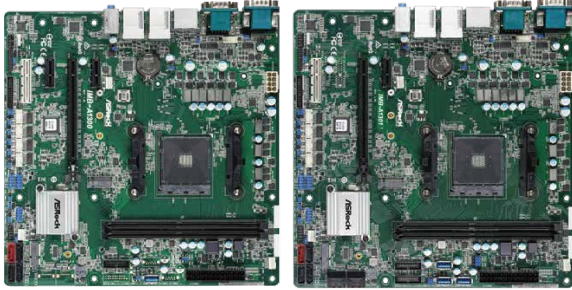


# IMB-A1300 / A1301

Micro-ATX Motherboard



## KEY FEATURES

- AMD Ryzen 7th/5th/3th Gen (Raven Ridge/Matisse) Core™ Processors with B450 chipset (IMB-A1300)
- AMD Ryzen 7th/5th/3th Gen (Raven Ridge/Matisse) Core™ Processors with X470 chipset (IMB-A1301)
- 2 x 288-pin Long-DIMM up to 32GB DDR4 3200 MHz with Matisse (16GB per DIMM)
- 2 x 288-pin Long-DIMM up to 32GB DDR4 2933 MHz with Raven Ridge (16GB per DIMM)
- 1 x PCIe x16 (Gen3), 3 x PCIe x1 (Gen3), 4 x USB 3.1 Gen2, 3 x USB 3.1 Gen1, 6 x USB 2.0, 1 x M.2 Key M, 1 x M.2 Key E, 6 x COM, 4 x SATA3 (IMB-A1300)
- 1 x PCIe x16 (Gen3), 1 x PCIe x1 (Gen3), 1 x PCIe x1 (Gen3), 4 x USB 3.1 Gen2, 7 x USB 3.1 Gen1, 6 x USB 2.0, 1 x M.2 Key M, 1 x M.2 Key E, 6 x COM, 8 x SATA3 (IMB-A1301)
- 2 x Intel 1 Gigabit LAN
- Supports triple display, 2 x DP++ 1.2, 1 x VGA
- TPM 2.0 onboard IC
- Support RAID 0/1/10
- ATX PWR (24+8-pin)

## SPECIFICATIONS

Form Factor	IMB-A1300	IMB-A1301
Dimensions	Micro-ATX (9.6-in x 9.6-in)	

### Processor System

CPU	AMD Ryzen 7th/5th/3th Gen (Raven Ridge/Matisse) Core™ Processors Ryzen 7th:Matisse (3700X,8cores,3.6GHz,65W) Ryzen 5th:Raven Ridge (2400G, QC, 3.6GHz,65W);Matisse (3600,6cores,3.6GHz,65W) Ryzen 3th:Raven Ridge (2200G, QC,3.5GHz,65W)	
Chipset	AMD Promontory B450 (IMB-A1300)	AMD Promontory X470 (IMB-A1301)
Socket	AM4	
BIOS	AMI SPI 256Mbit	

### Memory

Technology	Dual Channel DDR4 3200 MHz (Matisse) Dual Channel DDR4 2933 MHz (Raven Ridge)	
Capacity	32 GB (16 GB per DIMM)	
Socket	2 x 288-pin Long-DIMM	

### Graphics

Controller	AMD Radeon™ HD Vega DirectX 12	
HDMI	N/A	
DisplayPort	DisplayPort 1.2, DP++ Max resolution up to 4096x2160@60Hz	
VGA	Max resolution up to 4096x2160@60Hz	
LVDS	N/A	
eDP	N/A	
DVI	N/A	
MultiDisplay	Triple Display	

### Expansion Slot

PCIe	1 x PCIe x16 (PCIe Gen3 x8 for Raven Ridge);(PCIe Gen3 x16 for Matisse) 3 x PCIe x1 (Gen3)	1 x PCIe x16 (PCIe Gen3 x8 for Raven Ridge);(PCIe Gen3 x16 for Matisse) 1 x PCIe x4 (Gen3) 1 x PCIe x1 (Gen3)
PCI	0	
mini-PCIe	0	
M.2	1 x Key E (2230)with PCIe x1 and USB 2.0 for Wireless	
SIM Socket	N/A	

### Audio

Interface	Realtek ALC887, High Definition Audio. Line-out,Mic-in
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### Ethernet

Controller/ Speed	2 x Intel® I210-AT with 10/100/1000 Mbps
Connector	2 x RJ-45

Rear I/O	IMB-A1300	IMB-A1301
HDMI	N/A	
DisplayPort	2 x DP1.2++	
VGA	1	
DVI	N/A	
Ethernet	2 x 1 Gigabit LAN	
USB	Matisse: 4 x USB 3.1 (Gen2) Raven Ridge: 4 x USB 3.1 (Gen1)	
Audio	3 (Mic-in, Line-in, Line-out)	
COM	2 x COM(RS-232/422/485)	
PS2	1 x PS/2 combo	

### Internal Connector

USB	3 x USB 3.1 (Gen1)(1 x USB 3.1 header, 1 x Type A) 6 x USB 2.0 (3 x 2.54 pitch header)	7 x USB 3.1 (Gen1) (2 x USB 3.1 header, 3 x Type A) 6 x USB 2.0 (3 x 2.54 pitch header)
COM	4 x COM (RS-232)	
Parallel	1 (shared with GPIO)	
GPIO	8 x GPI, 8 x GPO (shared with LPT header)	
TPM	TPM 2.0 onboard IC	
LVDS	N/A	
eDP	N/A	
VGA	N/A	
SATA PWR Output	1	
Speaker Header	1	

### Storage

M.2	1 x Key M (2242/2260/2280)with PCIe x4 and SATA3 for SSD	
mSATA	N/A	
SATA	4 x SATA3 (6Gb/s), SATA3_1 shared with M.2_Key M	8 x SATA3 (6Gb/s), SATA3_1 shared with M.2_Key M
RAID	Support RAID 0/1/10	
eMMC	N/A	

### Watchdog Timer

Output	From Super I/O to drag RESETCON#
Interval	256 Segments, 0, 1, 2, ...,255sec

### Power Requirements

Input PWR	ATX PWR (24+8-pin)
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 Temp	0°C - 60°C
Storage Temp	-40° C - 85° C
Operating Humidity	5% - 90%
Storage Humidity	5% - 90%

## Assured Systems

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