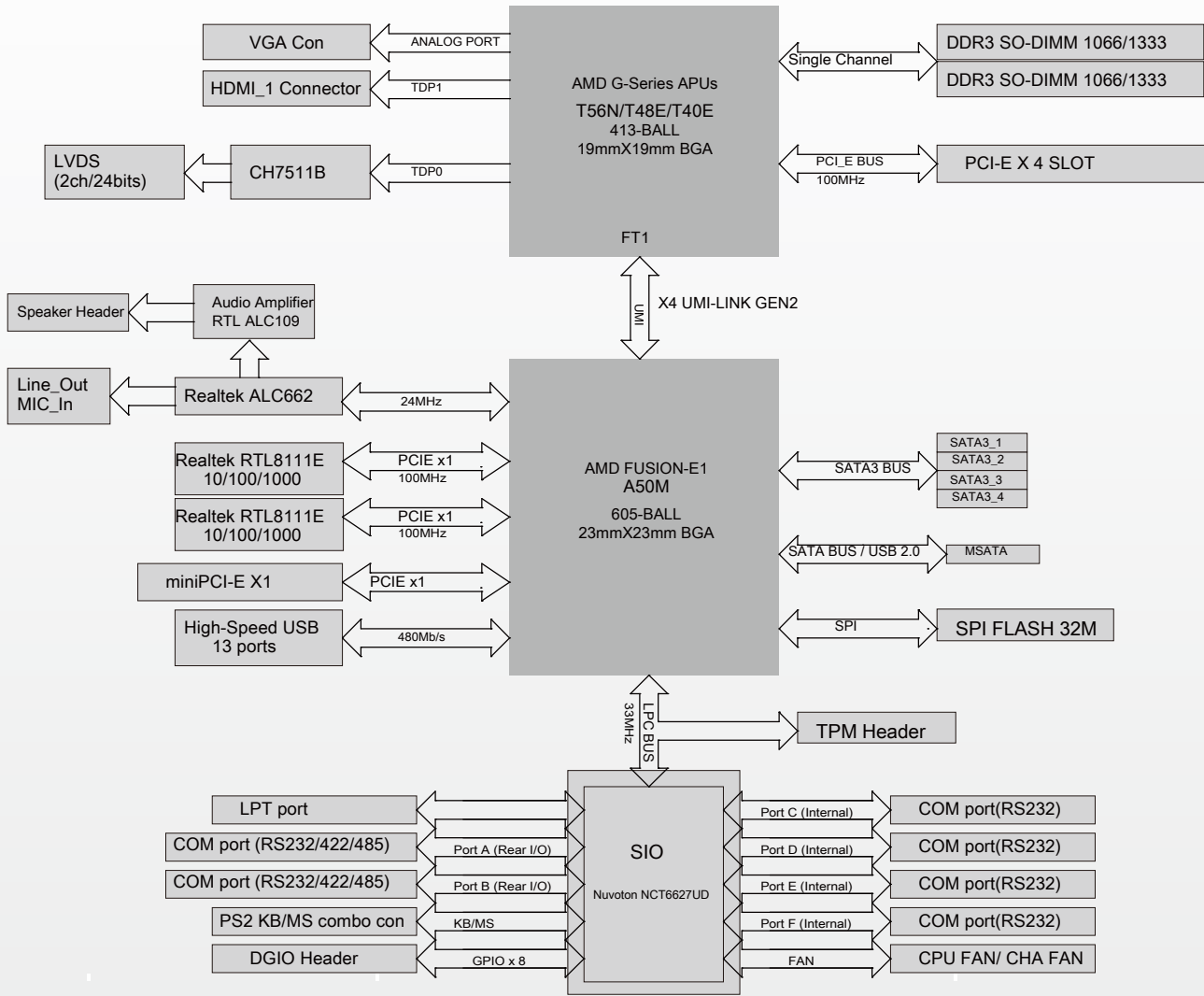
Internal Connector	
USB	6 (USB 2.0 compliant, Header), 1 Vertical Type A USB Connector
LVDS/Inverter	1/1
VGA	0
Serial	4 (RS-232)
SATA	4 x SATA3 (6.0Gb/s)
m-SATA	1
Mini-PCIe	1
Parallel	1
IrDA	0
GPIO	4 x GPI + 4 x GPO
SATA PWR Output Con	1
Speaker Header	1

Watchdog Timer	
Output	Output from super I/O to drag RESETCON#
Interval	256 Segments, 0,1,2...255 Sec/Min

Power Requirements	
Input PWR	12V DC-In (4-pin ATX PWR Con)
Power On	AT/ATX Supported AT : Directly PWR on as power input ready ATX : Press button to PWR on after power input ready

Environment	
Operating Temperature	0°C – 60°C

## Board Diagram



## IPC Motherboards Focused Markets

ASRock IMB solutions can be widely used for industrial applications, such as process control, data acquisition, and so on. IMB-PCs are typically panel mounted and often incorporate touch screens for user interaction.

