

intel[®]
ARC[™]
Graphics
Q3'23 Update



Today's Updates

Microsoft
DirectX₁₁

19% faster on DX11



New "**GPU Busy**" metric



Intel[®] PresentMon Beta

Unleashing Intel® Arc™ Graphics

43%

Performance Gains
on DirectX 9 Games



Intel® Arc™
A750 GPU

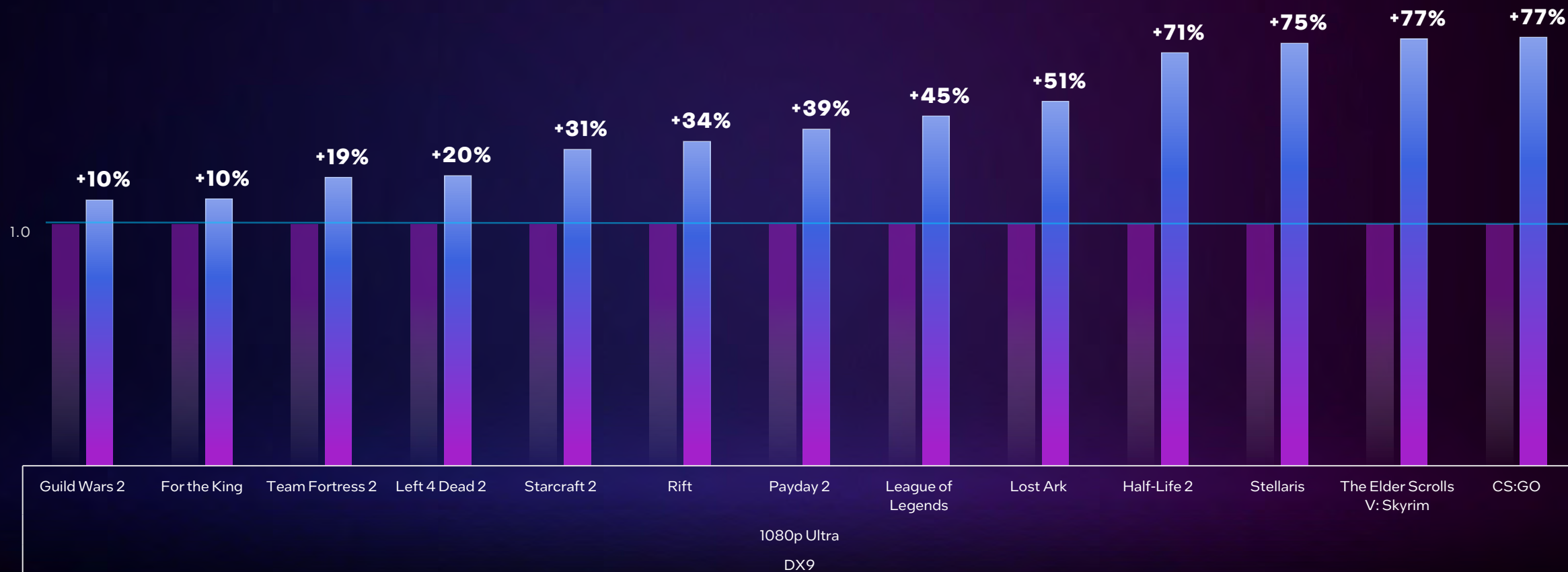
\$249
USD



Big Improvements in DX9 Gaming Performance

1080p Avg FPS Normalized

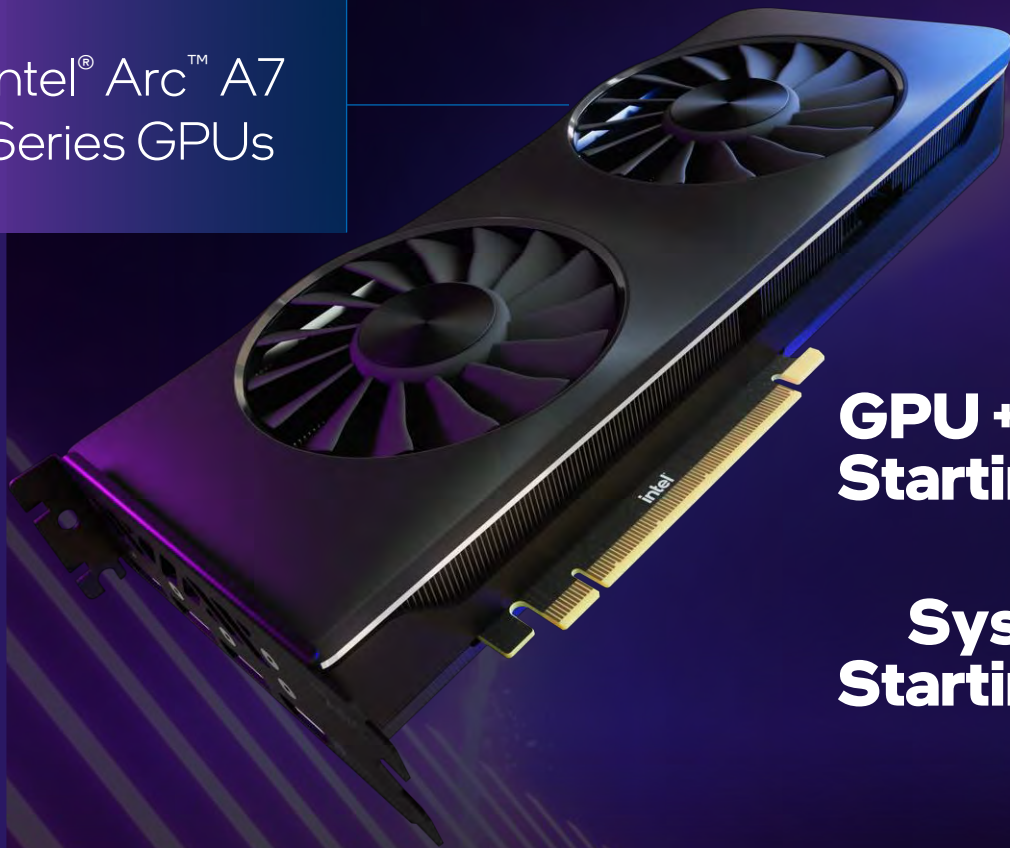
Intel® Arc™ A750 LE GPU 8GB – 3490 Launch Intel® Arc™ A750 LE GPU 8GB – 4086



INTEL® ARC™ BALANCED BUILDS

Intel® Arc™ GPU + Intel® Core™ CPU

Intel® Arc™ A7
Series GPUs



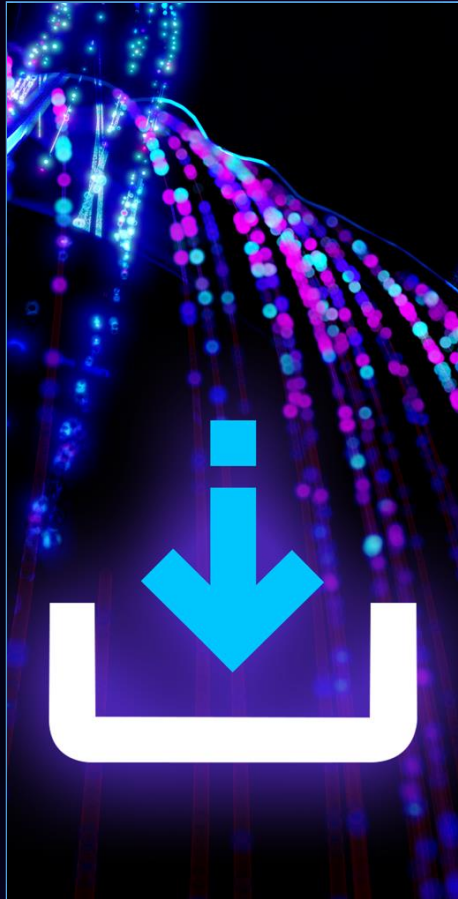
12th and 13th
Gen Intel® Core™
i5 and Intel®
Core™ i7 CPUs



GPU + CPU
Starting at: **\$419**
USD

Systems
Starting at: **\$799**
USD

Commitment to Gamers with Intel® Arc™ Graphics



30 Driver Releases Since Launch



Supporting 57 Games with Game On drivers



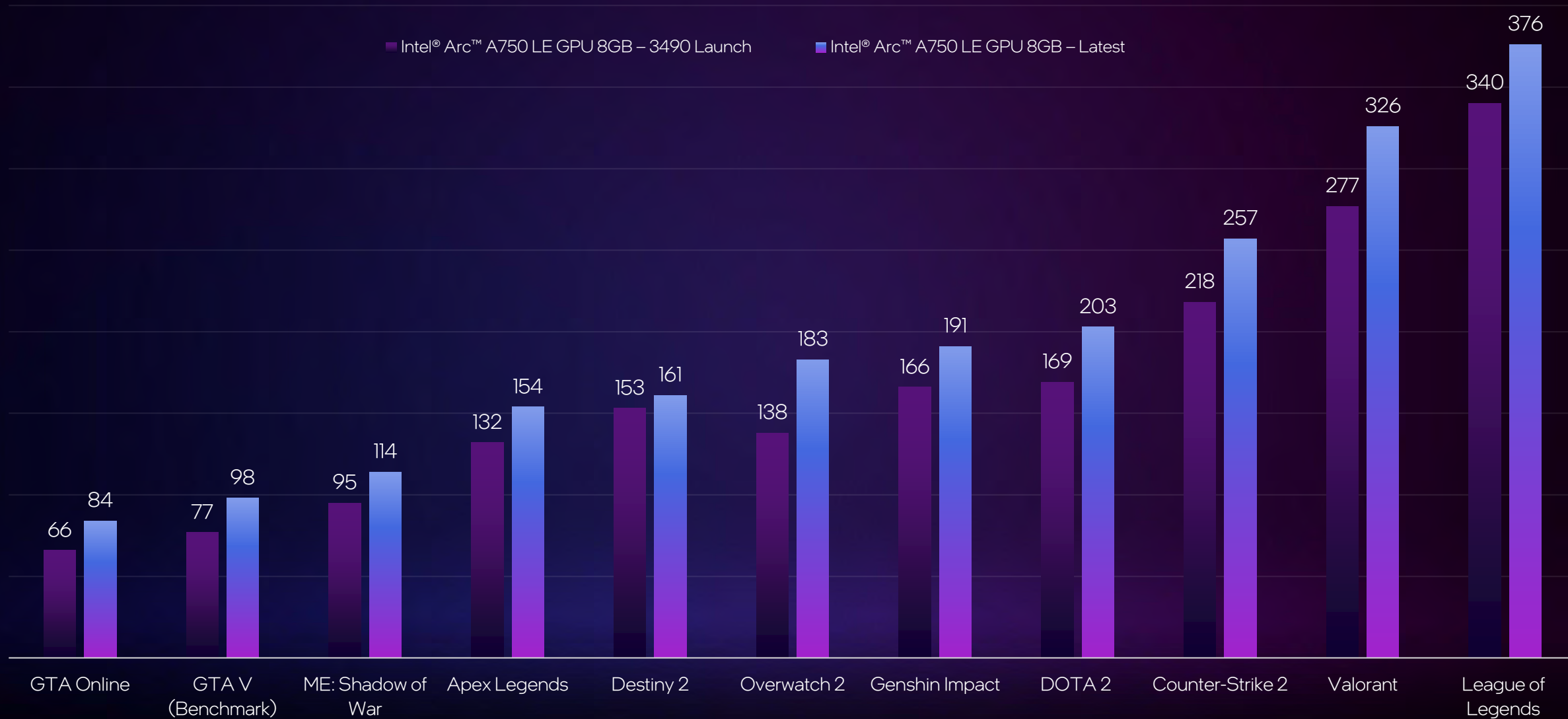
XeSS Now included in 70+ Games



Continuous Game Performance Improvements

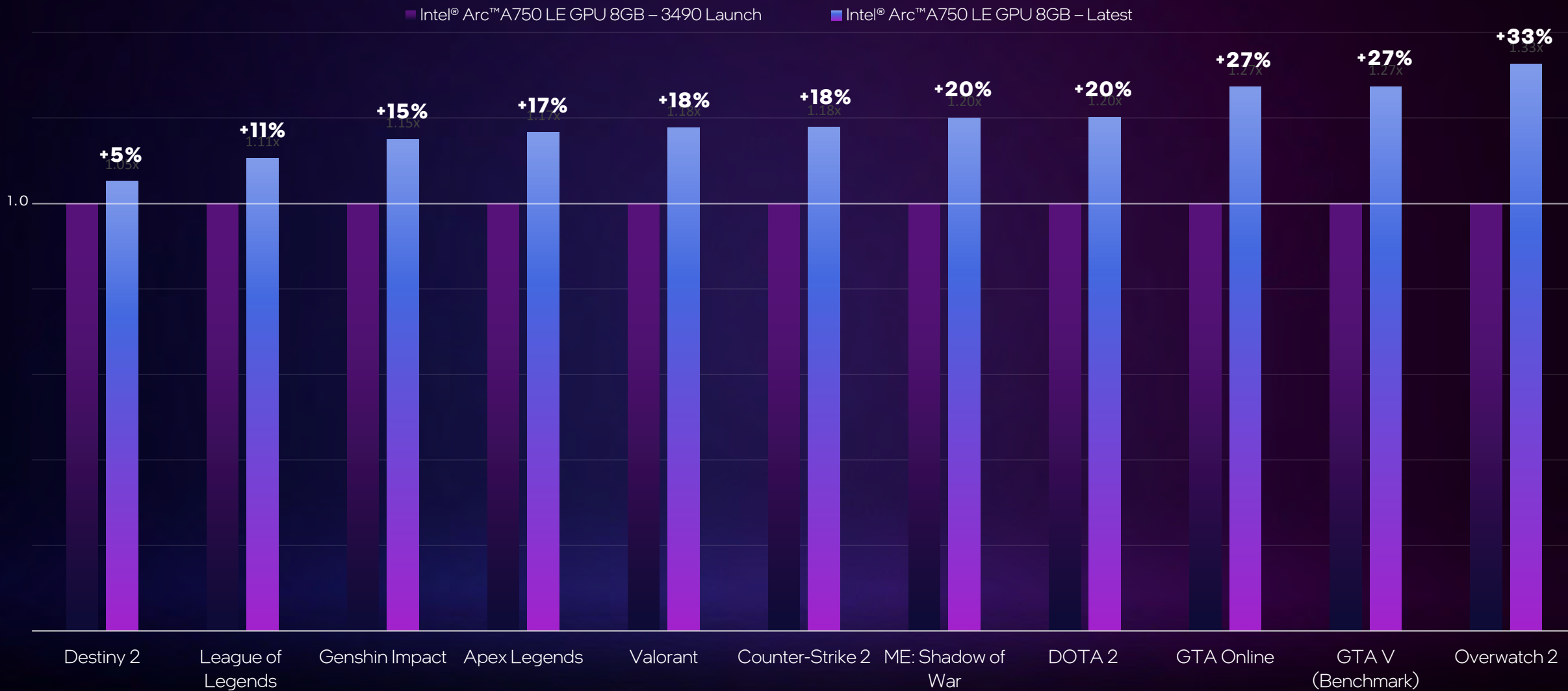
Big Improvements in DX11 Gaming Performance

1080p Average FPS



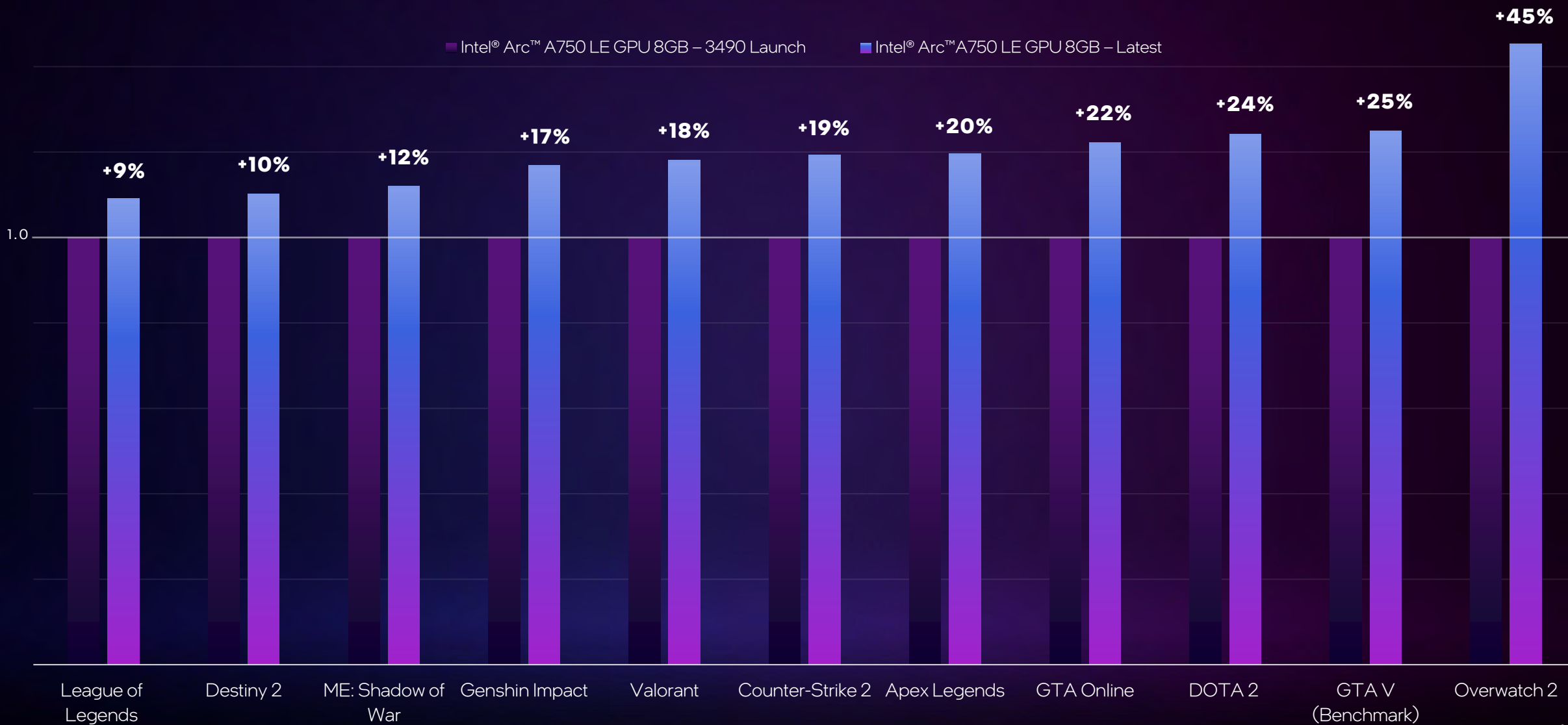
Big Improvements in DX11 Gaming Performance

1080p Avg FPS Normalized



Big Improvements in DX11 Gaming Performance

1080p 99th Percentile Normalized



Making Experiences Better on the Most Popular PC Games



1m+

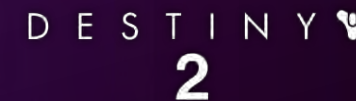
523k



128k

Concurrent
Players

53k



494k

362k





DX11 Gaming Improvements on Intel® Arc™ Graphics

Average FPS

19%

Faster

vs. Launch Driver



99th Percentile FPS

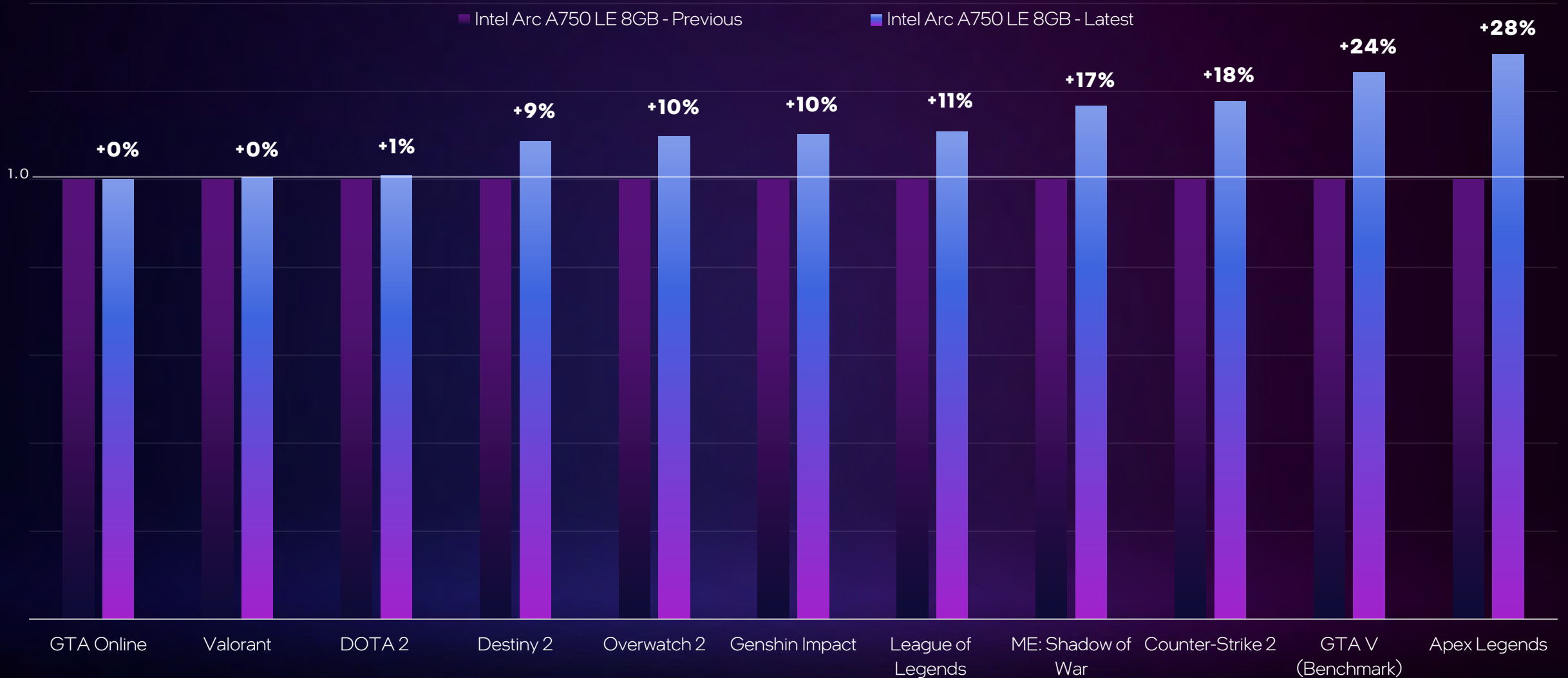
20%

Smother

vs. Launch Driver

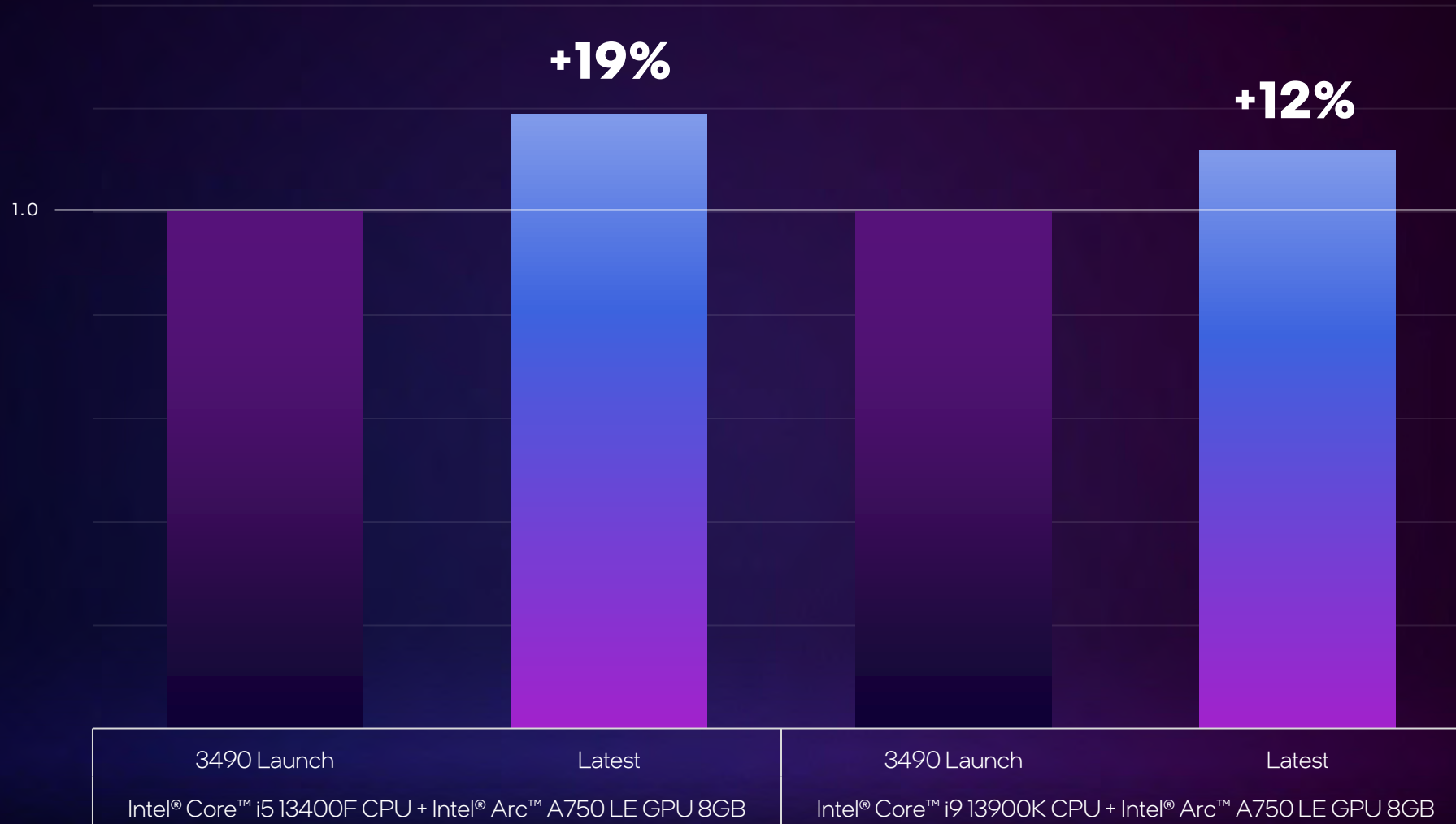
DX11 Gaming Performance Improvement on Intel® Core™ i9 CPUs

1080p Avg FPS Normalized



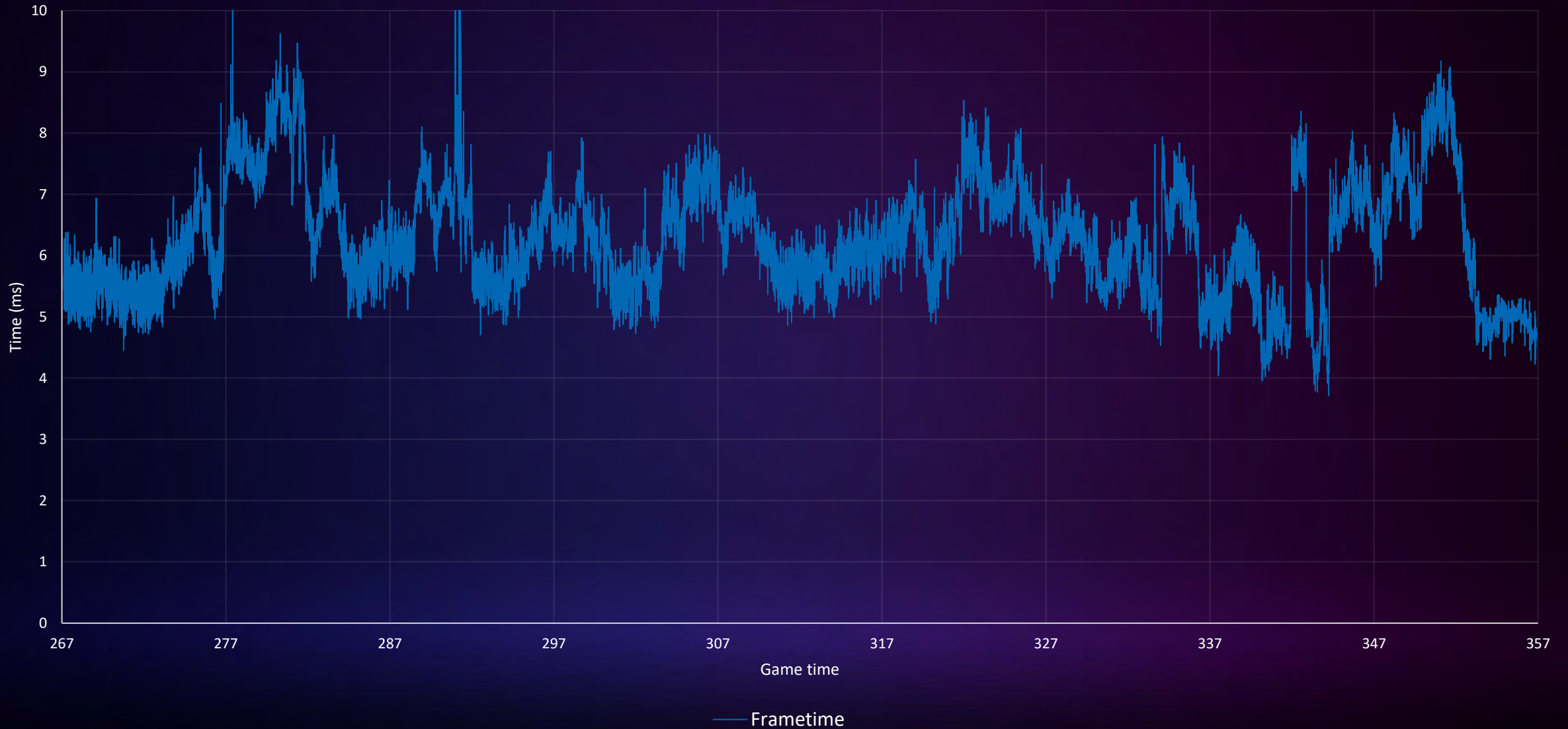
Avg DX11 Game Improvement for Intel® Arc™ Graphics

1080p Avg FPS Normalized



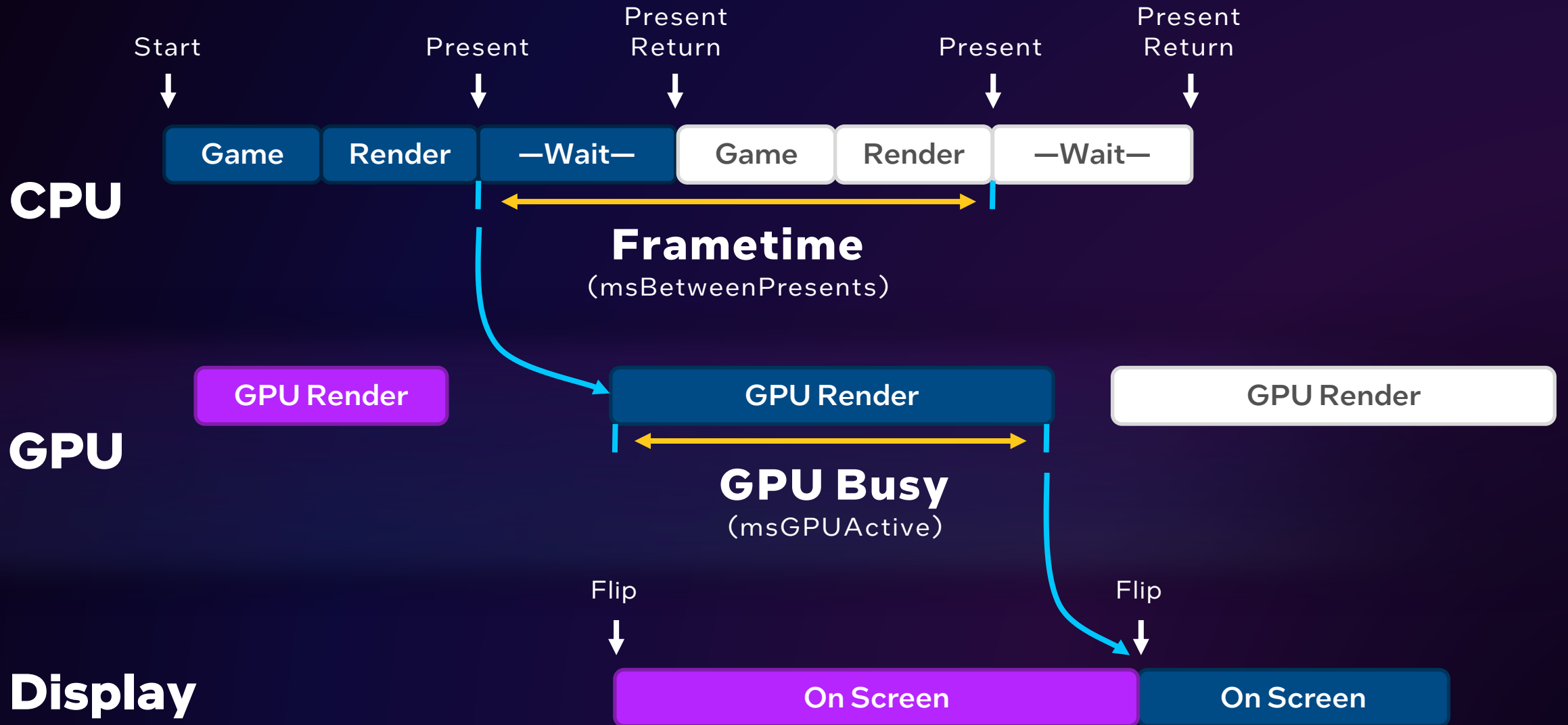
Overwatch 2 — 1080p Ultra

Intel® Core™ i5 CPU — Launch Driver (3490)



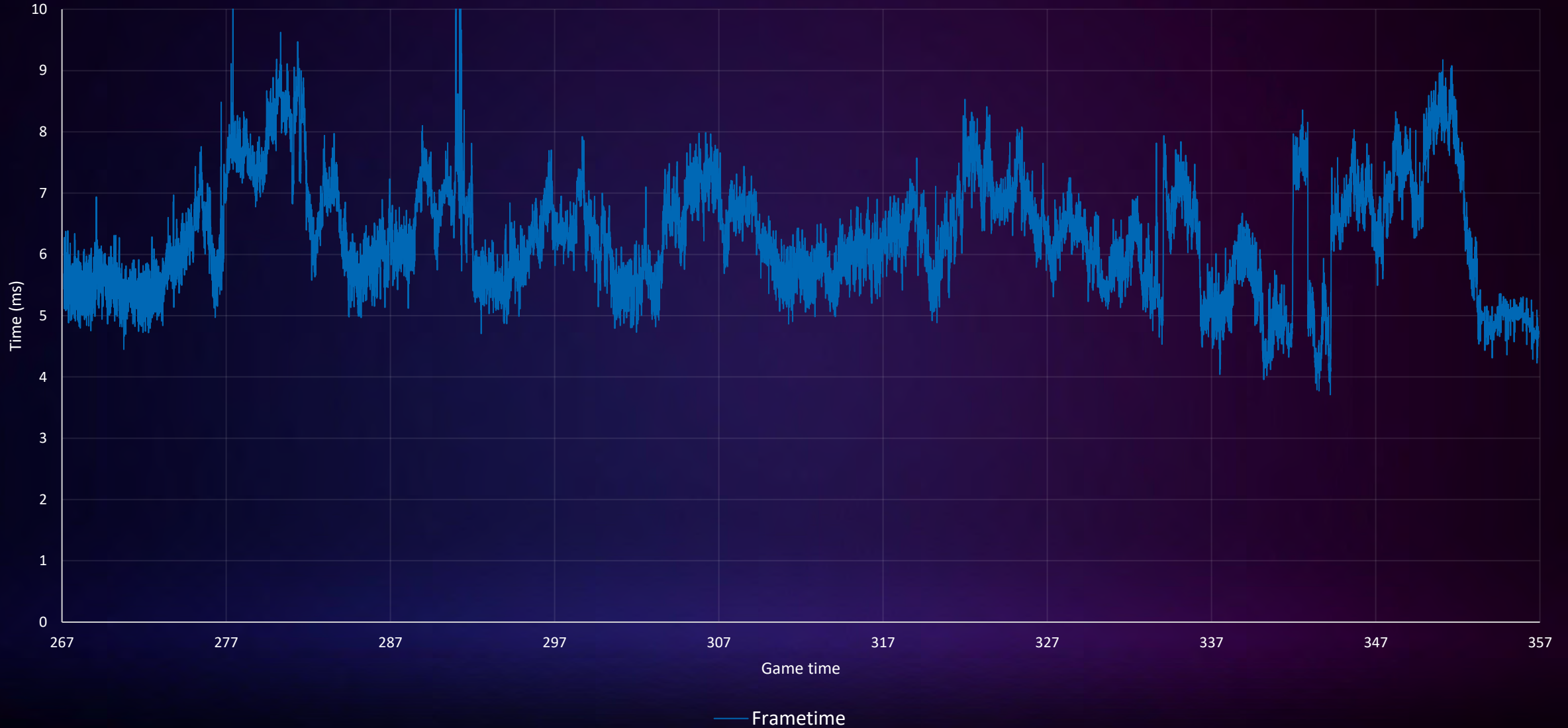
Example of Gaming Work Division

Overview



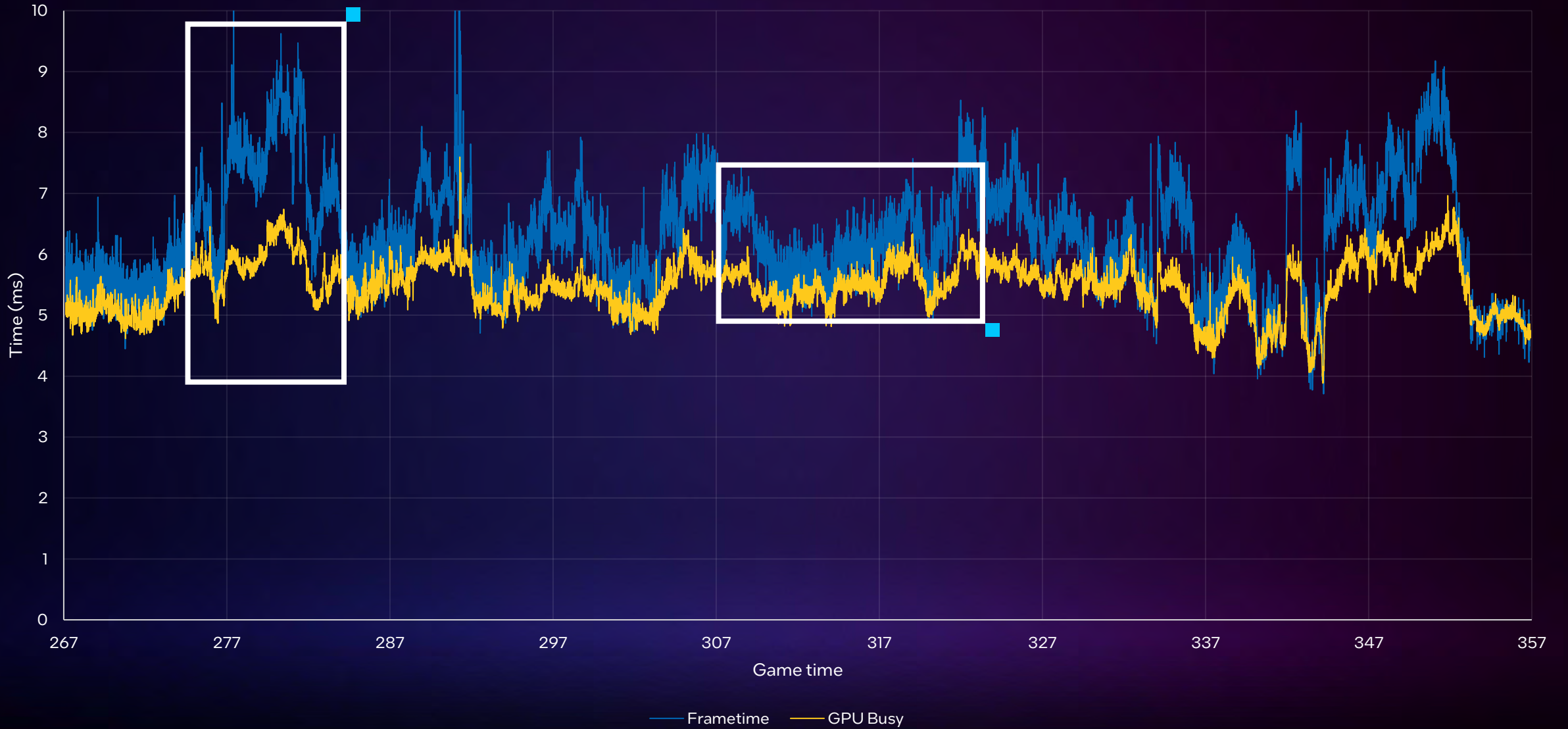
Overwatch 2 — 1080p Ultra

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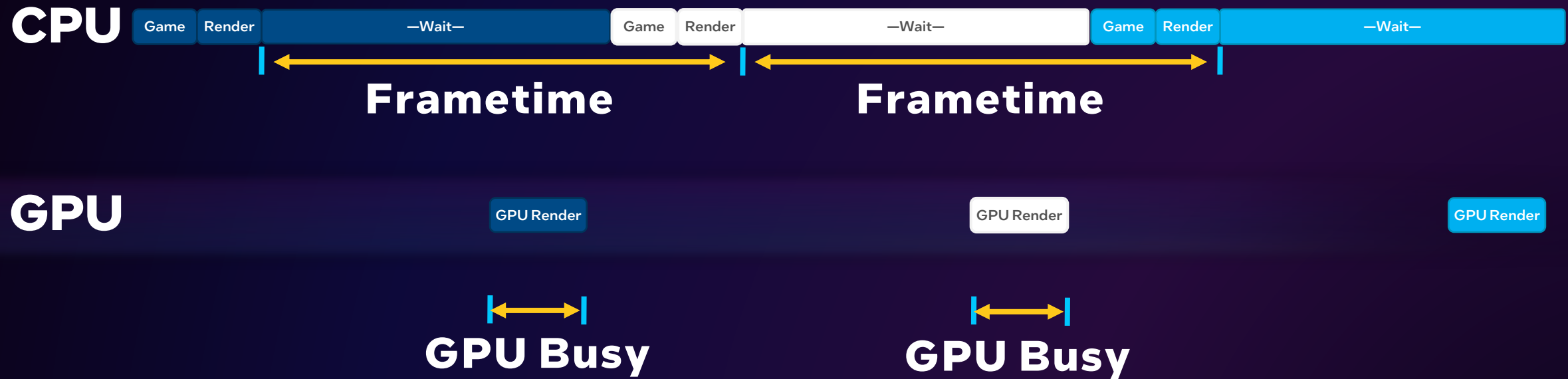
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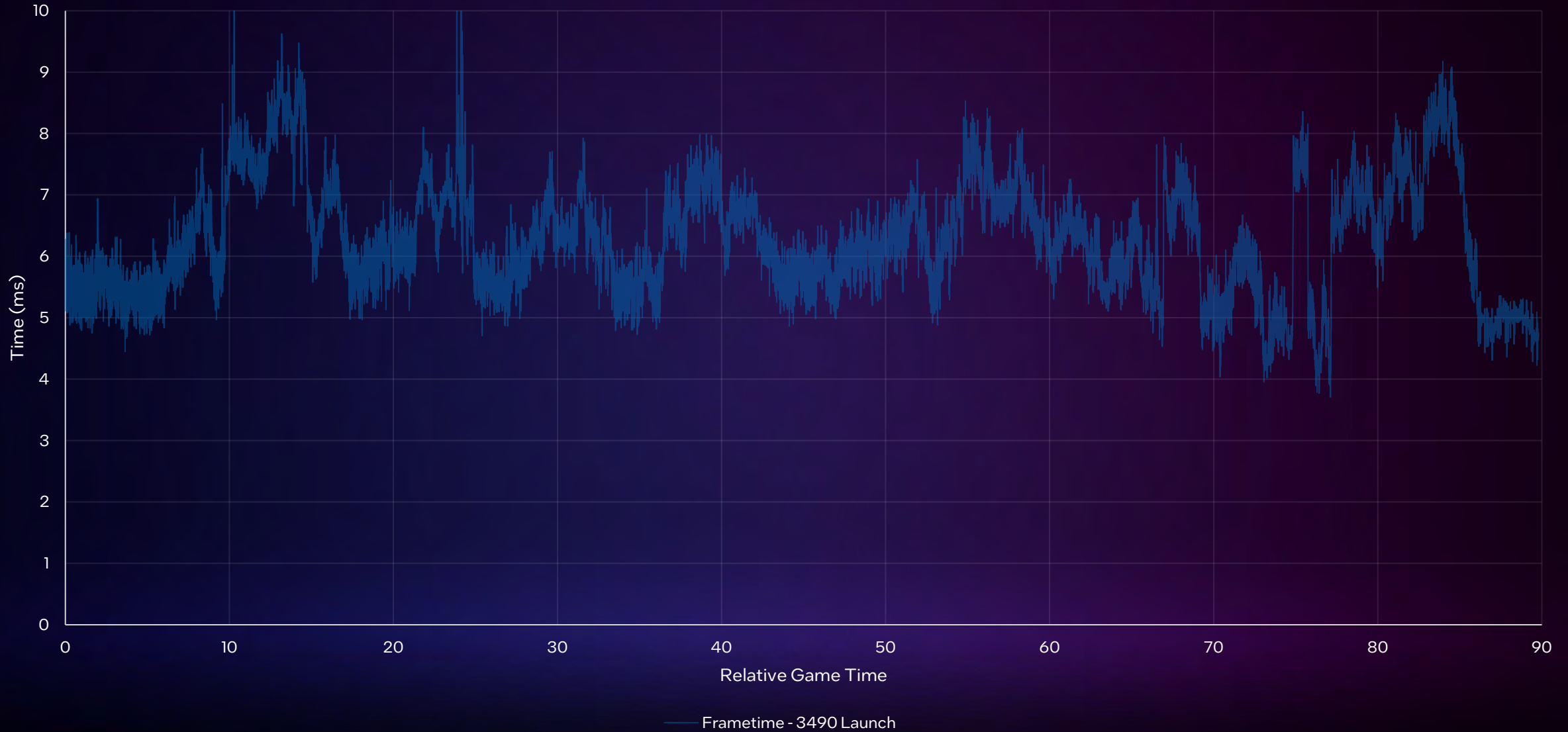
Example of Gaming Work Division

CPU limited



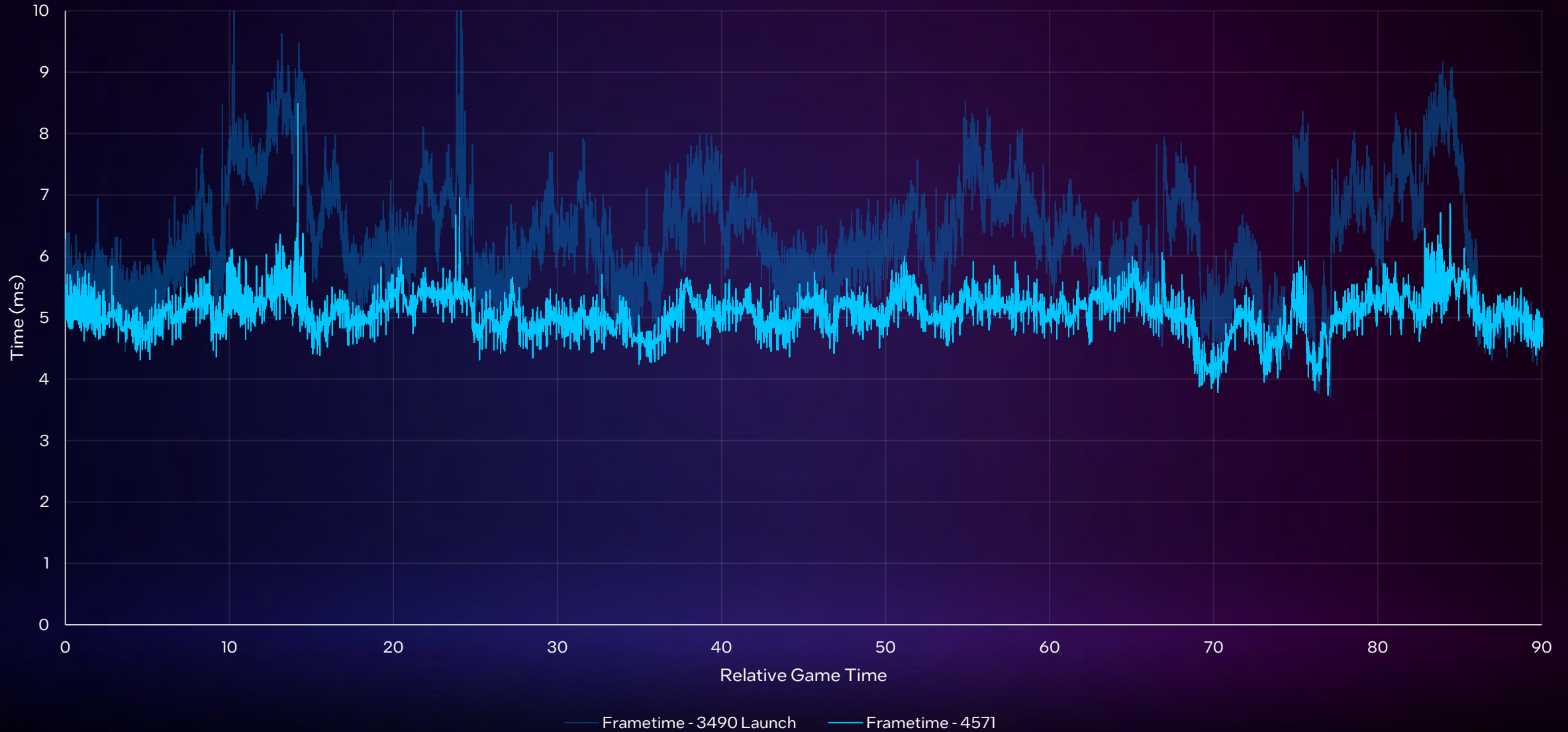
Overwatch 2 — 1080p Ultra

Intel® Core™ i5 CPU — Launch vs New Driver



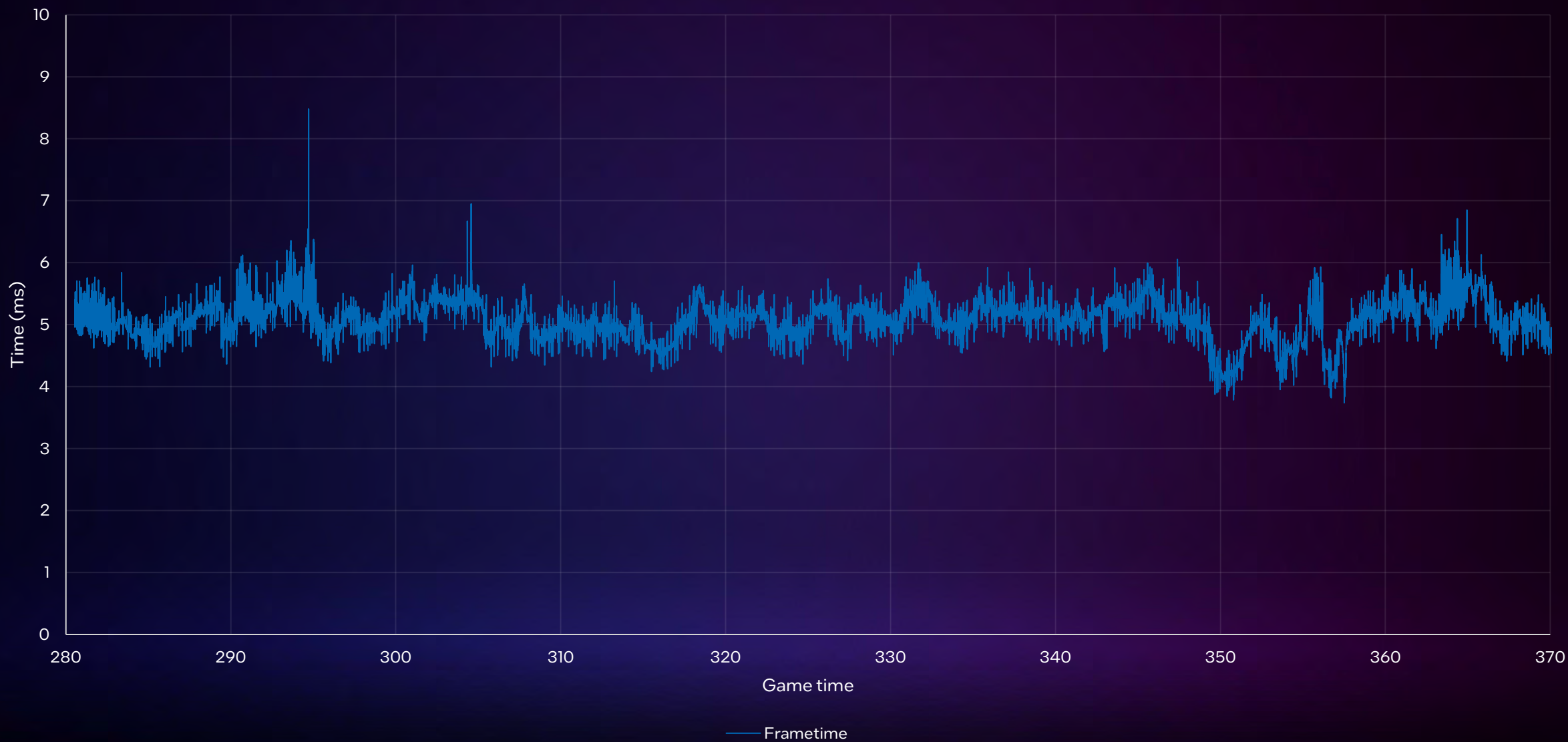
Overwatch 2 — 1080p Ultra

Intel® Core™ i5 CPU — Launch vs New Driver



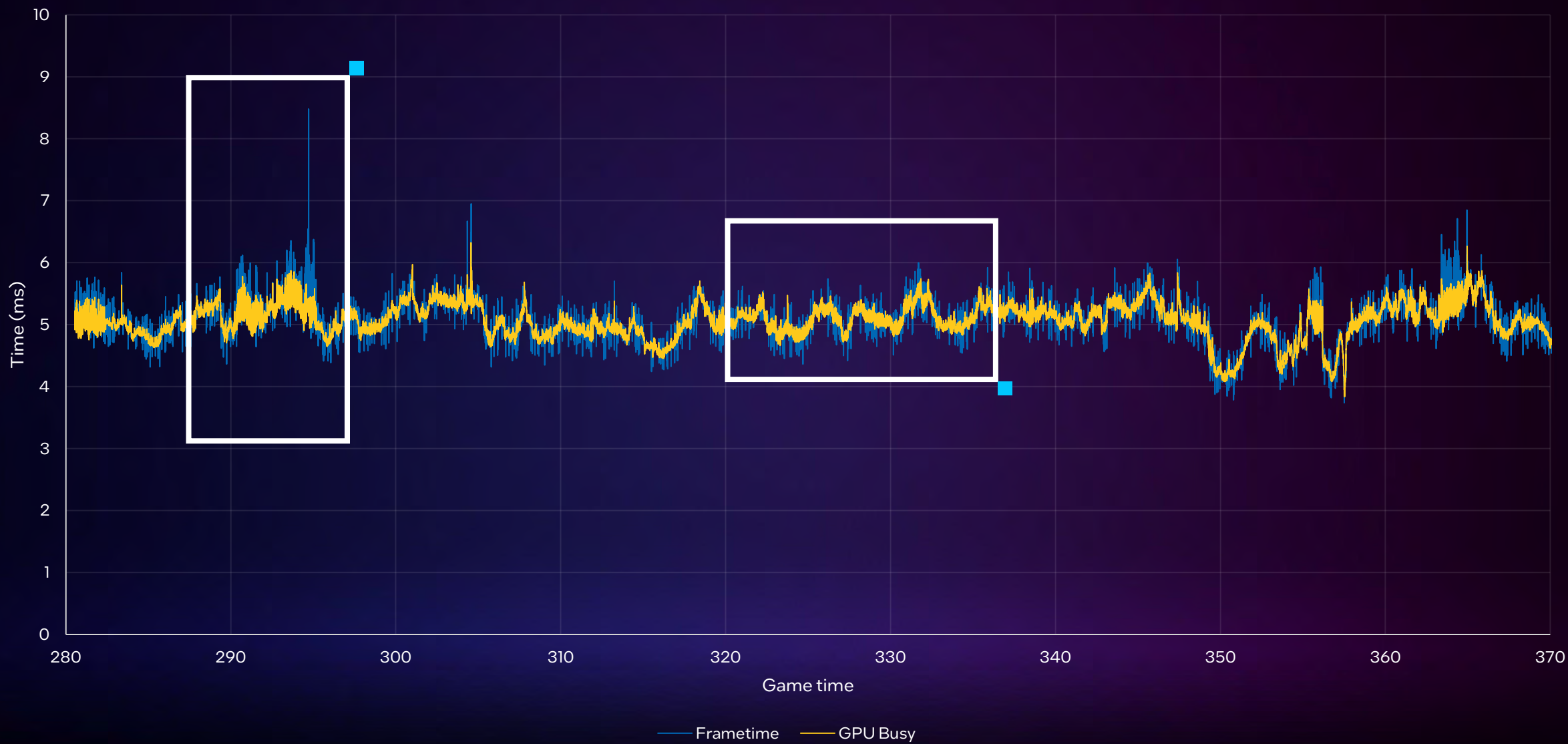
Overwatch 2 — 1080p Ultra

Intel® Core™ i5 CPU — New Driver (4571)



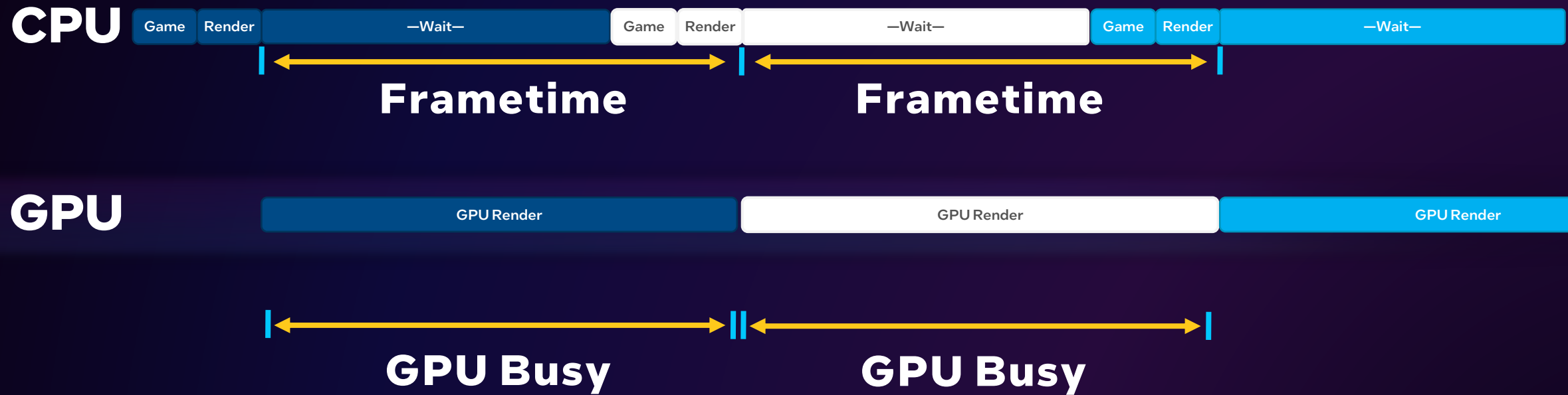
Overwatch 2 — 1080p Ultra

Intel® Core™ i5 CPU — New Driver (4571)



Example of Gaming Work Division

CPU and GPU Balanced



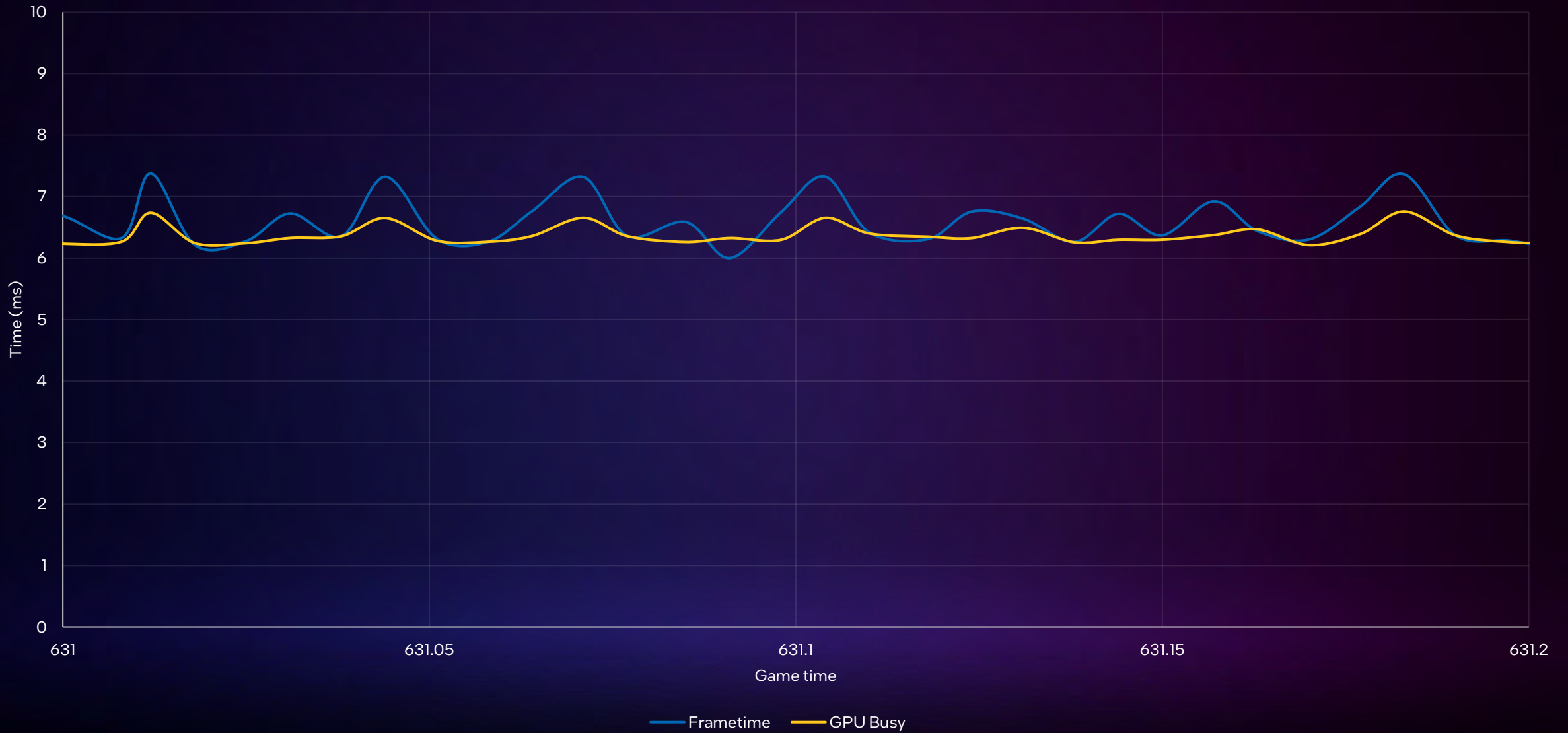
Counter-Strike 2 – 1080p Low

Intel® Core™ i5 CPU - New Driver (4571)



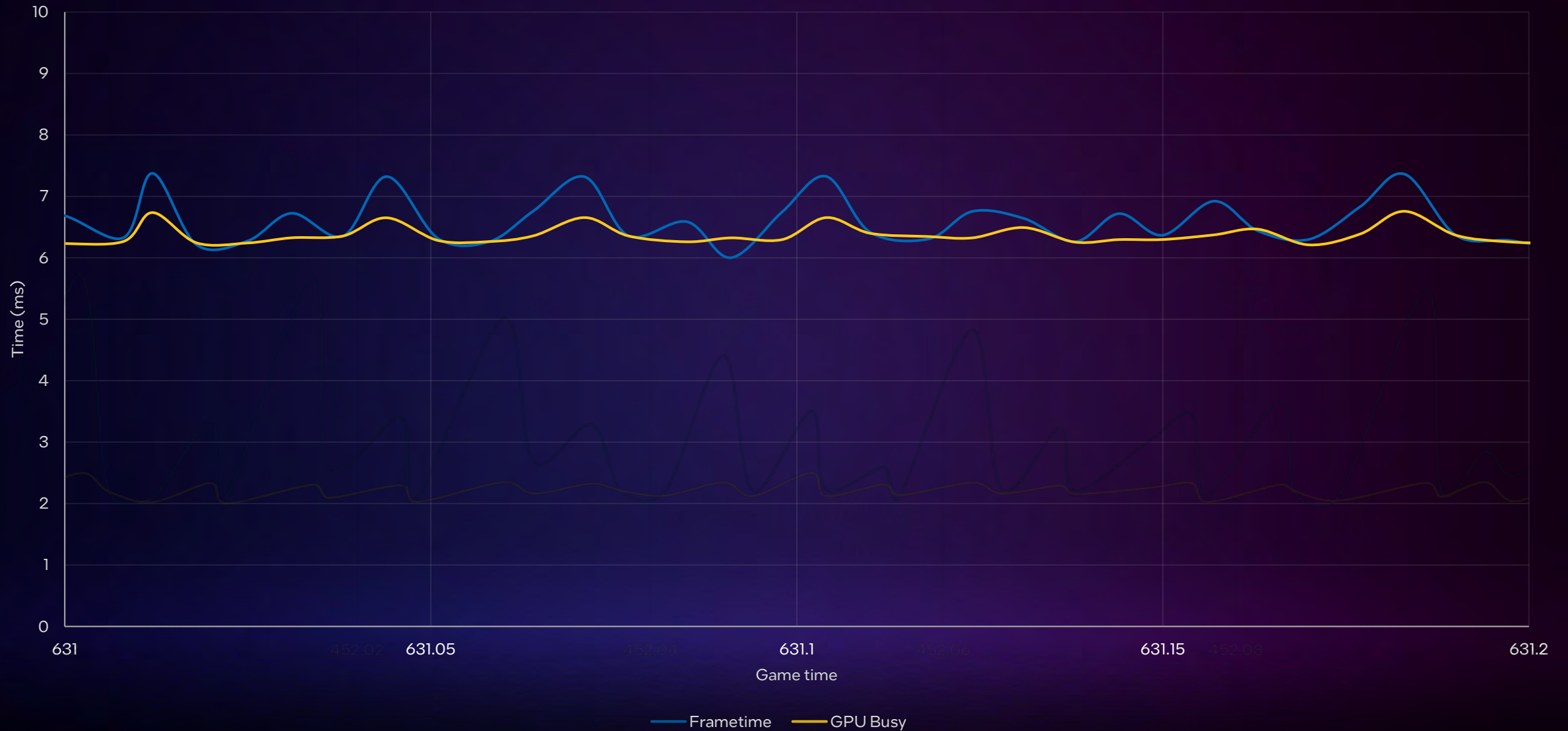
Counter-Strike 2 – 1080p Ultra

Intel® Core™ i5 CPU - New Driver (4571)



Counter-Strike 2 – 1080p Low vs Ultra

Intel® Core™ i5 CPU - New Driver (4571)

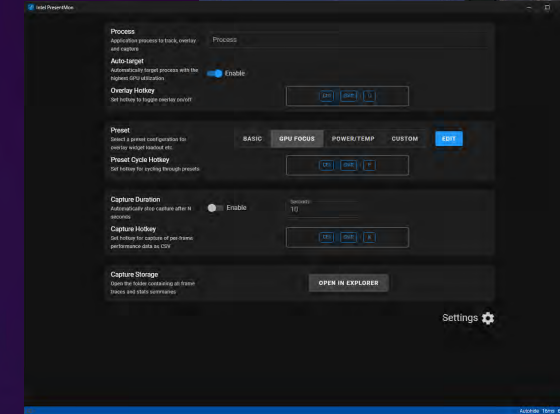
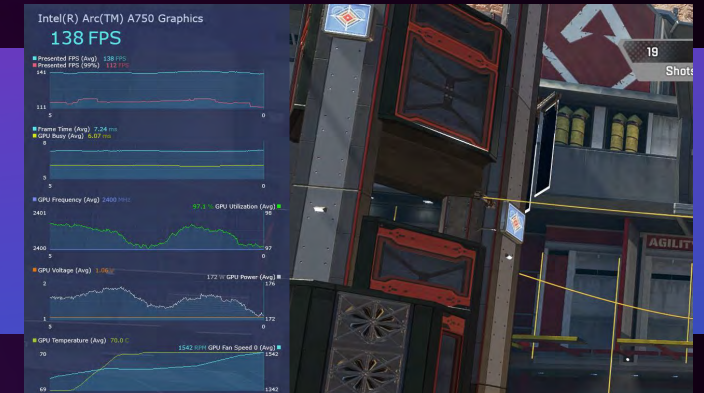




Intel® PresentMon Beta

New Performance Overlay, Capture, and Telemetry Tool

- Configurable overlay with real-time graphing
- Gaming PC balance metrics
- Integrated GPU telemetry and capture
- Multi-vendor support and open source
- Broad API support
- Command line options for power users
- Continued support for PresentMon developers and applications

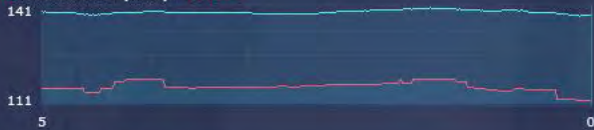


Download beta:
[game.intel.com/story/
intel-presentmon/](https://game.intel.com/story/intel-presentmon/)

Intel(R) Arc(TM) A750 Graphics

138 FPS

Presented FPS (Avg) 138 FPS
Presented FPS (99%) 112 FPS



Frame Time (Avg) 7.24 ms
GPU Busy (Avg) 6.07 ms



GPU Frequency (Avg) 2400 MHz



GPU Voltage (Avg) 1.06 V



GPU Temperature (Avg) 70.0 C



GPU Memory Used (Avg) 7.07 GB



Capture Status: Standing By



Process

Application process to track, overlay and capture

Process

Auto-target

Automatically target process with the highest GPU utilization

Enable

Overlay Hotkey

Set hotkey to toggle overlay on/off

Ctrl Shift D

Preset

Select a preset configuration for overlay widget loadout etc.

BASIC

GPU FOCUS

POWER/TEMP

CUSTOM

EDIT

Preset Cycle Hotkey

Set hotkey for cycling through presets

Ctrl Shift F

Capture Duration

Automatically stop capture after N seconds

Enable

Seconds

10

Capture Hotkey


Set hotkey for capture of per-frame performance data as CSV

Ctrl Shift K

Capture Storage

Open the folder containing all frame traces and stats summaries

OPEN IN EXPLORER

Settings 

← BACK

Overlay

Data Processing

Capture

Other

Overlay Configuration

Windowed Mode

Display widgets on a standalone window instead of an overlay tracking the target

Enable

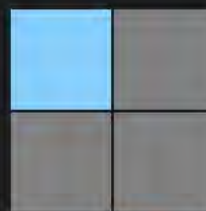
Automatic Hide

Automatically disable the overlay during capture

Enable

Position

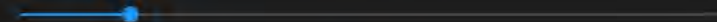
Where the overlay appears on the target window



400

Width

Width of the overlay window (height determined by content)



5

Time Scale

Range of time (s) displayed on graphs' x-axes. Controls the scrolling speed.



Graphics Scaling

Upscale overlay graphics to make text more readable on high DPI displays

Enable

Factor



Draw Rate

Closest valid rate will be



< Loadout Configuration

GPU Name		Readout		
Presented FPS	Avg	Readout		
Presented FPS	Avg	Graph	Line	
Presented FPS	99%		<input type="checkbox"/> Right Axis	
Frame Time	Avg	Graph	Line	
GPU Busy	Avg		<input type="checkbox"/> Right Axis	
GPU Frequency	Avg	Graph	Line	
GPU Utilization	Avg		<input checked="" type="checkbox"/> Right Axis	
GPU Voltage	Avg	Graph	Line	
GPU Power	Avg		<input checked="" type="checkbox"/> Right Axis	
GPU Temperature	Avg	Graph	Line	
GPU Fan Speed 0	Avg		<input checked="" type="checkbox"/> Right Axis	
GPU Memory Used	Avg	Graph	Line	
GPU Memory Used	Avg		<input checked="" type="checkbox"/> Right Axis	



DX11 Gaming Improvements on Intel® Arc™ Graphics



Average FPS

19%

Faster

vs. Launch Driver

99th Percentile FPS

20%

Smoother

vs. Launch Driver

Today's Updates

Microsoft
DirectX₁₁

19% faster on DX11



New "**GPU Busy**" metric



Intel[®] PresentMon Beta

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Performance varies by use, configuration and other factors. Learn more at www.Intel.com/PerformanceIndex

No product or component can be absolutely secure.

Your costs and results may vary. Some results may have been estimated or simulated.

Intel technologies may require enabled hardware, software or service activation.

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Workloads and Configurations

System Configurations

Intel® Arc™ Configurations

Processor:

- Intel® Core™ i9 13900K processor
- Intel® Core™ i5 13400F processor

Motherboard:

- ASUS ROG Maximus Z790 Hero (BIOS: 1202)

RAM:

- Corsair DOMINATOR PLATINUM RGB 32GB (2x16GB) DDR5 DRAM at 5600MHz C36 (For Intel® Core™ i9 13900K)
- Corsair DOMINATOR PLATINUM RGB 32GB (2x16GB) DDR5 DRAM at 4800MHz C36 (For Intel® Core™ i5 13400F)

Storage:

- Corsair MP600 Pro XT NVMe SSD

CPU Cooler:

- Corsair iCUE H150i ELITE LCD Display Liquid CPU Cooler

Power Supply:

- Corsair RM850x

OS:

- Windows 11 Pro 22H2 (22621.1848)
- Windows 11 Pro 22H2 (22621.2134, GTA V Benchmark, Shadow of War, Apex Legends)

Discrete Graphics:

- Intel® Arc™ A750 LE GPU

Graphics Driver:

- 31.0.101.3490
- 31.0.101.4571
- 31.0.101.4642 (GTA V Benchmark, Shadow of War, Apex Legends)

General Setup:

- Windows Balanced Power Plan Policy
- Windows Virtualization-based Security (VBS) Disabled
- Used Median of three test runs

Workloads

As measured by average FPS in the following games at 1080p Ultra:

Testing as of

July 17, 2023

Counter-Strike 2 (2000080/13896)
Destiny 2 (7.1.0.2)
DOTA 2 (5742 (7.33D))
Genshin Impact (3.7.0)
Grand Theft Auto V (1.67 build 2944)
League of Legends (13.13)
Middle-earth: Shadow of War (1.21)
Overwatch 2 (2.5.1.0.114992)
Valorant (07.00.00.909577)

August 13, 2023

Apex Legends (3.0.40.25)
Grand Theft Auto V (1.67 build 2944)
Middle-earth: Shadow of War (1.21)