

W281-G40

High Performance Workstation



Features

- High performance tower workstation / e-business server
- Intel® Xeon® W-2200 and W-2100 Processor Family
- Intel® C422 Express Chipset
- Quad Channel RDIMM/LRDIMM DDR4, 8 x DIMMs
- Intel® VROC ready
- Realtek ALC1150 HD audio codec
- 2 x GbE LAN ports (Intel® I210)
- 4 x 3.5" / 2.5" SATAIII HDD/SSD bays
- 1 x 2.5" SATAIII internal fixed drive bay
- Ultra-Fast M.2 and U.2 with PCIe Gen3 x4 interface
- 7 x PCIe Gen3 expansion slots
- 1200W 80 PLUS Gold single power supply

Intel® Xeon® W Processors

GIGABYTE brings Intel's Skylake architecture to the SOHO segment with a new offering: the 'Basin Falls' single-socket platform for workstations. This new build offers a wealth of I/O options, including multiple PCIe lanes to support graphics, and other add-on card options, as well as direct SATA and USB ports. GIGABYTE's precision engineering enables you to fulfil your workstation workload needs with ease.

Featured Technologies:

- Up to 18 cores with Intel® Hyper-Threading Technology
- Up to 48 processor PCIe* lanes
- Error-correcting code (ECC) support
- Built-in reliability, availability, and serviceability (RAS)
- Intel® Virtual RAID on CPU (Intel® VROC) support
- Thunderbolt™ 3 support
- Intel® Optane™ SSD 905P support
- Intel vPro® platform support

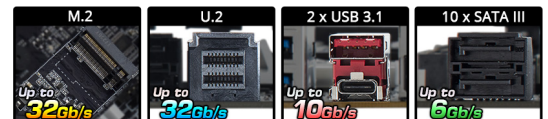


NVIDIA® Tesla® V100 Support

GIGABYTE's MW51-HP0 platforms 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.

Dense Storage/USB Design

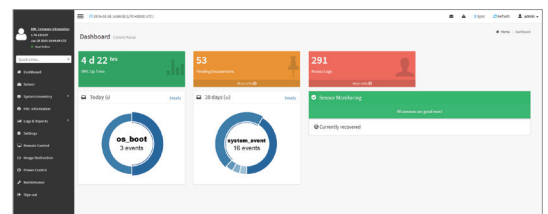
GIGABYTE's engineers have maximized the storage and external connection scope of this board with 10 SATA ports and 8 USB ports.



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.

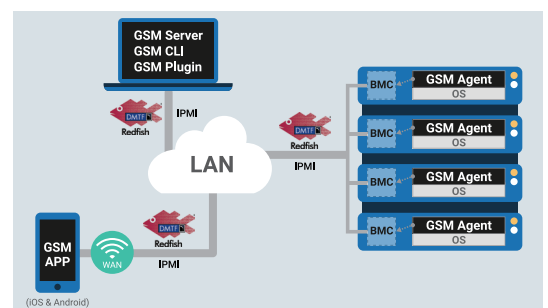
- **RESTful API support** (including the latest DMTF standards of Redfish) allows the administrator to integrate with 3rd party applications for server management
- **HTML5-based iKVM** remote management client included as a standard feature, no additional add-on license required to purchase
- **Detailed 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



Specification

Dimensions (WxHxD)	Pedestal 438 x 178 x 595 mm	Front I/O	2 x USB 3.0 1 x Power button with LED 1 x Reset button 1 x Power LED 1 x System status LED 1 x HDD activity LED 2 x LAN activity LEDs
Motherboard	MW51-HP0	Rear I/O	8 x USB 3.0 2 x USB 3.1 in Type-A and Type-C (5V/3A) 1 x PS/2 2 x RJ45 5 x Audio jacks 1 x Optical S/PDIF-Out
CPU	Intel® Xeon® W-2200 and W-2100 Processor Family TDP up to 140W	TPM	1 x TPM header
Socket	1 x LGA 2066, Socket R4 Mounting pitch: square ILM (80x80mm)	Power Supply	1 x 1200W 80 PLUS Gold single power supply AC Input: 100-240V~, 16-8A, 50-60Hz DC Output: Max. 1200W +12V/ 100A +5V/ 30A +3.3V/ 30A -12V/ 0.8A +5Vsb/ 4.0A NOTE: The system power supply requires C19 type power cord
Chipset	Intel® C422 Express Chipset	System Management	-
Memory	8 x DIMM slots DDR4 memory module supported only Quad channel memory architecture RDIMM modules up to 64GB supported LRDIMM modules up to 128GB supported 1.2V modules: 2666/2400/2133/1866 MHz NOTE: When installing memory modules, make sure to begin with the first socket of each channel, such as DIMM_P0_A0, DIMM_P0_B0, DIMM_P0_C0, DIMM_P0_D0	OS Compatibility	Windows 10 (x64) Based on Microsoft support policy, GIGABYTE recommends users to upgrade Skylake-based systems to Windows 10 before July 17th, 2018 to continue receiving support Red Hat Enterprise Linux 6.8 (x64) Red Hat Enterprise Linux 7.3 (x64) SUSE Linux Enterprise Server 11.4 (x64) SUSE Linux Enterprise Server 12.2 (x64) Ubuntu 16.04 LTS (x64) Ubuntu 16.10 LTS (x64)
LAN	2 x GbE LAN ports (Intel® I210)	Weight	Net Weight: 21.5 kg / Gross Weight: 30 kg
Audio	Realtek® ALC1150 HD audio codec Supports 7.1 channel configurations	System Fans	2 x 80x80x25mm (4,500rpm) 1 x 92x92x25mm (4,500rpm) 1 x 120x120x38mm (4,200rpm)
Storage	8 x 2.5" SATA/SAS hot-swappable HDD/SSD bays SAS card is required to enable the drive bays	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)
RAID	Intel® SATA RAID 0/1/10/5	Packaging Dimensions	918 x 630 x 373 mm
Expansion Slots	Slot_7: 1 x PCIe x16 (Gen3 x16) slot from CPU0 Slot_6: 1 x PCIe x16 (Gen3 x0 or x8) slot Slot_5: 1 x PCIe x16 (Gen3 x16 or x8) slot, shared with slot_6 Slot_4: 1 x PCIe x16 (Gen3 x0 or x8) slot Slot_3: 1 x PCIe x16 (Gen3 x16 or x8) slot, shared with slot_4 Slot_2: 1 x PCIe x16 (Gen3 x0 or x8) slot Slot_1: 1 x PCIe x16 (Gen3 x16 or x8) slot, shared with slot_2 1 x M.2 slot: - M-key - PCIe Gen3 x4 - Supports NGFF-2242/2260/2280/22110 cards 1 x U.2 connector: - Mini-SAS HD type - PCIe Gen3 x4 Support NVIDIA® SLI™ and AMD® CrossFireX™ technologies NOTE: Graphic card requests UEFI-ready	Packaging Content	1 x W281-G40 1 x Quick Installation guide
Internal I/O	1 x 24-pin ATX main power connector 1 x 8-pin ATX 12V power connector 1 x 4-pin and 1 x 3-pin for GPU power connectors 1 x CPU fan header 5 x System fan headers 2 x USB 3.0 headers for 4 ports 1 x USB 2.0 headers for 2 ports 1 x Front audio header 1 x PMBus connector 1 x Clear CMOS jumper 10 x SATA III 6Gb/s ports 2 x SATA DOM jumpers 2 x SATA DOM SGPIO connectors 1 x ME update jumper 1 x M.2 slot 1 x U.2 connector 1 x Front panel header 1 x Back plane board header 2 x COM headers 1 x TPM header 1 x VROC connector 1 x BIOS recovery jumper 1 x Buzzer	Part Numbers	Barebone package: 6NW281G40MR-00 Part Numbers: - Motherboard: 9MW51HP0NR-00 - I/O shield: 12AIO-MW51H0-00R - Power supply: 25EP0-212006-F3S - Fan-sink: 25ST0-7C9220-T1R (in option) - C19 type power cord 125V/13A (US): 25CP1-018000-Q0R (in option) - C19 type power cord 125V/13A (EU): 25CP3-01830H-Q0R (in option) - C19 type power cord 250V/15A (US): 25CP1-018300-Q0R (in option)

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

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