G241-G40
HPC Server - 2U 4 x PCIe GPU Server

Features

• Supports up to 4 x double slot GPU cards
• NVIDIA® validated GPU platform; Supports for NVIDIA® Tesla®
• 2nd Gen. Intel® Xeon® Scalable Processors
• 6-Channel RDIMM/LRDIMM DDR4, 12 x DIMMs
• 2 x 10Gb/s BASE-T and 2 x 1Gb/s LAN ports
• 1 x Dedicated management port
• 4 x 3.5” SATA/SAS hot-swap HDD/SSD bays
• 4 x PCIe Gen3 expansion slots for GPUs
• 1 x PCIe x16 Half-length low-profile slots for add-on cards
• Aspeed® AST2500 remote management controller
• Dual 2000W 80 PLUS Platinum redundant power supply

Intel® Xeon® Scalable Family Processors
GIGABYTE’s Intel® Xeon® Scalable Processor family servers are available in dual socket configurations, and are compatible with the full family of different SKUs (Bronze, Silver, Gold and Platinum) that are workload optimized to support different applications, from enterprise IT database, cloud and storage to the most high-demand HPC workloads.

Compute:
• Up to 28 cores / 56 threads per socket
• Up to 38.5 MB L3 cache (non-inclusive)
• Up to 3x UPI socket interconnects @ 10.4 GT/s
• CPU TDP 70W – 205W

Memory:
• 6 channels, 2 DIMMs per channel
• Up to 12 DIMMS per socket
• Up to 2933MHz max memory speed
• Intel Optane DC Persistent Memory ready

I/O:
• 48 PCIe 3.0 lanes per socket

NVIDIA® Tesla® V100 Support
GIGABYTE’s Intel® Xeon® Scalable servers and motherboards are fully compatible and qualified to use with NVIDIA’s Tesla® V100 GPU, an advanced data center GPU built to accelerate AI, HPC, and graphics. Powered by NVIDIA’s Volta™ architecture and with 640 Tensor Cores, the Tesla® V100 has broken the 100 teraflops (TFLOPS) barrier of deep learning performance — enabling data scientists, researchers, and engineers to tackle challenges that were once impossible.

GIGABYTE Management Console (AMI MegaRAC SP-X)
This GIGABYTE server product utilizes a AMI MegaRAC SP-X platform for BMC server management, with a feature rich and easy to use browser-based graphical user interface.

• RESTful API support (including the latest DMTF standards of Redfish) allows the administrator to integrate with 3rd party applications for server management
• HTML5-based iKVM remote management client included as a standard feature, no additional add-on license required to purchase
• Detailed FRU information from SMBIOS
• Pre-event automatic video recording feature from 10 to 30 seconds
• SAS / RAID controller monitoring feature

GIGABYTE Server Management (GSM)
GIGABYTE Server Management (GSM) is GIGABYTE’s proprietary multiple server remote management software platform, available as a free download from each GIGABYTE server product page. GSM is compatible with either IPMI or Redfish (RESTful API) connection interfaces, and comprises the following sub-programs:

• GSM Server  •  GSM CLI  •  GSM Agent  •  GSM Mobile  •  GSM Plugin
### Power Supply
- **Power Supply:** 2 x 80 PLUS Platinum 2000W redundant PSUs
- **AC Input:**
  - 100-120V~/12A, 50-60Hz
  - 180-240V~/10A, 50-60Hz
- **DC Input:**
  - 240V/10A
- **DC Output:**
  - 1000W@100-120V, +12.2V/81.5A, +12Vsb/2.5A
  - 1600W@180-199V, +12.2V/131A, +12Vsb/2.5A
  - 1800W@200-220V, +12.2V/147.5A, +12Vsb/2.5A
  - 2000W@221-240V, +12V/163.5A, +12Vsb/2.5A

### System Management
- **Management Controller:** Aspeed® AST2500
- **GIGABYTE Management Console (AMI MegaRAC SP-X)**

#### Dashboard
- JAVA Based Serial Over LAN
- HTML5 KVM

#### Sensor Monitor
- Voltage
- RPM
- Temperature
- CPU Status

#### Sensor Reading History Data
- FRU Information

#### FRU Information
- SEL Log in Linear Storage / Circular Storage Policy

#### Hardware Inventory
- Fan Profile
- System Firewall
- Power Consumption
- Power Control
- LDAP / AD / RADIUS Support
- Backup & Restore Configuration
- Remote BIOS/BCMC/CLDL Update
- Event Log Filter
- User Management
- Media Redirection Settings
- PAM Order Settings
- SSL Settings
- SMTP Settings

### OS Compatibility
- **For Cascade Lake processors:**
  - Windows Server 2012 R2 with Update
  - Windows Server 2016
  - Windows Server 2019
  - Red Hat Enterprise Linux 7.6 (x64) or later
  - Red Hat Enterprise Linux 8.0 (x64) or later
  - SUSE Linux Enterprise Server 12.3 (x64) or later
  - SUSE Linux Enterprise Server 15 (x64) or later
  - Ubuntu 18.04 LTS (x64) or later
  - VMware ESXi 6.0 Update3 or later
  - VMware ESXi 6.5 Update2 or later
  - VMware ESXi 6.7 Update1 or later
  - Citrix Xenserver 7.1.0 CU2 or later
  - Citrix Xenserver 7.5.0 or later
  - Citrix Hypervisor 8.0.0 or later

### Operating Properties
- **Operating temperature:** 10°C to 35°C
- **Operating humidity:** 8%-80% (non-condensing)
- **Non-operating temperature:** -40°C to 60°C
- **Non-operating humidity:** 20%-95% (non-condensing)

### Packaging
- **1 x G241-G40**

### Content
- **2 x CPU heatsinks**
- **1 x Rail kit**

### Part Numbers
- **Barebone with rail kit:** 6NG241G40MR-00
  - Motherboard: 9MD71-HB1R-00
  - Rail kit: 25HB2-3A0202-K0R
  - CPU heatsink: 25ST1-253106-F2R / 25ST1-253209-F2R
  - HDD Back plane board: 9CBPG041NR-00
  - Front panel board: 9CFP1000NR-00
  - Power supply: 25EP0-22000A-L0S

*All specifications are subject to change without notice. Please visit our website for the latest information.*

*Intel, the Intel logo, the Intel Inside logo, Xeon, and Optane are trademarks of Intel Corporation or its subsidiaries.*

*NVIDIA, the NVIDIA logo and Tesla are trademarks and/or registered trademarks of NVIDIA Corporation in the U.S. and other countries.*