



# NVIDIA Tesla K40 Compute Processor

The NVIDIA Tesla™ K40 represents the latest and most advanced Kepler GPU architecture from NVIDIA. Based on the new GK110B GPU, new levels of supercomputing processing capability is now available in a wide range of HP Z-workstations. Based on the massively parallel re-worked CUDA architecture, it features many “must have” HPC capabilities including 12GB ECC memory and an L1/L2 cache design for improved bandwidth and data sharing. The Tesla K40 features innovative technologies like SMX, Hyper-Q, and Dynamic Parallelism.



- Delivers up to 1.5 Tflops of double-precision peak performance, enabling a single workstation to deliver ~3 Tflops with two K40's. The K40 single precision peak performance is 3.6 Tflops.
- New CUDA core architecture delivers up to 3x more performance per watt compared to the previous generation Fermi GPU based Tesla cards.
- When enabled, converts power headroom to higher clocks and achieve even greater acceleration for various HPC workloads on Tesla K40.
- Enables GPU threads to automatically spawn new threads. This allows elimination of unnecessary program control transfers between CPU and GPU and enables GPU acceleration of a broader set of algorithms.
- This feature enables multiple CPU cores to simultaneously utilize the CUDA cores on a single Kepler GPU. The result is a dramatically increased level of average GPU utilization.

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<b>Compatibility</b>	The NVIDIA Tesla K40 Computing Processor is supported on the following HP Personal Workstation: Z820 with 1125W power supply, Z620, Z420
<b>Dimensions</b>	Out of Package: 11.09 x 26.67 cm Count of cartons per pallet layer: 8 Count of layers in pallet: 9 Quantity per Pallet: 72 Packed: 245 x 488 x 230 mm
<b>Weight</b>	Out of Package: 826 g
<b>Warranty</b>	The NVIDIA Tesla K40 has a one-year limited warranty or the remainder of the warranty of the HP product in which it is installed. Technical support is available seven days a week, 24 hours a day by phone, as well as online support forums. Parts and labor are available on-site within the next business day. Telephone support is available for parts diagnosis and installation. Certain restrictions and exclusions apply.
<b>Additional information</b>	P/N: F4A88AA UPC/EAN code: 888182122914
<b>Country of Origin</b>	China
<b>What's in the box</b>	NVIDIA Tesla K40c Compute Processor; Documentation

<sup>1</sup> Enabling ECC will cause some of the memory to be used for the ECC bits so the user available memory will decrease by ~6.25%.

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