# **HOW TO SELL THE NEW**

# RADEON™ PRO WX 2100 AND WX 3100 GRAPHICS CARDS

# Redefining Entry Level Workstation Graphics



# WHO'S IT FOR?

Radeon™ Pro WX 2100 and WX 3100 graphics cards are entry-level workstation cards based on the "Polaris" architecture. These cards are suited for the following people:

- · CAD designers, engineers and architects working on small to medium sized assemblies and models
- Photo or video editors working with applications like Adobe® Photoshop® and Premiere®
- Financial analysts, or enterprises looking for affordable, workstation grade, multi-monitor support



## **SELL IT IN 5 SECONDS**

The Radeon<sup>TM</sup> Pro WX 2100 and WX 3100 are the fastest entry-level workstation graphics cards available today. 
These cards offer an amazing upgrade path from previous entry-level workstation graphics, delivering up to 2x more performance over our previous generation. 
Compared to the current entry-level cards from NVIDIA, the Radeon<sup>TM</sup> Pro WX 2100 is on average up to 20% faster than the NVIDIA Quadro P400<sup>3</sup>, and the Radeon<sup>TM</sup> Pro WX 3100 is on average up to 29% faster than the NVIDIA Quadro P600<sup>4</sup>.



# **SELL IT IN 60 SECONDS**

The Radeon<sup>TM</sup> Pro WX 2100 and WX 3100 are the fastest entry-level workstation graphics cards available today.<sup>1</sup> These cards offer an amazing upgrade path from previous entry-level workstation graphics, delivering up to 2x more performance over the previous generation.<sup>2</sup> The Radeon<sup>TM</sup> Pro WX 2100 and WX 3100 workstation graphics cards are based on the efficient 14nm "Polaris" GPU architecture, both are equipped with 8 compute units (512 stream processors) to drive users' workloads to the screen. Peak performance for these cards comes in at 1.25 TFLOPS single precision compute. The difference between these two cards is the memory configuration. The Radeon<sup>TM</sup> Pro WX 2100 comes with 2GB of fast GDDR5 memory on a 64-bit interface, while the Radeon Pro WX 3100 has 4GB of fast GDDR5 memory on a 128-bit interface. Compared to the current entry-level cards from NVIDIA, the Radeon<sup>TM</sup> Pro WX 2100 is on average up to 20% faster than the NVIDIA Quadro P400<sup>3</sup>, and the Radeon<sup>TM</sup> Pro WX 3100 is on average up to 29% faster than the NVIDIA Quadro P600<sup>4</sup>.

# RADEONTM PRO WX 2100 AND WX 3100 QUICK SPECS Based on "Polaris" GPU Architecture 8 Compute Units (512 Stream Processors) Up to 1.25 TFLOPS Single Precision Compute Performance 2GB GDDR5 Memory, 64-bit Memory Bandwidth (WX 2100) 4GB GDDR5 Memory, 128-bit Memory Bandwidth (WX 3100)





# WHY IT'S GREAT

FEATURE	BENEFIT
4TH GENERATION GRAPHICS CORE NEXT (GCN) ARCHITECTURE	The Radeon™ Pro WX 2100 and WX 3100 graphics cards are based on the fourth-generation of Graphics Core Next (GCN) GPU architecture and, like its predecessor, can perform graphic and arithmetic instructions in parallel.
4K/5K DISPLAY SUPPORT	With three discrete DisplayPort 1.4 HBR3/HDR Ready $^{\rm s}$ outputs, the Radeon $^{\rm TM}$ Pro WX 2100 and WX 3100 graphics cards can drive up to three 4K displays at 60Hz or one 5K display at 60Hz.
10-BIT COLOR	Native support for 10-bits per color channel for color-critical tasks. Driving an effective 30-bits per pixel, the Radeon™ Pro WX 2100 and WX 3100 are great for any workload requiring that level of detail and color precision.
AMD EYEFINITY TECHNOLOGY SUPPORT	Industry-leading multi-display technology enabling highly immersive and unrivaled multi-tasking across up to three displays <sup>6</sup> , powered by a single Radeon™ Pro WX 2100 or WX 3100 graphics card.



# **HOW WE STACK UP**

### RADEON™ PRO WX 2100 VS. NVIDIA QUADRO P400

	RADEON™ PRO WX 2100	NVIDIA QUADRO P400	AMD ADVANTAGE
PEAK SINGLE PRECISION PERFORMANCE	1.25 TFLOPS	0.641 TFLOPS	Yes
GPU MEMORY	2GB GDDR5	2GB GDDR5	
MEMORY BANDWIDTH	48 GB/s	32 GB/s	Yes
CATIA (EST. SPECVIEWPERF® 12.1)	29.53	26.22	Up to 12% faster <sup>7</sup>
CREO (EST. SPECAPC <sup>SM</sup> PTC CREO 3.0 GRAPHICS COMPOSITE)	4.24	3.88	Up to 9% faster <sup>8</sup>
SIEMENS NX (EST. SPECVIEWPERF® 12.1)	36.6	26.6	Up to 37% faster <sup>9</sup>
SOLIDWORKS (EST. SPECAPC <sup>SM</sup> FSAA GRAPHICS COMPOSITE)	5.08	3.17	Up to 60% faster <sup>10</sup>

## RADEON™ PRO WX 3100 VS. NVIDIA QUADRO P600

	RADEON™ PRO WX 3100	NVIDIA QUADRO P600	AMD ADVANTAGE
PEAK SINGLE PRECISION PERFORMANCE	1.25 TFLOPS	1.195 TFLOPS	Yes
GPU MEMORY	4GB GDDR5	2GB GDDR5	Yes
MEMORY BANDWIDTH	96 GB/s	64 GB/s	Yes
CATIA (EST. SPECVIEWPERF® 12.1)	46.84	41.11	Up to 14% faster <sup>11</sup>
CREO (EST. SPECAPC <sup>SM</sup> PTC CREO 3.0 GRAPHICS COMPOSITE)	6.32	5.4	Up to 17% faster12
SIEMENS NX (EST. SPECVIEWPERF® 12.1)	56.25	36.41	Up to 54% faster <sup>13</sup>
SOLIDWORKS (EST. SPECAPC <sup>SM</sup> FSAA GRAPHICS COMPOSITE)	6.3	4.26	Up to 47% faster <sup>14</sup>

## To learn more about Radeon Pro, please visit: pro.radeon.com/wx

Unless otherwise stated, results listed below are from testing conducted by AMD Performance Labs as of March 22nd, 2017 on a test system comprising of Intel E5-1650 v3 ⓐ 3.50 GHz, 16GB DDR4 physical memory. Windows 7 Professional 64-bit, Radeon™ Pro WX 2100, WX 3100, AMD FirePro™ W2100, WV10IA Quadro P400, P600, AMD graphics driver 17.20/NVIDIA graphics driver 382.05 and LITEON 512GB SSD. Scores are estimates based on AMD internal lab measurements/modelling and may vary. Additional information about SPECviewperf®12.1 can be found at www.spec.org. PC manufacturers may vary configurations, yielding different results. Performance may vary based on use of latest drivers

- "Entry-level" means sub-US\$250 workstation cards. Benchmark Application: SPECviewperf 12.1 Geomean Results. Radeon™ Pro WX2100 score: 16.79, NVIDIA Quadro P400 score: 13.91 Performance Differential: (16.79-13.91)/13.91 = -20.72% faster performance on Radeon™ Pro WX2100. Radeon™ Pro WX3100 score: 27.92, NVIDIA Quadro P600 score: 21.66. Performance Differential: (27.92-21.66)/21.66 = -28.92% faster performance on Radeon™ Pro WX3100. Radeon™ Pro WX3100 score: 27.92, FirePro™ W4100 score: 11.71. Performance Differential: (27.92-11.71)/11.71 = -138.55% faster performance on Radeon™ Pro WX3100. RPW-171
- 2. Benchmark Application: Estimated SPECviewperf® 12.1 Geomean Results. Radeon™ Pro WX2100 score: 16.79, FirePro™ W2100 score: 8.61. Performance Differential: (16.79-8.61)/8.61 = -94.96% faster performance on Radeon™ Pro WX2100. Radeon™ Pro WX3100 score: 27.92, FirePro™ W4100 score: 11.71. Performance Differential: (27.92-11.71)/11.71 = -2.3x faster performance on Radeon™ Pro WX3100. RPW-172
- Benchmark Application: Estimated SPECviewperf® 12.1 geomean. Radeon™ Pro WX2100 score: 16.79, NVIDIA Quadro P400 score: 13.91. Performance Differential: (16.79-13.91)/13.91 = -20.72% faster performance on Radeon™ Pro WX2100. RPW-133
- Benchmark Application: Estimated SPECviewperf® 12.1. Geomean Radeon™ Pro WX3100 score: 27.92, NVIDIA Quadro P600 score: 21.66. Performance Differential: (27.92-21.66)/21.66 = -28.92% faster performance on Radeon™ Pro WX3100. RPW-142
- Product is based on the DisplayPort 1.4 Specification published February 23, 2016, and is expected to pass VESA's compliance testing process when available. GD-110
- Learn more at www.amd.com/en/technologies
- Benchmark Application: Estimated SPECviewperf® 12.1 catia-04 viewset. Radeon™ Pro WX2100 score: 29.53, NVIDIA Quadro P400 score: 26.22. Performance Differential: (29.53-26.22)/26.22 = -12.62% faster performance on Radeon™ Pro WX2100. RPW-128

- Benchmark Application: Estimated SPECapc<sup>5M</sup> PTC Creo 3.0 Graphics Composite. Radeon<sup>™</sup> Pro WX2100 score: 4.24, NVIDIA Quadro P400 score: 3.88. Performance Differential: (4.24-3.88)/3.88 = ~9.28% faster performance on Radeon<sup>™</sup> Pro WX2100. RPW-134
- Benchmark Application: Estimated SPECviewperf® 12.1 snx-02 viewset. Radeon™ Pro WX2100 score: 36.60, NVIDIA Quadro P400 score: 26.61. Performance Differential: (36.60-26.61)/26.61 = ~37.54% faster performance on Radeon™ Pro WX2100. RPW-132
- Benchmark Application: Estimated SPECapc<sup>SM</sup> Dassault SolidWorks 2015 FSAA Graphics Composite Radeon<sup>TM</sup> Pro WX2100 score: 5.08, NVIDIA Quadro P400 score: 3.17. Performance Differential: (5.08-3.17)/3.17 = -60.25% faster performance on Radeon<sup>TM</sup> Pro WX2100. RPW-136
- Benchmark Application: Estimated SPECviewperf® 12.1 catia-04 viewset. Radeon™ Pro WX3100 score: 46.84, NVIDIA Quadro P600 score: 41.11. Performance Differential: (46.84-41.11)/41.11 = -13.94% faster performance on Radeon™ Pro WX3100. RPW-137
- Benchmark Application: Estimated SPECapc<sup>5M</sup> PTC Creo 3.0 Graphics Composite. Radeon<sup>™</sup> Pro WX3100 score: 6.32, NVIDIA Quadro P600 score: 5.40. Performance Differential: (6.32-5.40)/5.40 = -17.04% faster performance on Radeon<sup>™</sup> Pro WX3100. RPW-143
- Benchmark Application: Estimated SPECviewperf® 12.1 snx-02 viewset. Radeon™ Pro WX3100 score: 56.25, NVIDIA Quadro P600 score: 36.41. Performance Differential: (56.25-36.41)/36.41 = -54.49% faster performance on Radeon™ Pro WX3100. RPW-141
- 14. Benchmark Application: Estimated SPECapc<sup>SM</sup> Dassault SolidWorks 2015 FSAA Graphics Composite Radeon™ Pro WX3100 score: 6.30, NVIDIA Quadro P600 score: 4.26. Performance Differential: (6.30-4.26)/4.26 = −47.89% faster performance on Radeon™ Pro WX3100 RPW-13100 RPM-3100 RPM-31

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