

AMIX-BEGO (WMIX-A77E0)

AMD® A77E based Mini-ITX Motherboard supports
AMD® 2nd Gen AMD® Embedded R-Series APU with
4 HDMI/LVDS, 4 SATA III, 3 COM, 12 USB, Dual Intel® GbE LAN.



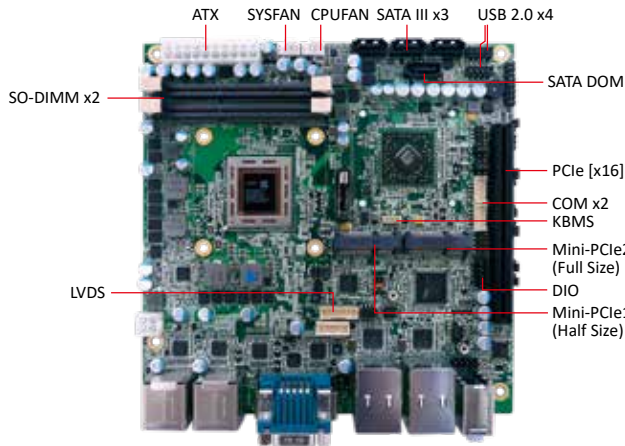
Mini PCIe



Multi Display



HDMI



Key Features

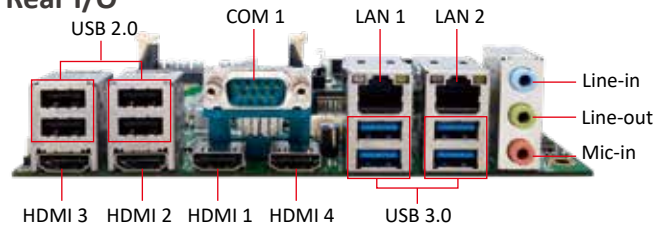
- AMD® 2nd Gen Embedded R-Series APU onboard with AMD® A77E chipset
- Two 204-pin SO-DIMM up to 16GB DDR3 1600/1866/2133MHz SDRAM
- Multi-Display: 4 HDMI/LVDS
- One HDMI port share with LVDS function by jumper
- Two Intel® Gigabit Ethernet ports
- 1 PCIe (x16), 2 Mini-PCIe (1 combo mSATA) expansion slots
- 4 SATA III, 3 COM, 4 USB 3.0 and 8 USB 2.0
- Supports 4K/2K Resolution Display
- EuP/ErP 2013 Ready, support TPM v1.2/v2.0 (optional)

Product Specification

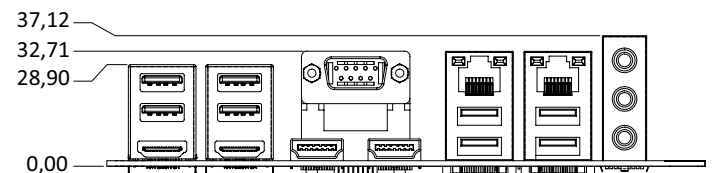
System Processor/Chipset	
Processor	AMD® 2 nd Gen Embedded R-Series APU onboard RX-427BB (3.6GHz/2.7GHz, QC, 8CU, 35W) RX-425BB (3.4GHz/2.5GHz, QC, 6CU, 35W) RX-225FB (3.0GHz/2.2GHz, DC, 3CU, 17W)
Chipset	AMD® A77E FCH
BIOS	AMI SPI Flash ROM
Memory	
Technology	DDR3 SDRAM up to 2133 MHz (RX-427BB) DDR3 SDRAM up to 1866 MHz (RX-425BB) DDR3 SDRAM up to 1600 MHz (RX-225FB)
Max. capacity	Up to 16GB
Socket	2 x 204-pin SO-DIMM
Display	
Graphics	AMD® Radeon HD 9000
Display interface	4 x HDMI v1.4, 2 x LVDS (Dual channel 18/24-bit)
Multi-display	Up to four independent displays
Resolution	HDMI: 4096 x 2160 @ 24Hz (max) LVDS: 1920 x 1200 @ 60Hz (max)
Ethernet	
Interface	10/100/1000 Mbps
Controller	Intel® I210 GbE
Connector	2 x RJ45 (rear I/O)
Audio	
Interface	Line-in, Line-out, Mic-in
CODEC	Realtek ALC662 HD Audio Codec
Expansion Slot	
PCI Express	1 x PCIe (x16)
Mini-PCIe	1 x Half size, 1 x Full size (combo mSATA)
SATA	
Max. data transfer rate	6.0Gb/s
Port	4 x SATA III (1 support SATADOM)
I/O	
Audio	Line-in, Line-out, Mic-in (rear I/O)
USB	4 x USB 3.0 (rear I/O) 8 x USB 2.0 (4x rear I/O, 4x pin-header)
COM	2 x RS-232 (box-header) 1 x RS-232/422/485 (rear I/O) All ports with 5V/12V by Jumper selection
HDMI/VGA/DVI/DP/LVDS	4 x HDMI (rear I/O) 1 x LVDS share HDMI by jumper (box-header)
DIO	1 x 4-in / 4-out Digital I/O (pin-header)
SMBus	1 x SMBus (pin-header)
PS/2	1 x PS/2 Keyboard and Mouse (box-header)
Other	
TPM	Infineon TPM v1.2 (optional) / TPM v2.0 (optional)
Power Requirement	

Power connector	1 x ATX 2x10-pin 1 x ATX (+12V 2x2-pin)
Power type	ATX (20-pin+ 4-pin)
Power mode	AT / ATX (by jumper selection)
Watchdog Timer	
Interval	Programmable 1 ~ 255 sec/min
Output	System reset
Environment	
Operating temperature	0°C ~ 60°C (32°F ~ 140°F) standard -20°C ~ 70°C (-4°F ~ 158°F) optional -40°C ~ 70°C (-40°F ~ 158°F) optional
Storage temperature	-40°C ~ 80°C (-40°F ~ 176°F)
Relative humidity	0% ~ 95% (non-condensing)
Form Factor	
Dimensions (L x W)	Mini-ITX 170mm x 170mm (6.69" x 6.69")

Rear I/O



Dimensions



Ordering Information

Part Number	Description
AMIX-BEGO-427B (MOQ)	Mini-ITX, AMD RX-427BB 35W, 4HDMI/LVDS, 4SATA/3COM/12USB/2LAN, ATX2x10P
AMIX-BEGO-425B (MOQ)	Mini-ITX, AMD RX-425BB 35W, 4HDMI/LVDS, 4SATA/3COM/12USB/2LAN, ATX2x10P
AMIX-BEGO-225F (MOQ)	Mini-ITX, AMD RX-225FB 17W, 4HDMI/LVDS, 4SATA/3COM/12USB/2LAN, ATX2x10P

Optional Accessories

Part Number	Description
NABB002000AO	I/O shield
VK00000700A9	SATA cable
NAAA000400AK	Cooler w/ FAN for BGA1364/FP3