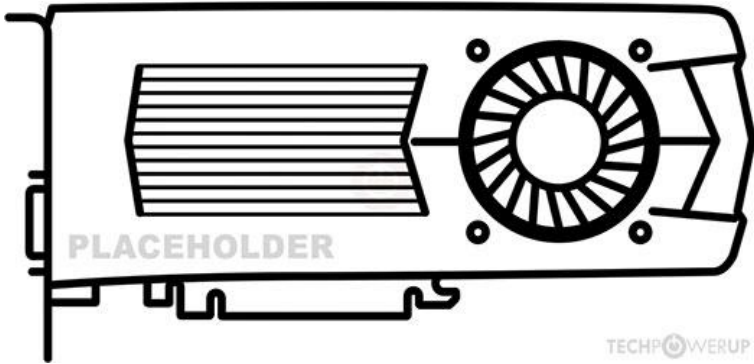




GPU Database B100 Specs

NVIDIA B100

GB102 x2 GRAPHICS PROCESSOR	16896 x2 CORES	528 x2 TMUS	24 x2 ROPS	96 GB x2 MEMORY SIZE	HBM3e MEMORY TYPE
4096 bit x2 BUS WIDTH					



The B100 is a professional graphics card by NVIDIA, launched in November 2024. Built on the 5 nm process, and based on the GB102 graphics processor, the card does not support DirectX. Since B100 does not support DirectX 11 or DirectX 12, it might not be able to run all the latest games. B100 combines two graphics processors to increase performance. It features 16896 shading units, 528 texture mapping units, and 24 ROPs, per GPU. Also included are 528 tensor cores which help improve the speed of machine learning applications. NVIDIA has paired 192 GB HBM3e memory with the B100, which are connected using a 4096-bit memory interface per GPU (each GPU manages 98,304 MB). The GPU is operating at a frequency of 1665 MHz, which can be boosted up to 1837 MHz, memory is running at 2000 MHz.

Being a sxm module card, its power draw is rated at 1000 W maximum. This device has no display connectivity, as it is not designed to have monitors connected to it. B100 is connected to the rest of the system using a PCI-Express 5.0 x16 interface

Graphics Processor	Graphics Card	Clock Speeds
GPU Name: GB102	Release Date: Nov 2024	Base Clock: 1665 MHz
Architecture: Blackwell	Announced: Mar 18th, 2024	Boost Clock: 1837 MHz

Foundry:	TSMC
Process Type:	4NP FinFET
Process Size:	5 nm
Transistors:	104,000 million
Die Size:	unknown

Theoretical Performance

Pixel Rate:	44.09 GPixel/s	x2
Texture Rate:	969.9 GTexel/s	x2
FP16 (half):	248.3 TFLOPS (4:1)	x2
FP32 (float):	62.08 TFLOPS	x2
FP64 (double):	31.04 TFLOPS (1:2)	x2

Generation:	Server Blackwell (Bxx)
Predecessor:	Server Hopper
Production:	Active
Bus Interface:	PCIe 5.0 x16

Render Config

Shading Units:	16896	x2
TMUs:	528	x2
ROPs:	24	x2
SM Count:	132	x2
Tensor Cores:	528	x2
L1 Cache:	256 KB (per SM)	x2
L2 Cache:	50 MB	x2

Memory Clock:	2000 MHz 8 Gbps effective
Memory	
Memory Size:	96 GB
Memory Type:	HBM3e
Memory Bus:	4096 bit
Bandwidth:	4.10 TB/s

Board Design

Slot Width:	SXM Module
TDP:	1000 W
Suggested PSU:	1400 W
Outputs:	No outputs

Graphics Features

DirectX:	N/A
OpenGL:	N/A
OpenCL:	3.0
Vulkan:	N/A
CUDA:	10.1
Shader Model:	N/A

Card Notes

Placeholder

GB102 GPU Notes

Tensor Cores: 5th Gen NVENC: No Support NVDEC: No Support PureVideo HD: VP11 VDPAU: Feature Set K Most specs unknown Placeholder
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