AUTODESK

Arnold

Target Markets:

Very clear artistic benefits to Autodesk customers in Film/TV and Games

Expected to be very beneficial to Autodesk 3ds Max users in design visualization with AEC and Manufacturing industries

"Autodesk is committed to bringing the highest quality photorealistic rendering to our users and we look forward to a GPU version of the Arnold renderer that could leverage the NVIDIA RTX platform. We are super excited to see the performance gains while maintaining the great look our Arnold customers love."

Chris Vienneau, senior director, Media & Entertainment Products, Autodesk

DS SOLIDWORKS

SOLIDWORKS Visualize, SOLIDWORKS 3D CAD

Target Markets:

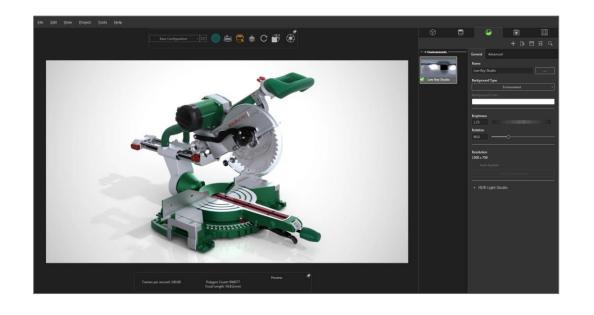
MFG

RTX Acceleration Proof Points:

Inference acceleration of the AI Denoiser in SOLIDWORKS Visualize

Technical POC SOLIDWORKS CAD plugin showing real-time Global Illumination

Target ship date for Turing support: 2019



"We are excited about the innovations in graphics technology that NVIDIA has unveiled at SIGGRAPH today, and know our customers will welcome this new, cutting-edge visualization capability into their daily workflows."

ADOBE





Dimension Renderer — Tech Preview

Target Markets:

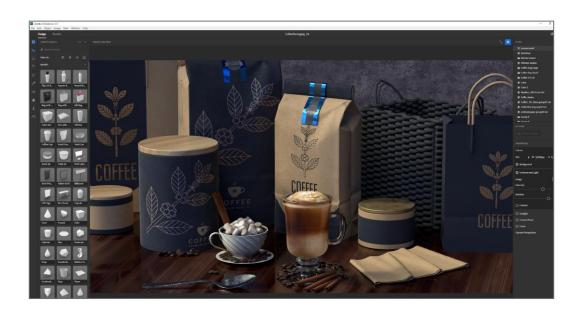
New render option for Dimension CC Bringing intuitive 3D design tools to the masses Graphics & package designers, branding pros

RTX Acceleration Proof Points:

Up to 10x performance boost on early alpha Note: Also uses NVIDIA MDL

Target Ship Date For Turing Support

Planned for Dimension CC, Release date TBD

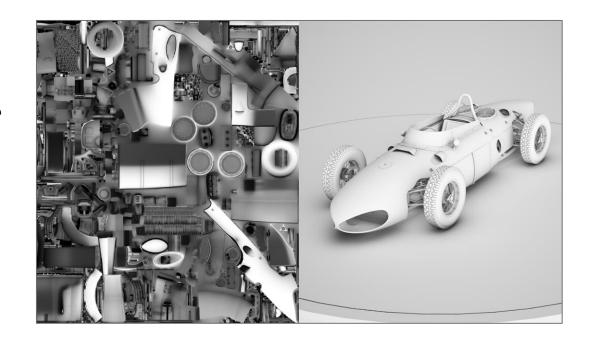


"Turing is a technological leap forward that will help Adobe shape the future of creative design. The powerful new ray tracing features of NVIDIA RTX will make 3D more accessible to designers and marketers through intuitive tools like Dimension CC. We look forward to leveraging the enhanced AI capabilities of RTX as we extend our Sensei machine learning capabilities to democratize 2D/3D compositing."

ALLEGORITHMIC

Substance

"RTX technology tightly integrates ray tracing into the real-time graphics pipeline. It enables new rendering techniques that will greatly improve the quality of real-time graphics, and the performance of graphical tools overall. In the case of Substance ray-traced bakers, we can observe an increase in speed of around 800% when compared with CPU-based ray tracing."



Cyrille Damez, CTO, Allegorithmic



ANSYS VRXPERIENCE

Industry's Leading Solution Provider for Simulation

Target Markets:

Fast Virtual Prototyping

RTX Acceleration Proof Points:

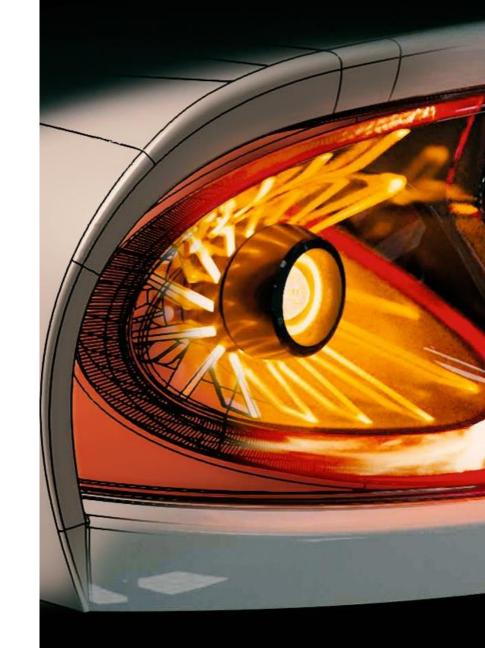
Up to 4x performance vs P6000 with OptiX 5.2

Faster Convergence in MC simulation

Higher framerate in Deterministic RayTracing experience of complex optical system

Target Ship Date For Turing Support

Next software release: 2019 R1



DASSAULT SYSTÈMES

3DEXPERIENCE CATIA

Target Markets:

Design, Engineering and Manufacturing Architecture, Engineering and Construction

RTX Acceleration Proof Points:

Rendering with life-like quality materials to accelerate VR rendering for immersive experiences and design validation.

Target ship date for Turing support: Mid 2019



ALTAIR Thea Render

Target Markets:

Architectural Visualization, Interior Design, Product Design, Manufacturing, Media & Entertainment

GPU Benefits:

Performance boost of an order of magnitude

Target Ship Dates:

SketchUp & Cinema 4D already released Rhino plugin to be released in Sept 2018



"Altair Thea Render v2.0 integrates NVIDIA OptiX™ denoiser, dramatically accelerating production of final renders. Users can take advantage of this optimized workflow, creating out-of-the-box, stunning photorealistic images in a fraction of previous render times. "

KITWARE

ParaView

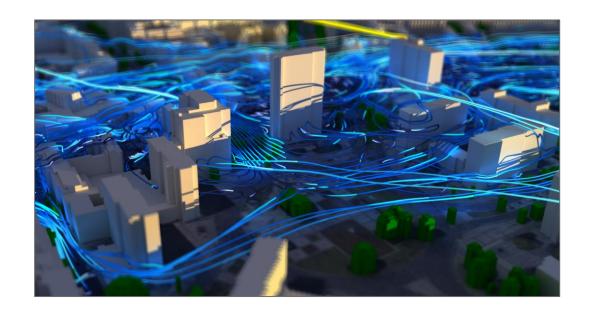
Target Markets:

Scientific computing, Engineering, HPC

RTX Acceleration Proof Points:

Added visual cues for better insight into data Physically accurate effects for improved visual communication Order of magnitude faster than CPU-only ray-tracing

Target Ship Date For Turing Support: March 2019



[&]quot;Interactive ray-tracing is a game changer for scientific visualization, offering improved visual cues for communicating scientific content without disrupting the exploratory workflow."

BLACKMAGIC DESIGN

DaVinci Resolve

Target Markets:

Media and entertainment

RTX Acceleration Proof Points:

Resolve 15 takes advantage of Tensor Cores to accelerate AI inferencing

Turing Support:

Support for Turing when it is commercially available in the Fall



[&]quot;Our customers are always looking for large performance gains and we are seeing a significant leap the Quadro RTX."

CHAOS GROUP

V-Ray GPU and Project Lavina

Target Markets:

AEC, design and media and entertainment

RTX Acceleration:

Technology preview of Project Lavina uses Microsoft's DXR to access RT Core acceleration in Turing

Delivers real-time ray tracing for scenes exported from Autodesk 3ds Max and Maya

V-Ray GPU shown using OptiX to access RT Core in Quadro RTX, seeing a 150% speed-up over Pascal generation.

Target ship date:

V-Ray GPU with RT Core support Q4, 2018 Project Lavina TBA



[&]quot;DXR on Turing enables us to explore workflows for real-time visualization that were not possible before. We estimate that Turing hardware is 3-5X faster than earlier GPU generations for the real-time ray tracing of our Project Lavina."

ISOTROPIX

Clarisse

Target Markets:

VFX layout, set dressing, look dev, lighting and rendering

RTX Acceleration Proof Points:

Clarisse already has OptiX de-noising, increasing interactive speeds by 6X

Demonstrating Clarisse with OptiX ray-tracing acceleration on Quadro RTX 6000, showing a 20X performance improvement over CPUs

Target General Availability Date:

Q4 2018



"We're excited about the hardware acceleration in NVIDIA's Turing generation because it will enable our customers to enjoy rendering acceleration 20X faster than on CPU. It's just fantastic!"

OTOY

Octane

Target Markets:

Media and entertainment, product design, light field rendering (VR/AR) and real time game engines (Unity, Unreal Engine)

RTX Acceleration:

Octane 2019 and RNDR SDK support Microsoft's DXR and Vulkan RT to access RTX ray-tracing hardware in Quadro RTX with new high speed path tracing and light field rendering kernels

Technology demonstration of Octane 4 using new OptiX backend with RTX/NVLink on Quadro RTX

Target Ship Date:

Octane 2019 in H1

NVIDIA Booth Talk:

Tuesday: 5:30-5:55 PM, Jules Urbach, CEO Octane 4 with RTX Ray Tracing: The Future of GPU VFX and Holographic Media on the RNDR Blockchain



"NVIDIA RTX ray tracing hardware is the future - and will define the next decades of GPU rendering. At SIGGRAPH we're demonstrating performance improvements of 5-8X with Octane 2019's path tracing kernel - running at 3.2 billion rays/second on NVIDIA's new Quadro RTX 6000 - compared to 400 millions rays/second on P6000."

PIXAR Renderman

Target Markets:

Media and entertainment

RTX Acceleration Proof Points:

Demonstrating early RenderMan XPU architecture that uses CPU and GPU utilizing NVIDIA OptiX

Pixar Art and Science Fair Wednesday features demos of Al denoiser and XPU running on Quadro RTX 6000

Target Ship Date For Turing Support

RenderMan 22.1 will ship in Sept with OptiX denoiser RenderMan XPU in the R23 timeframe. Early access starts in early 2019 with rolling betas through the year



"Pixar is excited to be working closely with NVIDIA to integrate the OptiX ray tracing acceleration in Quadro RTX into the next generation of high performance RenderMan solutions for animation and VFX."

REDSHIFT

Redshift Renderer

Target Markets:

Media and entertainment

RTX Acceleration Proof Points:

Redshift 2.6 (available now) with OptiX de-noising, accelerating interactivity

Redshift 3.0 will leverage OptiX for Turing-generation ray tracing

Target Ship Date For Turing Support

Redshift 3.0 is expected to ship in Q1 2019

NVIDIA Booth talk:

Wed: 3:30-3:55 PM, Rob Slater, Co-founder Production-Quality, Final-Frame Rendering on a GPU,



" The Quadro RTX is a BEAST! "

WETA DIGITAL

Gazebo Renderer

Industry:

FILM and TV Visual Effects

RTX Acceleration:

Adding ray-tracing capability to their Gazebo real-time renderer

Immediate visual feedback on lighting and animation decision-making

Target ship date for Gazebo RTX

Q3 development rollout 2018



"Our long-term collaboration with NVIDIA on advanced rendering continues with Turing. The performance improvements change how artists can work with hero assets throughout the pipeline, improving every creative decision along the way. This is not a speed up, it's a step up to a new way of working."

ESI GROUP



IC.IDO

Target Markets:

Engineering and Manufacturing: Automotive, Aerospace, Ground Transportation, Construction Equipment, Industrial Machines, and Mining and Farm Implements

RTX Acceleration Proof Points:

True-to-life visibility reviews for new products and build processes

Evaluate impact of reflections on product design variants operability in real time

Experience from first person point of view effect of production environment lighting of production or service tasks

Target Ship Date For Turing Support Early 2019



"Turing has the potential to be a game-changer for our customers' workflows. Our preliminary tests with an early Turing-based GPU showed frame rates high enough for our engineering customers to realize raytraced reflections and their effects on proposed product configurations in real-time, for example cockpit or cabin visibility. This should significantly advance immersive product and procedural evaluation capability in CAVE's or active stereo displays, and eventually maybe even HMD's. We are actively exploring how innovations like RTX can be integrated into future versions of our solution."

UNIVERSITY OF ILLINOIS

VMD — Visual Molecular Dynamics

Target Markets:

Life Science, Materials Science

RTX Acceleration Proof Points:

Ray tracing performance up to 8x faster than on the fastest previous GPUs

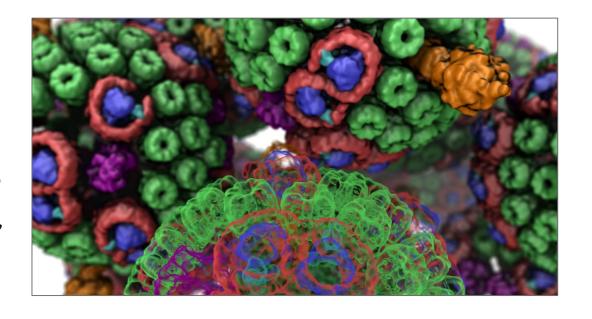
Visualization features like depth-of-field are fully interactive even for large models

Interactive VMD ray tracing converges in only a second or two in most common cases

Interactive RT frame rates permit ray traced VR HMD viewing, omnidirectional stereoscopic panoramas using only a desktop workstation

Target Ship Date For Turing Support

September 2018 (In beta now)



"VMD exploits Turing's RTX acceleration for fully interactive ray tracing of even the most difficult scenes from state-of-the-art research, giving scientists intuitive WYSIWYG publication rendering at high fidelity, all without becoming a graphics professional."

Courtesy of John Stone, Senior Research Programmer, University of Illinois at Urbana-Champaign