Official Specification

RX 580

|  |  |  |
| --- | --- | --- |
| GPU | Compute Units | 36 |
| Base Frequency | 1257 MHz |
| Boost Frequency | Up to 1340 MHz |
| Peak Texture Fill-Rate | Up to 192.96 GT/s |
| Max Performance | Up to 6.2 TFLOPs |
| ROPs | 32 |
| Stream Processors | 2304 |
| Texture Units | 144 |
| Transistor Count | 5.7 B |
| Requirements | Typical Board Power (Desktop) | 185 W |
| Minimum PSU Recommendation | 500 W |
| GPU Memory | Memory Speed | Up to 8 Gbps |
| Max Memory Size | 8 GB |
| Memory Type | GDDR5 |
| Memory Interface | 256-bit |
| Memory Bandwidth | Up to 256 GB/s |
| Supported Rendering Format | HDMI™ 4K Support | Yes |
| 4K H264 Decode | Yes |
| 4K H264 Encode | Yes |
| H265/HEVC Decode | Yes |
| H265/HEVC Encode | Yes |
| Connectivity | DisplayPort | 1.4 HDR |
| Dual Link DVI | No |
| HDMI | 4K60 Support |
| VGA | No |

RX 470

|  |  |  |
| --- | --- | --- |
| GPU | Compute Units | 32 |
| Base Frequency | 926 MHz |
| Boost Frequency | Up to 1206 MHz |
| Max Performance | Up to 4.9 TFLOPs |
| Stream Processors | 2048 |
| Requirements | Typical Board Power (Desktop) | 120 W |
| Minimum PSU Recommendation | 450 W |
| GPU Memory | Memory Speed | Up to 6.6 Gbps |
| Max Memory Size | 4 GB |
| Memory Type | GDDR5 |
| Memory Interface | 256-bit |
| Memory Bandwidth | Up to 211 GB/s |
| Supported Rendering Format | HDMI™ 4K Support | Yes |
| 4K H264 Decode | Yes |
| 4K H264 Encode | Yes |
| H265/HEVC Decode | Yes |
| H265/HEVC Encode | Yes |
| Connectivity | DisplayPort | 1.4 HDR |
| Dual Link DVI | No |
| HDMI | 4K60 Support |
| VGA | No |

RX 480

|  |  |  |
| --- | --- | --- |
| GPU | Compute Units | 36 |
| Base Frequency | 1120 MHz |
| Boost Frequency | Up to 1266 MHz |
| Max Performance | Up to 5.8 TFLOPs |
| Stream Processors | 2304 |
| Requirements | Typical Board Power (Desktop) | 150 W |
| Minimum PSU Recommendation | 500 W |
| GPU Memory | Memory Speed | Up to 7 Gbps |
| Max Memory Size | 4 GB/8GB |
| Memory Type | GDDR5 |
| Memory Interface | 256-bit |
| Memory Bandwidth | Up to 224 GB/s |
| Supported Rendering Format | HDMI™ 4K Support | Yes |
| 4K H264 Decode | Yes |
| 4K H264 Encode | Yes |
| H265/HEVC Decode | Yes |
| H265/HEVC Encode | Yes |
| Connectivity | DisplayPort | 1.4 HDR |
| Dual Link DVI | No |
| HDMI | 4K60 Support |
| VGA | No |

RX 570

|  |  |  |
| --- | --- | --- |
| GPU | Compute Units | 32 |
| Base Frequency | 1168 MHz |
| Boost Frequency | Up to 1244 MHz |
| Peak Texture Fill-Rate | Up to 39.808 GP/s |
| Max Performance | Up to 5.1 TFLOPs |
| ROPs | 32 |
| Stream Processors | 2048 |
| Texture Units | 128 |
| Transistor Count | 5.7 B |
| Requirements | Typical Board Power (Desktop) | 150 W |
| Minimum PSU Recommendation | 450 W |
| GPU Memory | Memory Speed | Up to 7 Gbps |
| Max Memory Size | 8 GB |
| Memory Type | GDDR5 |
| Memory Interface | 256-bit |
| Memory Bandwidth | Up to 224 GB/s |
| Supported Rendering Format | HDMI™ 4K Support | Yes |
| 4K H264 Decode | Yes |
| 4K H264 Encode | Yes |
| H265/HEVC Decode | Yes |
| H265/HEVC Encode | Yes |
| Connectivity | DisplayPort | 1.4 HDR |
| Dual Link DVI | No |
| HDMI | 4K60 Support |
| VGA | No |

KEEP IN MIND

ARC 750 310 380

1650 S/TI

5500

6400

6500

480

470

570

R9 370

970

<https://www.tomshardware.com/reviews/amd-radeon-rx-580-review,5020.html>

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **GPU** | **AMD RX 480** | **AMD RX 580** | **AMD RX 470** | **AMD RX 570** | **AMD R9 390** | **Nvidia GTX 1050 Ti** | **Nvidia GTX 1060** |
| **Streaming Multiprocessors / Compute Units** | 36 | 36 | 32 | 32 | 40 | 6 | 10 |
| **GPU Cores** | 2304 | 2304 | 2048 | 2048 | 2560 | 768 | 1280 |
| **Texture Units** | 144 | 144 | 128 | 128 | 160 | 48 | 80 |
| **ROPs** | 32 | 32 | 32 | 32 | 64 | 32 | 48 |
| **Base Clock** | 1120 MHz | 1257 MHz | 926 MHz | 1168 MHz | Up to 1000MHz | 1290 MHz | 1506 MHz |
| **GPU Boost Clock** | 1266 MHz | 1340 MHz | 1206 MHz | 1244 MHz | Up to 1000MHz | 1392 MHz | 1708 MHz |
| **Total Video memory** | 4096 or 8192 MB | 4096 or 8192 MB | 4096 or 8192 MB | 4096 MB | 8192 MB | 4096 MB | 6144 MB |
| **Memory Clock (Effective)** | 1750 (7000) or 2000 (8000) MHz | 2000 (8000) MHz | 1650 (6600) MHz | 1750 (7000) MHz | 1500 (6000) MHz | 1752 (7008) MHz | 2002 (8008) MHz |
| **Memory Bandwidth** | 224 or 256 GB/s | 256 GB/s | 211 GB/s | 224 GB/s | 384 GB/s | 112 GB/s | 192 GB/s |
| **Bus Width** | 256-bit | 256-bit | 256-bit | 256-bit | 512-bit | 128-bit | 192-bit |
| **Manufacturing Process** | 14nm | 14nm | 14nm | 14nm | 28nm | 16nm | 16nm |
| **TDP** | 150 W | 185 W | 120 W | 150 W | 275 W | 75W | 120 W |