


RADX® Trifecta-GPU™ COTS PXIe GPU Modules

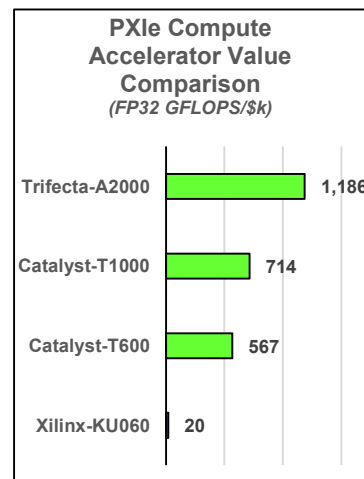
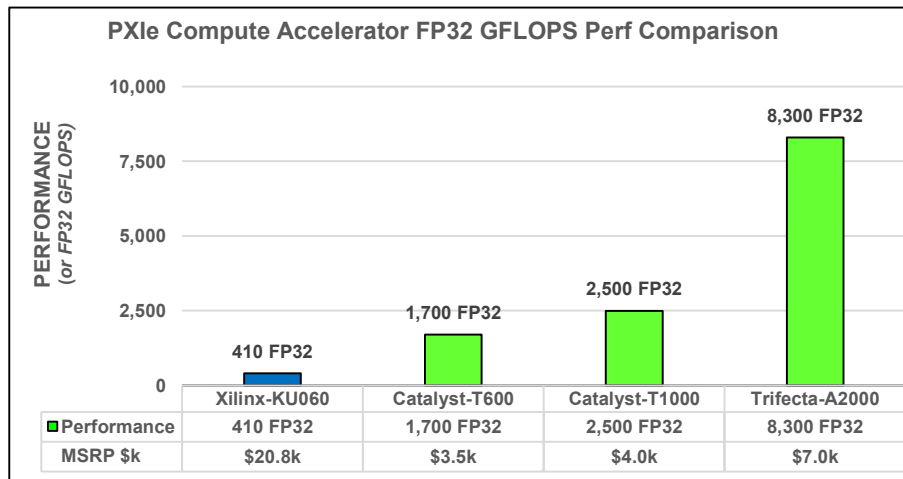
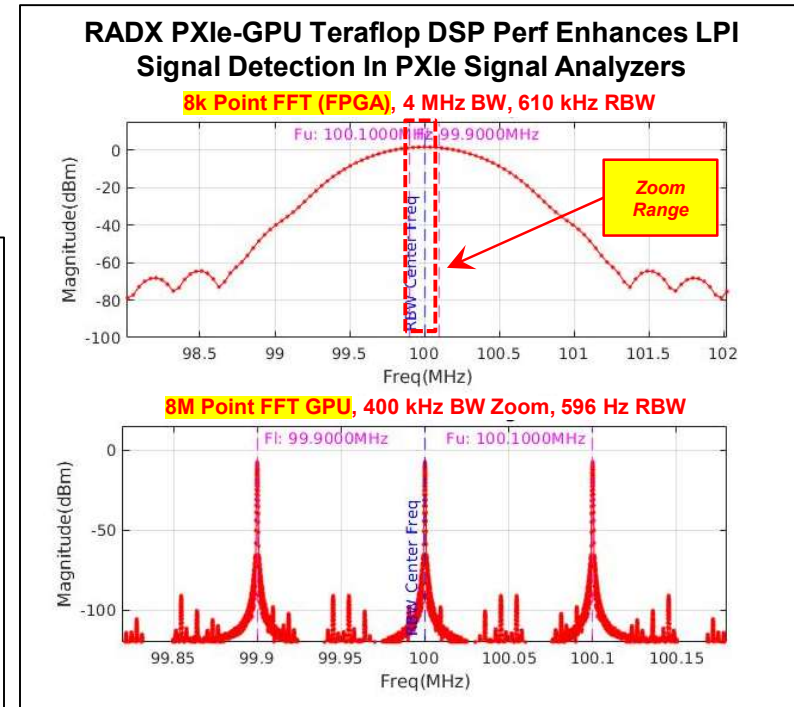
Bring the Power of Easy-to-Program, 8.3 FP32 TFLOPS NVIDIA® RTX A2000 GPUs to PXIe/CPCIe Systems - for Advanced Graphics and GPU-Accelerated Signal Processing, ML & DL Inference Apps

- Enables Tight  Integration with MATLAB, Python and C/C++ for NVIDIA CUDA-Accelerated or OpenCL® Signal Processing, Machine and Deep Learning Applications in PXIe Systems – with Support for Popular Frameworks



- Single and Dual Slot Models with NVIDIA RTX A2000 GPUs for Flexible and Scalable PXIe/CPCIe Application Performance:

- **2D/3D Graphics Perf:** ~20x to ~100x Higher than Embedded Controller GPUs
- **Signal Processing Perf:** 8.3 FP32 TFLOPS for ~20x Higher Compute Performance than Xilinx KU060 FPGAs (410 FP32 GFOPS)
- **ML/DL Inference Performance:** ~20x to ~200x Higher than Embedded Controller CPUs via MATLAB, TensorFlow or PyTorch



For More Info, Email info@radxtech.com or Call +1 (619) 677-1849 x 1

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RADX® Trifecta-GPU COTS PXIe GPU Module Specifications

(Subject to Change Without Notice)

#	Parameter	PXIe-GPU-A2000-8GB-1SM (Single-Slot, 4HP)	PXIe-GPU-A2000-8GB-2SM (Dual-Slot, 8HP)
1	NVIDIA Ampere GPU:	RTX-A2000 MXM 3.1 Type A	
2	FP32 Peak Performance	8.3 FP32 TFLOPS (22.7x PXIe-7915 @ 410 GFLOPS)	
3	CUDA & Other Cores:	2,560 CUDA / 20 RT / 80 TENSOR	
4	On-Board Memory:	8 GB GDDR6 with 192-bit I/F (2x PXIe-7915 @ 4 GB DDR3)	
5	On-Board Memory BW:	192 GB/Sec (11.3x PXIe-7915 @ 17 GB/Sec)	
6	Total Graphics Power (Watts):	~58W / Slot (~58W Total)	~29W / Slot (~58W Total)
7	Supported PXIe Chassis:	All 38W / Slot NI & 3 rd Party PXIe Chassis	NI PXIe 58W / Slot Chassis (e.g., PXIe-1092, -1095, -1084, etc.)
8	Display I/F & Resolution:	4 x Mini Display Port 1.4a I/Fs (HDMI 2.1) with 4k+ Resolution @ 120Hz or 8K Resolution at 60Hz with 10-bit Color	
9	Thermal Solution:	Passive Aluminum Heat Sink (1- or 2-Slot) / ~15 LFM Air Flow	
10	GPU / Module PCIe I/F:	GPU: PCIe Gen 4 x16 / Module: PCIe Gen 4 x8 (Backplane Limit for Most Chassis is PCIe G3 x8 or x4)	
11	Module Form Factor:	Single (4HP), 3U PXIe Peripheral / 3U CPCle Type 2 Slot with XJ3 and XJ4 Connectors	Dual (8HP), 3U PXIe Peripheral / 3U CPCle Type 2 Slot with XJ3 and XJ4 Connectors
12	Module Dimensions:	~0.4 kg (0.8 lb) / 100 mm H x 160 mm D x 20.32 mm W (4HP) (3.94 in H x 6.3 in D x 0.8 in W [4HP])	0.5 kg (1.1 lb) / 100 mm H x 160 mm D x 40.64 mm W (8HP) (3.94 in H x 6.3 in D x 1.6 in W [8HP])
13	Op & Storage Temps:	Op Temp: 0° to 55° C, 10% to 90%, Non-Condensing, Storage Temp: -40° to +85° C	
14	Designed to Meet Specs & Certs:	GPU MXM Certified for FCC Part 15-B Class A, CE and RoHS. Module is Designed to Meet FCC Part 15-B Class A / CE / RoHS / EN55022 Class A / EN55024 / EN300386-2 / MIL-PRF-28800F Class 3 (Class 2 Optional). Module Level Certs May be Available – Ask RADX for a Quotation.	
15	Operating System Support:	Windows 10, Windows 11 and Linux (64-bit, Distributions TBD)	
16	Graphics APIs:	DirectX 12, Shader Model 5.1, OpenGL 4.6, Vulkan 1.2 (or Later)	
17	Compute APIs:	CUDA Toolkit 8.0+, CUDA Compute V8+, OpenCL™ 1.2+ & CUDA-X AI	
18	RDMA & Peer-to-Peer Support:	NVIDIA GPUDirect Support for Trifecta-GPUs, Trifecta, Catalyst and 3 rd Party PXIe Modules Availability TBD	
19	Framework Support:	NI LabVIEW via Python, C/C++ or MATLAB; MathWorks MATLAB, Simulink, ML, DL and Parallel Toolboxes; RAPIDS cuSignal; RAPIDS AI and Others	
20	Programming Support:	RADX Transform-X Examples for MATLAB, Python and C/C++	
21	Standard Warranty:	1 Year Return to Factory Standard (Extended Warranty and Technology Insertion Options Available)	
22	Export Control Related Info:	ECCN: EAR99 / HSC: 84733092	
23	COO / TAA / BAA:	TW / TAA & BAA Compliant	
24	Anticipated QTY 1 MSRP & GA	\$6,999 / Q422	\$7,999 / Q422
26	Value: GFLOPS / \$k MSRP	1,186 GFLOPS/\$k (~59x PXIe-7915 @ 20 GFLOPS / \$k)	1,038 GFLOPS/\$k (~52x PXIe-7915 @ 20 GFLOPS / \$k)



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