

AMD Ryzen V3000 SOM

- Dimension : 91 mm x 83 mm x 12.7 mm
- AMD Ryzen Embedded V3C48 (8C / 16T 45W), AMD Ryzen Embedded V3C18I (8C / 16T 15W)
- Connectivity: 2x 10 GbE (Native, supports fiber / copper)
- Operating Systems: Windows 10/11/IoT, Linux
- Embedded Grade Longevity - 10 Years Guaranteed Availability



Built in AI



High-Performance AI Analytics



Enhanced Image Processing



Flexible and Secure System



Comprehensive Software Suite



Overview

The SolidRun System on Module (SoM) featuring AMD Ryzen™ Embedded V3000 Series processors delivers exceptional performance, robust security features, and extensive connectivity options for industrial applications. Built on AMD's Zen3 architecture and leveraging a 6nm process, this SoM is designed to meet the demanding needs of modern embedded systems.



Performance Leadership, Environmental and Operational Specifications

This SoM offers up to 338% CPU integer performance increase over legacy V-Series, leading power performance with TDP ranging from 10W to 54W, a doubled core count over the previous generation for enhanced multitasking and processing power, support for a wide junction temperature range from -40°C to 105°C, and full production by October 2022 with availability for up to 10 years after product launch.



Extended Scalability and Support

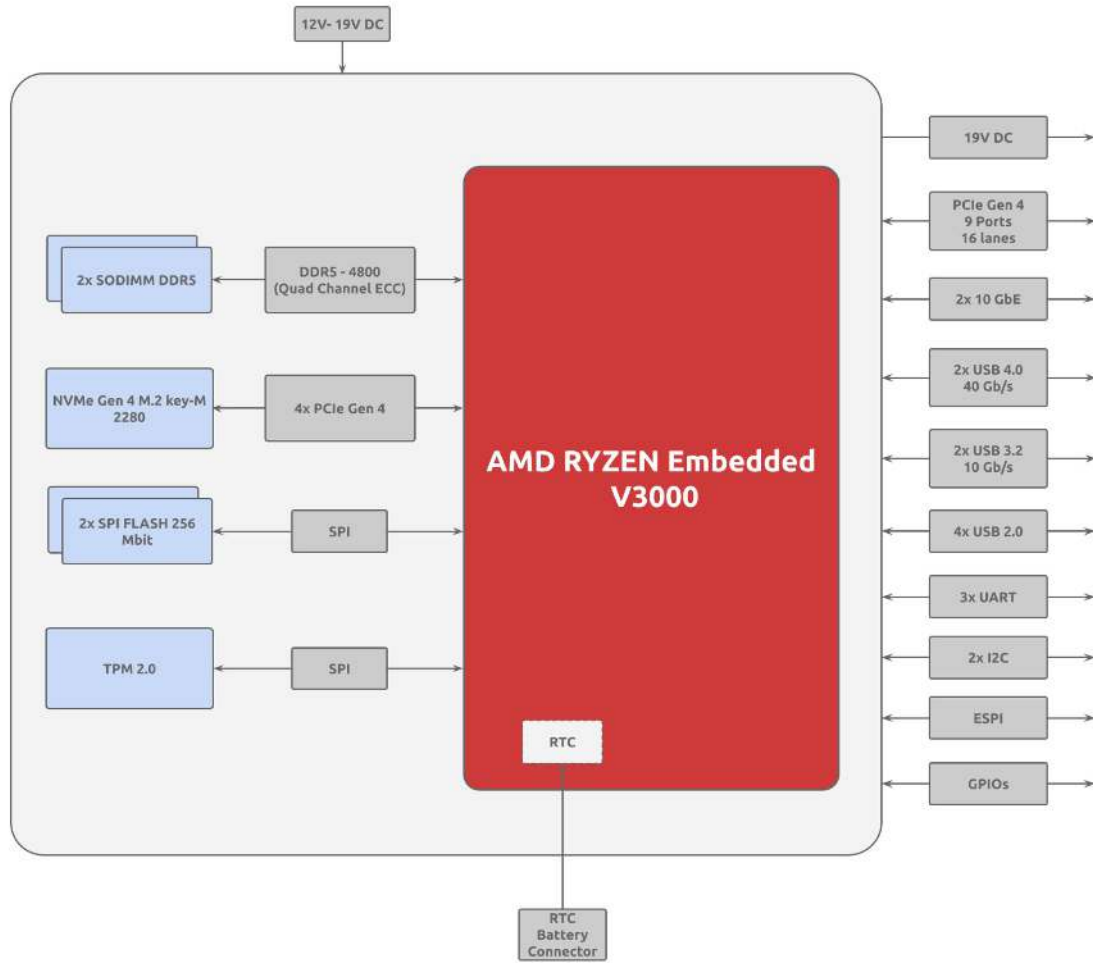
The AMD Ryzen V3000 SoM is available in configurations from 4 to 8 cores in a single BGA package, designed for 24/7 operation with "Always On" storage and networking systems supporting more than 7 years of continuous operation, and offers up to 10 years of planned product availability, providing customers with a long lifecycle support roadmap.



Strong Integration and Enablement

The SoM includes purpose-built integrations like PCIe Gen4, dual Ethernet, and a BGA package, supports high-speed peripherals with up to 20 lanes of PCIe Gen4, 2x SATA 3.0, two dual 10Gb Ethernet MACs, and 8 USB ports (USB 4.0, 3.1 Gen2, and 2.0), offers rapid memory transfer speeds with DDR5-4800 dual-channel memory support for faster data processing and efficiency, and features powerful security measures such as an onboard AMD Secure Processor for Crypto Co-processing, Platform Secure Boot capabilities, and one-time programmable (OTP) capabilities for enhanced security management.

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	AMD Ryzen V3000 SOM	Notes
CPU	AMD Ryzen Embedded V3C48 (8C / 16T 45W) AMD Ryzen Embedded V3C18I (8C / 16T 15W)	
RAM	Dual channel DDR5-4800 up to 64 GB ECC / non-ECC	2x SODIMM (2x32 bit each)
Storage	NVMe PCIe Gen4 x 4	M.2 key-M 2280
LAN	2x 10 GbE (native, supports fiber / copper)	
PCIe	9 ports, 16 lanes PCIe gen 4	
USB	2x USB4 40 Gbps 2x USB 3.2 gen 2 10 Gb/s 4x USB 2.0	
BIOS	AMI Aptio V	Dual SPI FLASH for redundancy Console redirection
Operating Systems	Windows 10/11/IoT, Linux	Other x86 operating systems supported
Power	DC 12V-19V	
Temperature rating (T Junction)	-40°C - 105°C for V3C18I 0°C - 105°C for V3C48, V3C14	
Dimension	91 mm x 83 mm x 12.7 mm	Including SODIMM modules