# Inventec ® at core

*Best Value Solution for HPC, AI and VDI*

# P47G4 - Single-socket HPC/AI/VDI Server

The P47G4 server series feature a 2U, single–socket HPC (high performance computing) server system equipped with latest AMD® EPYC™ Processor Family that fits up to 4 accelerators. This allows P47G4 to deliver up to 100 teraflops of FP16 compute performance in lower acquisition costs, without compromising performance and features of a traditional 2 socket system, presenting unmatched compute, memory, IO and security capabilities to accelerate mission critical applications. P47G4 could perfectly meet the emerging scale–out demands of datacenter and HPC markets with increasing utilization, enabling organizations to right–size for key datacenter/HPC workloads in lower TCO. The series present,

## Optimized High Performance

A single AMD® EPYC™ processor provides up to 32 cores, 8 memory channels and 128 PCIe 3.0 lanes. With the industry–leading core count, more VMs and more robustly configured VMs per server are enabled than ever. Whether deploying a single server, implementing a private cloud or enabling a hybrid cloud, P47G4 series strike the perfect balance of cores/threads, memory, IO bandwidth and security to deliver excellent performance for many HPC workloads.

## High Scalability

P47G4 series enable up to 4 dedicated GPGPUs in a single–socket server with peer–to–peer communication through the CPU. No more dual sockets or PCIe switches are required to achieve this level of GPGPU density.

## Highlights -

- Ground-up AMD® EPYC™ SoC Design
- Support latest GPGPU technologies, up to 4 AMD® Radeon Instinct™ GPGPUs
- Best cost performance ratio for advancing HPC and AI applications
- Supporting up to two NIC cards from front OCP 2.0 A+B mezz and rear PCIe x16 slot
- Optimized Serviceability

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PCI EXPRESS

DDR4

80 PLUS PLATINUM

AMD EPYC

The series could further support up to 8 SATA drives, or 6 SATA with 2 U.2 NVMe drives without any extra attachment of HBA cards; meanwhile, two onboard M.2 NVMe disks are supported.

## SoC-level Security

With industry's first embedded x86 silicon-level data security, P47G4 series minimize potential attack surfaces and protects software and data with AMD® Secure Root-of-Trust, AMD® Secure Run, and AMD® Secure Move Technologies.

## Single Socket Server Cost Benefits for Enterprise Business and Datacenter Applications

Buy only what you need to support your critical applications. P47G4 series are specialized in VDI and AI (deep learning) arena, applicable for High-Performance-Computing, Cloud, Virtualized IT, Machine Learning, as well as Big Data. Right-size your server and datacenter, without extra CPU or socket, no additional heat sink or redundant connectivity components now with P47G4 server systems! 

| | |
|---|---|
| Model Name | P47G4 |
| Positioning | HPC/GPGPU |
| Form Factor | 2U1N rack mount with slide rail |
| Processor | Single Socket; AMD® EPYC™ Processor Family |
| Memory Slot | 16x DDR4 DIMM slot |
| Chipset | SoC, supporting 128 PCIe Gen3 lanes |
| Disk Drive Bay | **Front Primary Bay:**<br>Option1: 8x 2.5" SATA3 6Gb/s hot-plug drive<br>Option2: 6x 2.5" SATA3 6Gb/s + 2x NVMe hot-plug drive<br>**Supporting 2x onboard M.2 NVMe drive** |
| Expansion Slot | Front (Option):<br>1x PCIe Gen3 OCP 2.0 A+B mezz for NIC/IB<br>Rear:<br>4x PCIe Gen3 x16 for GPGPU (Double-wide, FHFL)<br>1x PCIe Gen3 x16 for NIC/IB (FHHL) |
| Network Controller | **Supporting 10GbE/25GbE standard PCIe network card**<br>**Supporting 10GbE/25GbE/100GbE Mezz card**<br>**Inventec network OCP mezz card options:**<br>Option1:<br>NIC-I599-10GD (Dual port 10Gb SFP+)<br>Option2:<br>NIC-I540-10GDC (Dual port 10Gb RJ-45) |
| Storage Controller | **Native support from CPU:**<br>8x SATA3 6Gb/s port<br>2x U.2 NVMe port<br>2x M.2 NVMe socket |
| System Management | IPMI 2.0 compliant + KVM with Dedicated LAN |
| TPM | 2.0 |
| Power Supply | 1+1 redundancy<br>1600W Platinum |
| Fan | 5+1 redundancy<br>6056 hot-swap fan |

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**ABOUT INVENTEC**

Inventec Enterprise Business Group (EBG) was established in 1998 and has been focusing on the design and manufacturing of server systems. Inventec EBG is the key server system supplier of the global branding clients.

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