

# GeForce GTX 650 vs. GTX 1650 Performance For Linux Gaming, Performance-Per-Watt

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The latest in our benchmarking with the new GeForce GTX 1650 is some "fun" tests seeing how its performance compares to that of the GeForce GTX 650 Kepler. Various OpenGL and Vulkan Linux gaming tests were carried out as well as some compute tests and throughout monitoring the AC power consumption to yield the performance-per-Watt metrics.

The GeForce GTX 650 Kepler graphics card launched nearly seven years ago already with its 40nm GK107 GPU that provided 384 CUDA cores, 1058MHz core clock speed, and 1GB of GDDR5 video memory. The GTX 650 has a 64 Watt TDP but came with a 6-pin PCIe power connector. The GTX 650 / Kepler is the last generation currently supported by the mainline Linux driver and also the oldest NVIDIA hardware with Vulkan driver coverage, making this comparison particularly interesting.

The GeForce GTX 1650 meanwhile with its 12nm TU117 GPU has 896 CUDA cores, 1485MHz base clock speed,

1665MHz boost clock speed, and 4GB of GDDR5 video memory. The GeForce GTX 1650 has a 75 Watt TDP without the need for any external PCIe power connection.

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