RADX® Catalyst and Orca-C2X COTS PXIe-GPUs

RADX PXIe-GPUs Bring the Easy-to-Program Power of NVIDIA® Professional GPUs to PXIe for Accelerated Graphics, Video, Image, Signal & Data Processing and ML / DL / LLM Training & Inference Apps

Catalyst & Orca Single-Slot PXIe-GPUs™ (US Patent No. 12,284,547)

PXIe-GPU-T400-2GB
PXIe-GPU-T600-4GB
PXIe-GPU-T1000-8GB
PXIe-GPU-AmpereRTXA1k-8GB
PXIe-GPU-AdaRTX2k-16GB
PXIe-GPU-BWRTXPro2k-16GB
PXIe-GPU-AdaRTX4kSFF-20GB
PXIe-GPU-BWRTXPro2kSFF-24GB
PXIe-GPU-AdaL4DC-24GB
Orca-C2X PXIe-C2X-G4x8-eGPU-AdaRTX6k-48GB

- **Easy-to-Program via LabVIEW, MATLAB, Python & C/C++** with CUDA®, OpenCL® & Tensor Core Acceleration for Signal, Image & Video Processing and ML/DL/LLM Training & Inference Apps in PXIe Systems and Optimized Support for Popular Libraries & Frameworks:



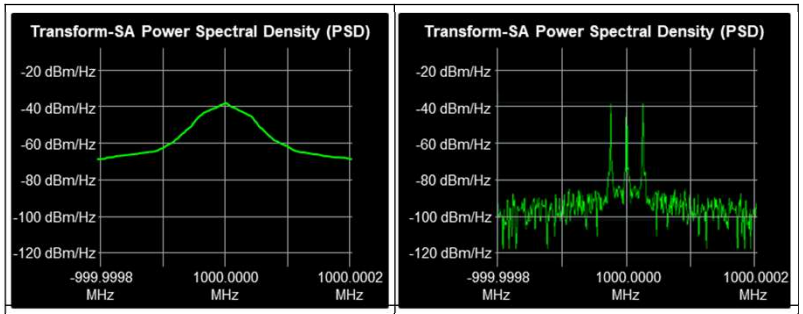
RADX Patented (US Patent No. 12,284,547) Catalyst PXIe-GPUs and Orca-C2X are Designed & Assembled in the USA

- **Eliminates the Need for Separate GPU Servers**
  - ***Accelerated Image, Video & Signal Processing:*** *1.0 to 91.1 FP32 TFLOPS for up to 200x Higher Compute Performance vs. Xilinx KU060 FPGAs and PXIe Embedded Controllers*
  - ***NVENC / NVDEC*** *HW Accelerated Video Encoding / Decoding Engines for Real-Time Video Compression & Decompression at up to 100x CPU CODEC Performance Levels*
  - ***2D/3D Graphics****: Up to ~200x Higher Performance vs. Embedded Controller GPUs*
  - ***AI ML / DL / LLM Inference & Training****: Up to ~200x versus Embedded Controller CPUs*
  - ***Supports Wide Range of PXIe Chassis:*** *Software Programmable from 38W/Slot - 72W/Slot*

- **Eliminates Win 11 Security Gaps from EOL/EOS IGPUs in Embedded Controllers**
- **Enhances LPI Signal Detection**

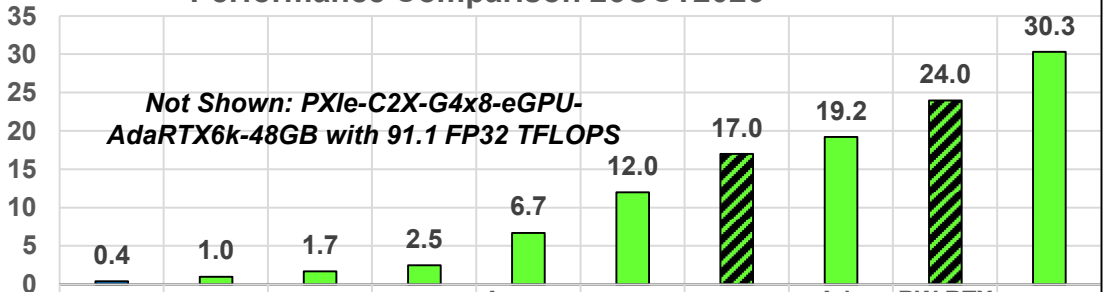
RADX PXIe-GPUs Support 256M Point FFTs and up to 1B FFTS/Sec *to Dramatically Reduce RBW and Average Noise Floor to Improve LPI Signal Detection*

RADX PXIe-GPUs Support 2 to 256 Megasample FFTs in Real-Time to Enhance LPI Signal Detection in PXIe Signal Analyzers



32 kilosample (kS) FFT	1 Megasample (MS) FFT
1.25 MHz BW TDMS Signal	
87.74 Hz RBW	2.74 Hz RBW (32x Gain)
-80 dBm / Hz Avg. Noise Floor	-100 dBm / Hz Avg. Noise Floor
~0.25 msec FFT Time (CPU) (on NI PXIe-8881 Intel Xeon W-2245 - $15k)	~0.25 msec FFT Time (GPU) (on RADX Catalyst PXIe-GPU-AdaRTX2k-16GB-1SP - $9k)

RADX In-Chassis PXIe Compute Accelerator FP32 TFLOPS Performance Comparison 26OCT2026



	NI PXIe-7915	T400	T600	T1000	Ampere RTX A1k	Ada RTX 2k	BW RTX Pro 2k	Ada RTX 4k SFF	BW RTX Pro 4k SFF	Ada L4 DC
FP32 TFLOPS	0.4	1.0	1.7	2.5	6.7	12.0	17.0	19.2	24.0	30.3
Q226 MSRP $k	$27.7k	$4.0k	$5.0k	$6.0k	$8.0k	$9.0k	$10.0k	$12.0k	$16.0k	$18.0k
FP32 FLOPS / $k	0.01	0.25	0.34	0.42	0.84	1.33	1.70	1.60	1.50	1.68

RADX TECHNOLOGIES, INC.

www.radxtech.com
Email: info@radxtech.com
Tel: +1 (619) 677-1849 x1

© Copyright 2026, RADX Technologies, Inc. All Rights Reserved.
26OCT2026 V2.7

Partner
APPLICATION SOLUTION & PRODUCT

Available on GSA via testmart® since 1999
https://tinyurl.com/muk72crx

Available from APEX WAVES
www.apexwaves.com

RADX® Catalyst and Orca-C2X COTS PXIe-GPU™ Module Specifications (Q226)

(As of 26OCT2026 - Subject to Change Without Notice)

1. PXIe-GPU MODEL (P/N): *RADX Catalyst and Orca-C2X PXIe-GPUs are Covered by US Patent No. 12,284,547*	PXIe-GPU-T400-2GB	PXIe-GPU-T600-4GB	PXIe-GPU-T1000-8GB	PXIe-GPU-Ampere RTXA1k-8GB	PXIe-GPU-AdaRTX2k-16GB	PXIe-GPU-AdaRTX4kSFF-20GB	PXIe-GPU-BWRTXPro2K-16GB	PXIe-GPU-BWRTXPro4kSFF-24GB	PXIe-GPU-AdaL4-24GB *(Compute Only)*	Orca PXIe-C2X-G4x8-eGPU-AdaRTX6k-48GB
2. INTEGRATED NVIDIA PCIe PROFESSIONAL GPU:	**Turing T400 2GB**	Turing T600 4GB	Turing T1000 8GB	Ampere RTX A1000 8GB	Ada RTX 2000 16GB	Ada RTX 4000 SFF 20GB	**Blackwell RTX Pro 2000 16GB**	**Blackwell RTX Pro 4000 SFF 24GB**	Ada L4 Data Center 24GB	Ada RTX 6000 48GB
3. NVIDIA PCIe GPU DATASHEET:	https://tinyurl.com/zp5ufvkm	https://tinyurl.com/2ffw677m	https://tinyurl.com/37cwzms4	https://tinyurl.com/ytmesyz9	https://tinyurl.com/2z3e74xn	https://tinyurl.com/2w544pua	https://tinyurl.com/yrapn8hv	https://tinyurl.com/39hu8e9d	https://tinyurl.com/5n7y58j8	https://tinyurl.com/bdeyuapz
4. GPU GDDR6 / GDDR: *(≥16GB ideal for AI Training)*	**2GB GDDR6 / 64-bit / 80 GB/Sec**	**4GB GDDR6 / 128-bit / 160 GB/Sec**	**8GB GDDR6 / 128-bit / 160 GB/Sec**	**8GB GDDR6 / 128-bit / 192 GB/Sec**	**16GB GDDR6 / 128-bit / 224 GB/Sec**	**20GB GDDR6 / 160-bit / 280 GB/Sec**	**16GB GDDR7 / 128-bit / 288 GB/Sec**	**24GB GDDR7 / 192-bit / 432 GB/Sec**	**24GB GDDR6 / 192-bit / 300 GB/Sec**	**48GB GDDR6 / 384-bit / 960 GB/Sec**
5. GPU CORES:	320 x CUDA	640 x CUDA	896 x CUDA	2,304 x CUDA 18 x G2 RT 72 x G3 Tensor	2,816 x CUDA 22 x G3 RT 88 x G4 Tensor	6,144 x CUDA 48 x G3 RT 192 x G4 Tensor	4,352 x CUDA 34 x G4 RT 136 x G5 Tensor	8,960 x CUDA 70 x G4 RT 280 x G5 Tensor	7,424 x CUDA 60 x G3 RT 240 x G4 Tensor	18,176 x CUDA 142 x G3 RT 568 x G4 Tensor
6. FP32 TFLOPS (CUDA Cores):	**1.0**	**1.7**	**2.5**	**6.7**	**12.0**	**19.2**	**17.0**	**24.0**	**30.3**	**91.1**
7. TF32 TFLOPS (Tensor Cores):	**N/A**	**N/A**	**N/A**	**29.96**	**24.0**	**38.4**	**34.6**	**48.1**	**120.0**	**364.4**
8. NVENC / NVDEC CODECS: *(https://tinyurl.com/579y4u69)*	1 x G6 / 1 x G4	1 x G6 / 1 x G4	1 x G6 / 1 x G4	1 x G7 / 1 x G5	1 x G8 / 1 x G5	2 x G8 / 2 x G5	1 x G9 / 1 x G6	2 x G9 / 2 x G6	2 x G8 / 4 x G5	3 x G8 / 3 x G5
9. DISPLAY PORT / MINI DP I/Fs: *(4k+ Res @ 120Hz or 8K Res @ 60Hz+ with 10-bpp)*	3 x Mini DP1.4a I/Fs (HDMI 2.1)	4 x Mini DP1.4a I/Fs (HDMI 2.1)			4 x Mini DP1.4a I/Fs (HDMI 2.1)		4 x Min DP2.1b	4 x Min DP2.1b	N/A (Compute Only)	4 x Mini DP1.4a I/Fs (HDMI 2.1)
10. PXIe MODULE / GPU PCIe I/F:	PXIe G3 x8 / PCIe G3 x16			PXIe G4 x8 / PCIe G4 x8		PXIe G4 x8 / PCIe G4 x 16	PXIe G4 x8 / PCIe G5 x 16		G4 x8 / G4 x16	
11. PXIe MODULE FORM FACTOR:	1-Slot (4HP) 3U PXIe Peripheral / 3U CPCIe Type 2 with XJ3 & XJ4									1-Slot (4HP) + eGPU
12. PXIe MODULE DIMENSIONS:	~0.4 kg (0.7 lbs) / 100 mm H x 160 mm D x 20.32 mm W									
13. REQUIRED PXIe SLOTS & POWER:	1 Slot(s) @ 38W/Slot	1 Slot(s) @ ~50W/Slot (Software Programmable to ~40W)			1 Slot(s) @ 70W/Slot (Software Programmable to ~40W)				1 Slot(s) @ 72W/Slot	1 Slot(s) @ 15W/Slot + 500W External
14. PXIe MODULE THERMAL SOLUTION:	NVIDIA Fan Sink with ~152 LFM Air Flow	RADX Passive Aluminum Heat Sink with ~152 LFM Air Flow								
15. PXIe CHASSIS SUPPORT:	38W / Slot PXIe Chassis	58W / 82W Slot PXIe Chassis Recommended (Lower Power Chassis Supported with Software Programmed TDP Derating)								38W / Slot PXIe
16. OS SUPPORT:	Win 10, Win 11, Desktop Linux (64-bit, Popular Distributions) and NI RT Linux via **G2CPU**									
17. SOLVES IGPU WIN 11 SEC	**Yes – Enables Full Compliance with Windows 11 Security for Replacing EOL/EOS Integrated GPUs in Embedded Controllers**								**N/A - Headless**	**Yes**
18. KEY APIs:	DirectX 12, Shader Model 5.1, OpenGL 4.6, Vulkan 1.2 (or Later), CUDA Toolkit 8.0+, CUDA Compute V8+, OpenCL™ 1.2+, OpenCV 3.x, DirectCompute & CUDA-X AI									
19. RDMA / P2P SUPPORT:	NVIDIA RDMA, GPUDirect (incl. Teledyne SP Devices ADCs) and GPUDirect Storage Support Under Linux. Support for Other 3rd Party PXIe Modules with Mfg. Support									
20. SW FRAMEWORKS:	NI LabVIEW-RT via G2CPU; NI LabVIEW via G2CPU, NGENE CuLAB & DeepLTK, Graiphic; Python, C/C++ or MATLAB (with Toolkits), PyTorch, LibTorch, TensorFlow, FFmpeg, Ansys									
21. OP & STORAGE TEMPS:	Operating Temp: 0° to 55° C with 10% to 90% Humidity (NC) with Active Thermal Mgmt.; Storage Temp: -40° to +85° C									
21. CERTIFICATIONS & DESIGNED-TO-MEET SPECS:	GPUs Certified for FCC Part 15-B Class A, CE and RoHS. Module Certified to Meet RoHS and Designed to Meet CE and FCC Part 15-B Class A / EN55022 Class A / ENS55024 / EN300386-2 / MIL-PRF-28800G Class 3 (Class 2 Optional). Module Level Certs Available – Ask RADX for a Quotation.									
22. MODULE EXPORT COMPLIANCE:	COO: US / BAA-TAA / ECCN: 4A994.L / HSC: 84733092								COO: US / BAA-TAA / **ECCN: 4A090.A** / HSC: 84733092	
23. STANDARD WARRANTY:	1 Year Return-to-Factory Standard Warranty (From Date of Shipment) - *Extended Warranty and Technology Insertion Options Available.*									
24. LEADTIME (ARO / ARFP):	**~30 to ~45 Days**									**~60 Days**
25. Q226 MSRP - FOB SJC: *(Excl. US GPU Import Tariffs)*	**$3,999**	**$4,999**	**$5,999**	**$7,999**	**$8,999**	**$11,999**	**$9,999**	**$15,999**	**$17,999**	**$24,999**
26. VALUE: FP32 TFLOPS / $k MSRP: *(NI PXIe-7915 = 0.02)*	**0.25**	**0.34**	**0.42**	**0.84**	**1.33**	**1.60**	**1.70**	**1.5**	**1.68**	**3.64**

RADX® TECHNOLOGIES, INC.

www.radxtech.com

Email: info@radxtech.com

Tel: +1 (619) 677-1849 x1

© Copyright 2026, RADX Technologies, Inc. All Rights Reserved.

26OCT2026 V2.7

Partner

APPLICATION SOLUTION & PRODUCT

Available on GSA via

testmart® since 1999

https://tinyurl.com/muk72crx

Available from

APEX WAVES

www.apexwaves.com