

NVIDIA QUADRO GP100

FEATURES & BENEFITS RELATIVE TO TESLA K40C AND K6000

	TESLA K40C	QUADRO K6000	QUADRO GP100	BENEFIT
GPU ARCHITECTURE	KEPLER (GEN -2)	KEPLER (GEN -2)	PASCAL	NVIDIA'S LATEST GPU ARCHITECTURE
CUDA CORES	2880	2880	3584	FASTER RENDERING AND COMPUTE PERFORMANCE
FP64 PERFORMANCE	1.7 TFLOPS	1.7 TFLOPS	5.2 TFLOPS	206% GREATER FP64 COMPUTE PERFORMANCE
FP32 PERFORMANCE	4.29 TFLOPS	4.29 TFLOPS	10.3 TFLOPS	140% BETTER FP32 COMPUTE PERFORMANCE
FP16 PERFORMANCE	NONE	NONE	20.7 TFLOPS	REQUIRED FOR DEEP LEARNING (AI)
INT8 PERFORMANCE	NONE	NONE	47 TOPS	OPTIMIZES NEURAL NETWORK (AI) INFERENCE
MEMORY SIZE	12 GB GDDR5 ECC	12 GB GDDR5 ECC	16 GB HBM2 ECC	NEXT GENERATION MEMORY TECHNOLOGY
ECC MEMORY OVERHEAD	6.25% (11.25 GB AVAILABLE)	6.25% (11.25 GB AVAILABLE)	NONE, 16 GB AVAILABLE	NO ECC CAPACITY OR PERFORMANCE HIT
MEMORY BUS WIDTH	384-BIT	384-BIT	4096-BIT	RADICALLY ADVANCED MEMORY BUS IMPLEMENTATION
PEAK MEMORY BANDWIDTH	288 GB/S	288 GB/S	717 GB/S	MOVE DATA TO AND FROM 149% GPU FASTER
DISPLAY SUPPORT	NONE	2X DP 1.2 + 2X DVI DL	4X DP 1.4 + 1X DVI-D DL	SUPPORTS FOUR 5K OR MULTIPLE 8K DISPLAYS
HDR IMAGE SUPPORT	NO	NO	YES	MORE LIFELIKE IMAGES
VR READY	NO	NO	YES	PERFORMANCE AND FEATURES TO DRIVE VR EXPERIENCES
BOARD POWER	225 W	225 W	235 W	MUCH HIGHER PERFORMANCE AT SIMILAR POWER
AUXILIARY POWER CONNECTOR	2X 6-PIN PCIE	2X 6-PIN PCIE	8-PIN PCIE	SIMPLIFIED POWER SUPPLY CONNECTIVITY
FORM FACTOR	4.376" H X 10.5" L DUAL SLOT	4.376" H X 10.5" L DUAL SLOT	4.4" H X 10.5" L DUAL SLOT	NO SIGNIFICANT MECHANICAL CHANGES

HAVE QUESTIONS ON THE NEW NVIDIA QUADRO GP100?

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