Huawei Ascend 910C vs NVIDIA H100 NVL 94GB

Side by side datacenter GPU specifications from the Flopper.io database.

OVERVIEW

	Huawei Ascend 910C	NVIDIA H100 NVL 94GB
FP32 TFLOPS	**50.0**	**60.0**
Memory	**128 GB**	**94 GB**
Memory Bandwidth	**3.2 TB/s**	**3.9 TB/s**
TDP	**600 W**	**400 W**

PERFORMANCE BY PRECISION

Precision	Huawei Ascend 910C peak TFLOPS (dense)	NVIDIA H100 NVL 94GB peak TFLOPS (dense)
FP64	–	30.0
FP64_TC Tensor Core	–	60.0
FP32	50.0	60.0
TF32	–	–
BF16	800.0	–
FP16	800.0	–
FP8	–	–
FP6	–	–
FP4	–	–
INT8	1600.0	–

SPECIFICATIONS

	Huawei Ascend 910C	NVIDIA H100 NVL 94GB
Architecture	Da Vinci v2 (dual-die)	Hopper
Process Node	SMIC 7nm	4nm
Launch Year	2025	2023
Form Factor	OAM	PCIe
Memory Type	HBM2e	HBM3

	Huawei Ascend 910C	NVIDIA H100 NVL 94GB
Interface Width	—	—
Interconnect	Unified Bus (UB)	—
TDP	600 W	400 W
FP32 Efficiency	0.08 TFLOPS/W	0.15 TFLOPS/W