

Videocard Benchmarks

Over 1,000,000 Video Cards Benchmarked

High End Video Card Chart

This chart made up of millions of [PerformanceTest](#) benchmark results and is updated daily with new graphics card benchmarks. This high end chart contains high performance video cards typically found in premium gaming PCs. Recently introduced AMD (such as the AMD RX 6950 XT) and nVidia graphics cards (such as the nVidia GeForce RTX 3090) using the PCI-Express 4.0 standard are common in our high end video card charts.

G3D Mark	Price Performance
----------	-------------------

PassMark - G3D Mark

High End Videocards

Videocard	Average G3D Mark
GeForce RTX 4090	38,889
GeForce RTX 4080	34,684
GeForce RTX 4070 Ti	31,700
Radeon RX 7900 XTX	31,086
Radeon PRO W7900	30,956
GeForce RTX 3090 Ti	29,825
Radeon PRO W7800	29,368
Radeon RX 7900 XT	28,884
GeForce RTX 4090 Laptop GPU	28,655
Radeon RX 6950 XT	28,482
GeForce RTX 3080 Ti	27,320
Radeon RX 6900 XT	26,956
GeForce RTX 4070	26,872
GeForce RTX 3090	26,864
GeForce RTX 3080 12GB	26,721
GeForce RTX 4080 Laptop GPU	26,269
GeForce RTX 3080	25,359
RTX 4000 Ada Generation	25,226
Radeon RX 6800 XT	25,124
Radeon RX 7900 GRE	24,853
RTX 4000 Ada Generation Laptop GPU	24,218


Video Card ▼

GeForce RTX 3080 Ti Laptop GPU	20,214
Quadro GV100	20,021
TITAN RTX	19,912
Radeon RX 6700 XT	19,884
TITAN V	19,784
GeForce RTX 2080 SUPER	19,596
GeForce RTX 4070 Laptop GPU	19,527
GeForce RTX 4060	19,461
Quadro RTX 8000	19,402
TITAN Xp COLLECTORS EDITION	19,356
RTX A4000	19,353
Quadro RTX 6000	19,296
GeForce RTX 2080	18,803
Radeon RX 6700	18,743
NVIDIA TITAN Xp	18,631
RTX 3000 Ada Generation Laptop GPU	18,570
GeForce GTX 1080 Ti	18,539
Radeon RX 6850M XT	18,418
NVIDIA A10G	18,293
GeForce RTX 3070 Ti Laptop GPU	18,279
GeForce RTX 2070 SUPER	18,252
GeForce RTX 4060 Laptop GPU	18,006
A40-48Q	17,864
Radeon PRO W7600	17,632
RTX A4500 Laptop GPU	17,603
Radeon Pro W5700X	17,591
RTX A5500 Laptop GPU	17,581
Radeon RX 6650 XT	17,463
GeForce RTX 3060	17,096
TITAN V CEO Edition	16,988
Radeon RX 5700 XT	16,771
Radeon VII	16,753
Radeon RX 5700 XT 50th Anniversary	16,615
GeForce RTX 2060 SUPER	16,581
GeForce RTX 3080 Laptop GPU	16,559
Radeon RX 6600 XT	16,458
Tesla V100-SXM2-16GB	16,235
GeForce RTX 2070	16,179
Radeon RX 7600	16,083
Radeon PRO W6600	16,062
Quadro RTX 5000	16,041
Radeon Pro Vega II Duo	15,977
Miracast display_port driver V3	15,910
RTX A5000 Laptop GPU	15,899
GeForce RTX 2060 12GB	15,896
Radeon PRO W7500	15,831
Radeon Pro Vega II	15,668
RTX A4000 Laptop GPU	15,620
Quadro GP100	15,608
GeForce RTX 3070 Laptop GPU	15,535
GeForce GTX 1080	15,507
RTX 2000 Ada Generation Laptop GPU	15,473
Quadro RTX 4000	15,471
Radeon Pro VII	15,441


Video Card ▼

GeForce GTX 980 Ti	13,830
RTX A2000	13,789
Radeon RX 7600S	13,728
Radeon RX 6650M	13,676
NVIDIA TITAN X	13,660
RTX A2000 12GB	13,647
Radeon RX 6600M	13,599
Quadro RTX 5000 with Max-Q Design	13,591
GeForce GTX 1070	13,515
GeForce RTX 3060 Laptop GPU	13,415
Radeon RX Vega 56	13,408
NVIDIA A40	13,371
Radeon Vega Frontier Edition	13,337
Radeon RX 6700M	13,283
GeForce RTX 2080 with Max-Q Design	13,204
Radeon RX 6800M	13,181
Intel d_gfx-driver-ci-master-14429 DCH RI	13,174
Radeon PRO W6600X	13,113
GeForce GTX TITAN X	13,055
Radeon Pro Vega 64	12,984
Tesla V100-PCIE-16GB	12,983
GeForce RTX 3050	12,964
Radeon Pro WX 9100	12,960
GeForce GTX 1660 Ti	12,958
GeForce GTX 1660 SUPER	12,784
Radeon Pro 5700 XT	12,708
Quadro RTX 4000 (Mobile)	12,701
Tesla T10	12,650
Quadro RTX 4000 with Max-Q Design	12,636
Quadro P5200 with Max-Q Design	12,608
Quadro P5200	12,594
RTX A3000 Laptop GPU	12,491
GeForce RTX 2070 (Mobile)	12,354
Radeon Pro Vega 56	12,354
Quadro P5000	12,292
Radeon RX 6850M	12,274
Radeon Pro V520 MxGPU	12,258
Radeon RX 5600 OEM	12,229
GeForce RTX 3050 OEM	12,084
GeForce RTX 2070 with Max-Q Design	11,887
Quadro M6000 24GB	11,879
Radeon Pro 5700	11,844
Quadro M6000	11,741
GeForce GTX 1660	11,711
Quadro P4000	11,648
Intel Arc A580	11,605
GeForce GTX 1080 with Max-Q Design	11,577
Radeon RX 5600	11,507
Tesla P40	11,395
GeForce RTX 2060 (Mobile)	11,355
Radeon Pro Vega 48	11,300
Quadro P4200 with Max-Q Design	11,163
Quadro RTX 3000	11,150
GeForce GTX 980	11,141


Video Card ▼

GeForce RTX 2060 with Max-Q Design	9,787
GeForce GTX 1060 3GB	9,761
Radeon RX 6550M	9,669
GeForce GTX 970	9,644
Intel Arc A770	9,625
Radeon R9 Fury	9,605
RTX A1000 Laptop GPU	9,548
Radeon RX 590	9,489
GeForce GTX 780 Ti	9,486
Radeon RX 6500 XT	9,485
Radeon Ryzen 9 4900HSS	9,461
Radeon R9 390X	9,447
Radeon Pro 5600M	9,415
Intel Arc Pro A60	9,409
GeForce RTX 3050 Laptop GPU	9,408
Quadro M5000	9,395
Quadro P2200	9,375
Radeon RX 5500 XT	9,181
Radeon Pro W5500	9,134
Intel Arc A750	9,117
Quadro P3200 with Max-Q Design	9,113
GRID P40-2B4	9,111
Quadro P3200	9,100
Quadro P4000 with Max-Q Design	9,083
GeForce GTX 1060 5GB	9,032
GeForce GTX TITAN Black	9,011
Radeon R9 390	8,991
GeForce GTX TITAN Z	8,987
GRID P40-8Q	8,967
Radeon RX 580	8,898
Radeon RX 5500	8,839
GeForce GTX 1660 Ti with Max-Q Design	8,668
Tesla P4	8,666
Radeon R9 290X	8,660
Radeon RX 480	8,658
Radeon R9 295X2	8,638
Radeon RX590 GME	8,538
GRID RTX6000-1B	8,473
Quadro RTX 3000 with Max-Q Design	8,419
Radeon R9 290X / 390X	8,389
RTX A4500 Embedded GPU	8,373
Ryzen 5 4600HS with Radeon Graphics	8,371
Radeon R9 290	8,361
Radeon Pro 5500 XT	8,330
Radeon RX 5600M	8,326
Radeon Pro Duo	8,296
Intel Arc A730M	8,274
Tesla V100-PCIE-32GB	8,260
GeForce GTX Titan	8,212
GeForce GTX 1060 (Mobile)	8,161
Radeon R9 290 / 390	8,150
Quadro K6000	8,061
Radeon RX 470/570	8,043
GeForce GTX 780	8,021

[Home](#) **Video Card** ▼

Radeon RX 6500	7,470
Radeon RX 6400	7,448
GeForce RTX 2050	7,316
FirePro W8100	7,279
Radeon Pro 5300	7,230
Tesla P100-PCIe-16GB	7,225
Radeon Ryzen 9 4900HS	7,186
Quadro T2000	7,169
Radeon 780M	7,138
T600 Laptop GPU	7,094
A10-8Q	7,042
Quadro M5000M	7,018
GeForce RTX 3050 4GB Laptop GPU	7,011
Ryzen 7 4800HS with Radeon Graphics	6,999
RTX A500 Laptop GPU	6,995
RadeonT 780M	6,990
GeForce GTX 1650 (Mobile)	6,969
Radeon Pro W5500X	6,967
Quadro T2000 with Max-Q Design	6,944
Quadro P2000	6,912
Ryzen 7 6800HS with Radeon Graphics	6,867
Radeon Pro 5500M	6,816
GeForce GTX 970XM FORCE	6,707
Radeon R9 285	6,680
Quadro M4000	6,666
Quadro T1000 with Max-Q Design	6,662
Quadro P3000	6,607
Quadro T1000	6,596
AMD Ryzen Z1 Extreme	6,588
Radeon Pro WX 7130	6,578
Radeon RX Vega M GH	6,576
Radeon Ryzen 7 6800HS	6,567
Radeon RX 6300	6,545
T600	6,462
GeForce GTX 1650 Ti with Max-Q Design	6,412
P106-100	6,400
Radeon Pro 570	6,337
Ryzen 9 6900HS with Radeon Graphics	6,331
GeForce GTX 1050 Ti	6,307
Quadro M4000M	6,266
Radeon R9 280X	6,234
Radeon R9 380X	6,232
Tesla K80	6,210
Radeon R9 380	6,200
Radeon 680M Ryzen 7 7735HS	6,180
GeForce MX570 A	6,177
FirePro W9000	6,138
Radeon PRO W6300	6,137
GeForce GTX 1650 with Max-Q Design	6,132
GeForce GTX 960	6,046
Quadro K5200	6,034
GeForce MX570	6,021
Radeon Pro 5300M	5,996
GRID P100-16Q	5,945


Video Card

Radeon Ryzen 9 7950X 16-Core	5,515
Quadro M3000M	5,514
GeForce GTX 760 Ti OEM	5,427
Ryzen 9 6900HX	5,416
Radeon RX 5500M	5,415
Radeon Ryzen 7 6800HS Creator Edition	5,386
GeForce GTX 1050 Ti with Max-Q Design	5,384
Radeon Ryzen 7 7735HS	5,377
GRID P40-4Q	5,365
Ryzen 7 6800HS Creator Edition	5,345
GeForce GTX 950	5,344
FirePro W7100	5,326
GeForce GTX 670	5,315
Ryzen 7 7735HS with Radeon Graphics	5,307
Radeon Pro Vega 20	5,300
Radeon Ryzen 9 6900HX	5,287
Radeon HD 7970 / R9 280X	5,248
Ryzen 7 6800H	5,248
Ryzen 7 6800HS	5,237
Intel Arc Pro A40/A50	5,224
Radeon HD 8990	5,214
Radeon Ryzen 7 PRO 6850HS	5,212
GRID M60-2Q	5,203
Radeon R9 M395X	5,195
GeForce GTX 760 Ti	5,191
Radeon Ryzen 7 PRO 6850U	5,177
Quadro P2000 with Max-Q Design	5,172
Q12U-1	5,164
Radeon R9 M295X	5,150
GeForce GTX 1050 3GB	5,146
Radeon Ryzen 7 7735U	5,128
Ryzen 7 PRO 6860Z	5,077
Ryzen 9 PRO 6950HS with Radeon Graphics	5,068
FirePro S9000	5,059
GRID T4-16Q	5,055
GeForce GTX 1050	5,049
EIZO Quadro MED-XN51LP	5,048
Ryzen 7 PRO 6850U with Radeon Graphics	5,043
Radeon R9 M395	5,024
Ryzen 7 6800U	5,006
GeForce GTX 1630	4,995
Radeon Instinct MI25 MxGPU	4,979
Barco MXRT 7600	4,944
Ryzen 7 6800H with Radeon Graphics	4,922
Radeon R9 270X	4,913
FirePro S9050	4,901
Ryzen 7 6800U with Radeon Graphics	4,845
GRID P40-2Q	4,844
T550 Laptop GPU	4,842
Radeon Ryzen 7 4800HS	4,818
Radeon Pro Vega 16	4,809
Intel Arc A380	4,789
Ryzen 7 PRO 6860Z with Radeon Graphics	4,789


Video Card ▼

A16-2Q	4,583
GeForce MX550	4,583
B8DKMDAP	4,557
GeForce GTX 580	4,545
Radeon Eng Sample: 100-000000561-40_Y	4,544
Radeon Pro 465	4,538
Radeon Ryzen 7 6800U	4,533
FirePro S7000	4,524
GRID T4-8Q	4,519
Radeon R7 370	4,513
Tesla K40c	4,495
Radeon HD 7870 XT	4,470
GeForce GTX 1050 (Mobile)	4,462
GRID M60-1B	4,457
Citrix Indirect Display Adapter	4,447
Quadro P1000	4,440
GRID P6-4Q	4,429
Intel Arc	4,419
GeForce GTX 660 Ti	4,396
FirePro W7000 Adapter	4,362
GRID GTX P40-6	4,340
Tesla K20m	4,331
Quadro K4200	4,322
Radeon RX 5300M	4,307
Radeon R9 270	4,306
Quadro M2200	4,300
GRID RTX6000P-4Q	4,283
FirePro W7000	4,261
Radeon R9 270 / R7 370	4,260
RTXA6000-8Q	4,237
NVIDIA A40-4Q	4,230
NVIDIA A40-8Q	4,220
RadeonT 680M Ryzen 7 7735HS	4,159
GRID V100D-8Q	4,156
Radeon Ryzen 5 7535HS	4,156
GeForce GTX 680MX	4,142
Radeon RX 460	4,113
FirePro W8000	4,096
Radeon 660M Ryzen 5 7535HS	4,078
Radeon PRO Ryzen 5 PRO 6650U	4,067
GeForce GTX 480	4,062
RadeonT 660M Ryzen 5 7535HS	4,042
Radeon HD 7800-serie	4,029
GeForce GTX 1050 with Max-Q Design	4,016
Radeon Ryzen 5 6600H	4,014
GeForce GTX 660	3,997
Quadro K5000	3,983
Quadro M2000	3,980
A40-24Q	3,973
GRID RTX8000-4Q	3,961
GeForce GTX 570	3,930
GRID P6-2Q	3,926
GeForce GTX 750 Ti	3,902
GRID M60-8Q	3,884


Video Card ▼

GRID M60-1Q	3,695
T500	3,692
Matrox LUMA A310	3,690
T400 4GB	3,689
Ryzen 5 6600HS Creator Edition	3,686
Ryzen 5 7535HS with Radeon Graphics	3,680
Radeon Pro 560X	3,678
Ryzen 5 6600H with Radeon Graphics	3,674
Radeon Ryzen 5 PRO 6650U	3,664
Radeon R9 M485X	3,661
Radeon RX 560	3,647
Intel Arc A370M	3,646
T400	3,620
Radeon RX Vega M GL	3,607
Quadro P620	3,599
Ryzen 5 PRO 6650U with Radeon Graphics	3,575
GRID RTX8000-2Q	3,574
GeForce GTX 680M KY Bullet Edition	3,569
GRID M6-8Q	3,568
Radeon Ryzen 5 6600U	3,565
GeForce GTX 775M	3,551
Quadro K2200	3,551
Microsoft Basic Display Adapter Ryzen 5 3550H	3,537
Ryzen 5 7535U with Radeon Graphics	3,529
Ryzen 5 PRO 6650U	3,519
GRID K520	3,516
Quadro 7000	3,505
Tesla M10	3,490
Radeon Pro 560	3,475
Radeon Pro 460	3,453
GRID T4-2Q	3,451
Quadro M2000M	3,450
GeForce GTX 870M	3,449
Quadro K2200M	3,441
Radeon 740M	3,437
Tesla C2050 / C2070	3,428
NVIDIA A10-4Q	3,425
GeForce GTX 960M	3,396
Radeon HD8970M	3,369
Radeon E8870PCIe	3,368
GeForce GTX 750	3,362
GRID M10-1Q	3,351
Radeon R9 M390X	3,346
GeForce GTX 590	3,341
GeForce GTX 650 Ti BOOST	3,339
GRID P4-8Q	3,299
Tesla K40m	3,281
Quadro P600	3,270
Quadro M1200	3,263
GRID T4-4Q	3,260
GeForce 770M	3,246
Radeon R9 M470X	3,244
Eng Sample: 100-00000534-40_Y	3,237
Ryzen 5 6600U with Radeon Graphics	3,233


Video Card ▼

GeForce GTX 860M	3,029
Tesla C2075	3,017
FirePro W5100	2,980
GRID M10-4Q	2,977
FirePro W5000	2,965
GRID K260Q	2,949
Tesla K20Xm	2,918
Ryzen 9 5900HX with Radeon Graphics	2,908
Quadro K1200	2,907
Radeon R7 260	2,892
Quadro M1000M	2,891
Ryzen 7 PRO 4700G with Radeon Graphics	2,880
Eng Sample: 100-000000261-50_Y	2,860
Radeon Pro V340 MxGPU	2,853
Tesla C2070	2,840
GRID K280Q	2,840
FirePro W4300	2,834
Radeon HD 6970	2,833
Quadro M620	2,829
FirePro 3D V9800	2,812
Ryzen 7 5700G with Radeon Graphics	2,808
GeForce MX350	2,808
Radeon Ryzen 7 5800H	2,775
Radeon R9 M380	2,770
GeForce GTX 770M	2,765
Quadro K5000M	2,763
Custom GPU 0405	2,762
FirePro M6100 FireGL V	2,757
Radeon Ryzen 9 5900H	2,755
Radeon Ryzen 9 5980HS	2,749
Ryzen 7 5800H with Radeon Graphics	2,748
GeForce GTX 675MX	2,744
Radeon Ryzen 9 7900 12-Core	2,737
GRID K2	2,737
FirePro S7150	2,727
FirePro V9800	2,727
Radeon Pro 450	2,723
GeForce GTX 560	2,722
Quadro K4000	2,715
Ryzen 9 4900H with Radeon Graphics	2,714
Radeon RX 550	2,704
Barco MXRT 5500	2,702
Quadro 6000	2,701
Radeon HD 8950	2,696
GRID M10-2Q	2,692
Intel Iris Xe	2,691
Radeon Ryzen 7 5800HS	2,687
Ryzen 7 Pro 4750G with Radeon Graphics	2,682
GeForce GTX 465	2,679
Radeon Eng Sample: 100-000000300-40_Y	2,670
Ryzen 7 5700GE with Radeon Graphics	2,656
FirePro R5000	2,647
GRID P6-4A	2,639
MONSTER GeForce GTX 675M	2,637

FireStream 9370	2,528
N18F-Q1	2,525
Radeon Ryzen 5 5600GE	2,520

* - Last price seen from our affiliates.

Software

- [BurnInTest](#)
- [PerformanceTest](#)
- [OSForensics](#)
- [MemTest86](#)
- [WirelessMon](#)
- [Management Console](#)
- [Zoom Search Engine](#)
- [Free Software](#)

Benchmarks

- [CPU Benchmarks](#)
- [Video Card Benchmarks](#)
- [Hard Drive Benchmarks](#)
- [RAM Benchmarks](#)
- [PC Systems Benchmarks](#)
- [Software Marketshare](#)
- [Database Benchmarks](#)
- [Android Benchmarks](#)
- [iOS Benchmarks](#)
- [Internet Bandwidth](#)

Services

[Store](#)

[Support](#)

[Forums](#)

Hardware

- [USB3.0 Loopback Plugs](#)
- [USB2.0 Loopback Plugs](#)
- [PCIe Test Cards](#)
- [USB Power Delivery Tester](#)
- [Serial and Parallel Loopback Plugs](#)
- [USB Short Circuit Testers](#)

About Us

- [Company](#)
- [Contact Us](#)
- [The Press Room](#)

International

[Disclaimer](#)

[Refunds](#)

[Privacy](#)

[Social](#)



Copyright © 2023 PassMark® Software

