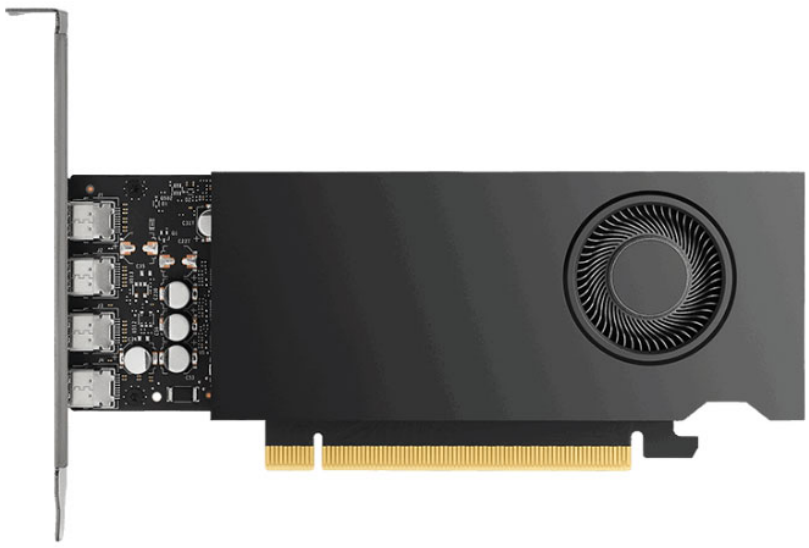
NVIDIA quietly launched the RTX 2000E 'Ada' graphics card, what's remarkable?

NVIDIA has just quietly introduced its latest RTX Workstation graphics card model, RTX 2000E, integrating Ada GPU in a compact design.

RTX 2000 Ada is a line of professional graphics cards for workstations, first introduced by NVIDIA in January this year, and is mainly aimed at the low-cost segment. The NVIDIA RTX 2000E Ada generation takes the existing version to new heights of precision in professional applications, with the 'E' suffix denoting ECC memory.

The RTX 2000E Ada is essentially a low-profile and single-slot GPU model based on the Ada Lovelace architecture. The card has a slightly smaller chassis than the RTX 2000 Ada Generation, but is the same length and has the same fan-style heatsink. However, the single-slot form factor makes it possible for the RTX 2000E Ada to be installed and customized in smaller chassis.

Unlike gaming graphics cards, the RTX 2000E will handle data errors for high accuracy and reliability. While the regular version is already quite good for professional applications, the RTX 2000E is said to be able to detect and correct single bit errors in real time, leading to better and more accurate results.

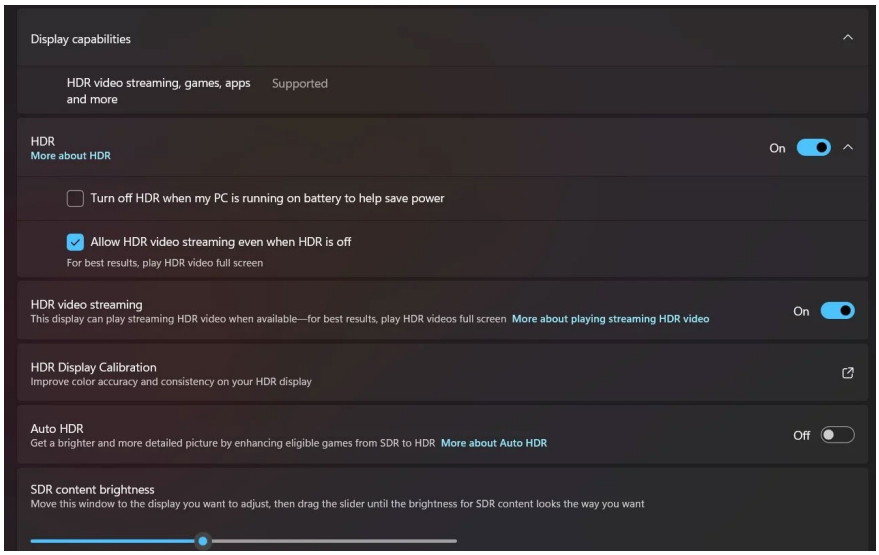



NVIDIA
RTX 2000E

ECC memory is especially useful in processing data where accuracy cannot be compromised. With the NVIDIA RTX 2000E Ada Generation, users will be able to work on tasks related to scientific research, AI training, content creation, and similar applications that emphasize data integrity. The RTX 2000E Ada Generation carries most of the specifications and features of the RTX 2000 Ada, including 22 third-generation RT cores, 88 fourth-generation Tensor cores, and 2816 Cuda cores.

The NVIDIA RTX 2000E Ada GPU is equipped with 16GB GDDR6 memory that supports ECC on a 128-bit memory bus, creating a memory bandwidth of approximately 224 GB/s. The card has quite high power efficiency with only 50W maximum TDP, 20W lower than the non-ECC version. It comes with 4 mini-DisplayPort 1.4a ports for image output and does not require an external power connector.

The RTX 2000E will be technically equivalent to the original, but compute performance will be slightly lower as it only runs at a 50W TDP (compared to 70W) and also has lower clocks. The GPU packs 2816 cores, delivering up to 8.9 TFLOPS (vs 12 TFLOPs) Single Precision Performance, 20.5 TFLOPS RT Core Performance, and 71 AI TOPS/71 TFLOPS AI Tensor Performance. The GPU also supports DLSS 3.0 out of the box and AV1 encoder for streamers and content creators.



The NVIDIA RTX 2000E Ada graphics card is currently listed with a suggested retail price of $849, more expensive than the regular RTX 2000.