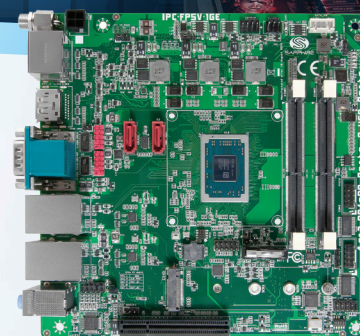


SAPPHIRE IPC-FP5R Embedded 10GbE Mini-ITX Platform

AMD Ryzen™ Embedded R1000 APU Three 4K displays

The new SAPHIRE IPC-FP5R Mini-ITX embedded motherboard is based on the latest AMD Ryzen™ Embedded R-Series Family APUs which features the industry leading Vega GPU graphics combined with the dual-core high-performance “Zen” CPU. Three independent 4K DP++ displays are supported in addition to dual-channel DDR4-2400 SODIMM memory, dual 1 or 10 Gigabit Ethernet controllers, and M.2 expansion for SSD modules. The SAPHIRE IPC-FP5R is an ideal solution for applications requiring a high speed communications front end like a min-server or high resolution display products like electronic gaming machines, medical imaging, interactive digital signage, thin clients, or POS terminals.



AMD Ryzen™ Embedded Processors

- ◆ “Zen” Architecture with 14nm FinFET
- ◆ Dual CPU cores / four threads
- ◆ Vega GPU up to 3 Compute Units
- ◆ Dual-channel DDR4 up to 2400 MT/s with ECC

Sapphire IPC-FP5R Platform Features

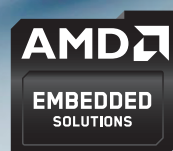
- ◆ Up to three DisplayPort 1.4 Displays
- ◆ Dual 10 Gigabit Ethernet ports (IPC-FP5R-10GE)
- ◆ Dual 1 Gigabit Ethernet ports (IPC-FP5R-1GE)
- ◆ Two COM ports (RS232/422/485)
- ◆ ALC662 HD 5.1 Channel Audio
- ◆ Four USB2.0 Headers
- ◆ Two USB3.1 ports
- ◆ Two USB2.0 ports
- ◆ 12V DC power input
- ◆ TPM 2.0 support
- ◆ Active APU cooler included

Expansion Slots

- ◆ M.2 2242/2260/2280 M Key slot (PCIe x 2 or SATA III)
- ◆ PCIe x 4 slot



| Model | | IPC-FP5R-10GE | IPC-FP5R-1GE |
|------------------------------|-----------------|--|----------------|
| CPU | | AMD Ryzen™ Embedded R1000 series APU | |
| System Memory | | DDR4 SO-DIMM, supports ECC | |
| | | 2x DDR4-Up to 2400, Max. 32GB | |
| External I/O Edge Connectors | Displays | 3 x DP++, 1 x eDP (Shared with 1 DP) | |
| | Ethernet | 2 x 10GbE RJ-45 | 2 x 1GbE RJ-45 |
| | COM | 2 x RS232/422/485 | |
| | Audio | 1 x Line-In, 1 x Line-Out, 1 x Mic-In | |
| | | Built-in HD audio w/ALC662 codec for 5.1 channel | |
| Internal I/O Headers | USB | 2 x USB3.1 Gen2, 2 x USB2.0 | |
| | USB | 4 x USB2.0 | |
| | COM | 2 x RS232(Jumperless) | |
| | GPIO | 5 x 2 pins | |
| Security | Front Panel | 5 x 2 pins | |
| | TPM | Infineon SLB9670 TPM2.0 on board | |
| Power | Chassis | Intrusion Alert | |
| | Power | DC 12V, 150W, Power Jack | |
| Expansion Slots | Power | 2x2 power header in parallel (with protection diode) | |
| | Expansion Slots | 1x M.2 (Key M, 2242/2260/2280) with PCIe x2 and SATA for SSD | |
| | Expansion Slots | 1x either SATA3.0 or M key | |
| | Expansion Slots | 1x SATA3.0 | |
| | | 1 slot, PCIe x 4 | |



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