



CoreStation® VFC640 Virtual Blade Workstation Datasheet

Performance and efficiency with multiple workstations in a blade that is only 0.5U of rack space

Virtualized workstations for secure anywhere access

The Amulet Hotkey CoreStation VFC640 packs true workstation performance in a data center optimized platform. Key reasons to centralize your workstations:

- Protect sensitive data and valuable intellectual property in the data center
- Deliver mobility without compromising performance
- Boost productivity and team collaboration

Data center optimized outstanding scalability and efficiency

The CoreStation VFC640 is based on the Dell EMC PowerEdge FC640 blade server with an Amulet Hotkey PCIe expansion module, virtual GPU accelerators and IO cards to deliver superior scalability, reliability and performance.

- **Optimum balance:** blades balance CPU and GPU resources to power the most demanding workloads
- **Extreme density:** each dual socket server with GPU accelerators uses only 0.5U of rack space to minimize datacenter footprint. Up to 32 GPU accelerated workstations per blade (128 in a 2U chassis)
- **Increase uptime:** redundant power and network and a controlled environment improve availability and hardware lifespan. Easily 'failover' users without even visiting the desk
- **Simplify management:** Dell EMC OpenManage and automation to realize the agility and scalability of a centralized workstation infrastructure

Powerful performance

Amulet Hotkey's unique DXF expansion module enables the use of virtual GPUs to combine the power of Intel Xeon Scalable CPUs and NVIDIA or AMD GPU.

- **More Cores:** Up to 56 cores per blade for demanding workloads
- **Fast Speeds:** Up to 3.6 GHz base to 4.2 GHz boost core speeds for single-threaded task performance. Faster memory, up to 2666MHz DIMMs
- **AVX-512:** for faster encryption, compression, simulation, modelling tasks
- **Hardware GPU acceleration:** NVIDIA Tesla or AMD FirePro virtual GPUs for graphics, compute and H.264 remote display protocol acceleration
- **Secondary IO card:** boost VFC640 blade IO capacity using an optional secondary IO card for Ethernet or native Fibre Channel or Infiniband ports

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Key Features

- Secure anywhere, anytime access to performance workstations
- Data center optimized with an agile and efficient architecture in a small footprint
- Up to 4x density advantage due to optimal matching of CPU and GPU resources
- Power and performance using up to two Intel Xeon Scalable processors
- NVIDIA Tesla or AMD MxGPU GPU accelerators to deliver an exceptional user experience
- Remote display protocol options such as VMware Blast, Citrix HDX, Teradici PCoIP, and Mechdyne TGX
- Connect using Amulet Hotkey secure DXZ zero clients, or thin clients, laptops and mobile devices

Ideal platform for:

- Virtual workstations with advanced visualization and computing
- High Performance Computing with GPU acceleration for IoT, AI, deep learning, machine learning and big data analytics
- Virtual desktop graphics acceleration for demanding programs such as Windows 10, Office 365 and video

Developed in partnership with...

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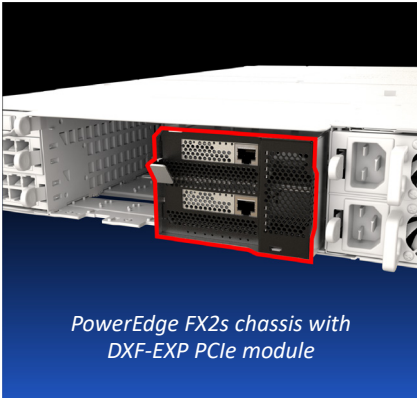
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Preliminary information. Technical specification and product appearance are subject to change.

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CoreStation VFC640 Virtual Blade Workstation

CoreStation VFC640 Specifications

Form factor	Half-height blade for Dell PowerEdge® FX2s enclosure Up to 4 VFC640 blades per 2U enclosure
Processors	Up to two Intel® Xeon® Scalable processors up to 3.6GHz, up to 38.5MB cache and up to 56 cores per CPU
Memory	Up to 2TB ECC Registered DDR4 (16 DIMM slots) RDIMM/LRDIMM speeds up to 2666MT/s
Drive Bays	Front: Up to 2 x 2.5" hot-swappable SAS/SATA HDD, SSD, or PCIe NVMe, max 12.8TB Optional PowerEdge FD332 storage sled for up to 16x 2.5" drives
Storage Controllers	Internal: Software RAID S140, PERC H330, PERC H730P Internal Dual SD Module(IDSDM) or 2x M.2 SSDs, Boot Optimized Storage System
Network	4x 10GE, 2x 10GE, and 2x 1GE network daughter card options
Expansion Slots	Support for GPUs and a low-profile card per VFC640 blade using the Amulet Hotkey DXF-QUAD-EXP expansion module
Security	TPM 1.2/2.0 option, Cryptographically signed firmware, Hardware Root of Trust, Secure Boot, System Lockdown, System Erase
Embedded / at-server management	Chassis Management Controller (CMC), IPMI 2.0 compliant, iDRAC9 Express or Enterprise with Lifecycle Controller, Redfish compliant, at-server LCD screen and local server KVM access
Operating Systems	VMware® ESXi, Citrix® XenServer®, Microsoft Windows Server® with Hyper-V
Power & Cooling	Supplied by the Dell FX2s enclosure

Amulet Hotkey DXF-EXP-V PCIe Expansion Module

Form Factor	The DXF-EXP-V module supports four x8 PCIe 3.0 slots for DXF-G cards and low-profile cards. Each module supports two CoreStation VFC640 blades in the FX2s chassis. Two DXF-EXP modules per PowerEdge FX2s chassis.
GPU Accelerators	GPU options for the DXF-EXP-V module (up to two per blade): DXF-G-P6 – NVIDIA Tesla P6 virtual GPU accelerator <ul style="list-style-type: none">NVIDIA Quadro vDWS and GRID vPC/vAPP software with up to 16 users16 GB GDDR5Virtualization support including: VMware vSphere 6.0/Horizon Desktops; Citrix XenServer XenDesktop/XenApp and more DXF-G-S7100X – AMD FirePro S7100X MxGPU virtual GPU accelerator <ul style="list-style-type: none">AMD Radeon Pro software with up to 16 users (no per users license fee)8GB GDDR5Virtualization support including: VMware vSphere 6.0/Horizon Desktops; Citrix XenServer/XenDesktop/XenApp and more
Network Expansion	Optional IO cards for DXF-EXP module (one per VFC640 blade ¹) <ul style="list-style-type: none">DXF-QLE2562 Qlogic QME2560 (2x 8Gbps Fibre Channel)DXF-QLE2662L Qlogic QLE2662L (2x 16Gbps Fibre Channel)DXF-57810S Qlogic 57810 (2x 10GbE)DXF-X540 Intel X540 or DXF- X540 Intel X710 (2x 10GbE)DXF-ConnectX-3 Mellanox ConnectX-3 (1x 40G Infiniband/10GbE) <p>Contact us if the NIC you want is not listed. 1. When using a single GPU per blade.</p>

Anywhere, anytime access to powerful workstation graphics!