



## Features

- Supports AMD R/G-series APU on board, up to 3.4GHz
- 2x DDR4 SO-DIMM, Max. 32GB support ECC
- 2x PCI-E Gigabit LAN
- 1x HDMI, 1x DisplayPort & 24-bit dual channel LVDS or eDP
- Watchdog timer, Digital I/O, iSMART
- 2x SATA III, 2x USB 3.0, 4x USB 2.0, 6x COM, 1x mSATA
- 1x PCI-E(x8), 1x Mini PCI-E, 1x M.2 (B-key)
- 1x SIM card slot

## System

CPU	AMD R/G-series APU on board, up to 3.4GHz
System Memory	2x DDR4 SO-DIMM Max. 32GB, supports ECC (R-series) 1x DDR4 SO-DIMM Max. 16GB, (G-series)
System Chipset	N/A
BIOS	AMI
Watchdog Timer	256 levels
SSD	1x mSATA (via Mini PCI-E)
H/W Monitor	Yes
Expansion Slot	1x PCI-E (x8), 1x Mini PCI-E, 1x M.2

## Graphics

VGA Controller	AMD R/G-series APU built-in Radeon HD9000 series graphics core
VGA Memory	Shared memory
Display Interface	HDMI, DisplayPort & 24-bit dual channel LVDS or eDP

## LAN

Controller	2x Intel I211-AT Gigabit LAN
Connector	RJ-45 on board

## Multi I/O

I/O Chipset	Nuvoton NCT6116D 1x RS232/422/485( jumperless selection) 5x RS232, 2x SATA III (6.0Gb/sec.)
USB	2 ports (USB 3.0) + 2 ports (USB 2.0) on board 2 ports via pin header (USB 2.0)
Audio	Built-in HD audio w/ ALC662 codec for 5.1 channel
Others	Digital I/O (4-in/4-out), iSMART, SIM card slot

## Mechanical and Environmental

Dimensions	170mm x 170mm (6.7" x 6.7")
Max. Power Requirement	TBD
Operating Temperature	0°C~60°C (32°F~140°F)
Storage Temperature	-20°C~80°C (-4°F~176°F)
Relative Humidity	90% (non-condensing @60°C)

## Ordering Information

MI979MF-421	AMD RX-421BD APU on board (2.1GHz/3.4GHz) Mini-ITX motherboard w/ HDMI + DP & LVDS or eDP, dual Gigabit LAN, iSMART, ATX
MI979MF-421D	AMD RX-421BD APU on board (2.1GHz/3.4GHz) Mini-ITX motherboard w/ HDMI + DP & LVDS or eDP, dual Gigabit LAN, iSMART, DC-in (12V~24V)
MI979BF-217	AMD GX-217GI APU on board (1.7GHz/2.0GHz) Mini-ITX motherboard w/ HDMI + DP, dual Gigabit LAN, iSMART, ATX

## Dimensions and Drawing

