Sandisk has released one of the most capacious SSDs in history of 256 TB

Sandisk introduced one of the most capacious SSDs in history – a capacity of 256 TB. The device is made in U.2 format and focused on cloud data centers, AI infrastructure and corporate tasks, where the maximum storage density is important.

The novelty is built on the new Ultraqlc platform using a 3D QLC memory of BICS8 with a density of 2 TBIT, as well as a proprietary multi-channel controller and Sandisk firmware.

Unlike traditional SSDs, Direct Write QLC technology is used in this drive-the record occurs directly in the QLC cells without using the Pseudo-SLC cache.

This reduces delays, makes notes resistant to power loss, but can affect speed – after all, QLC is slower than SLC.

To compensate for this, Sandisk uses the Dynamic Frequency Scaling and the functions of managing memory wear. The Data Retement system is also announced, which reduces the frequency of processing of cells by 33%.

The model for 256 TB will go on sale in the first half of 2026 along with 128 TB versions. Prices have not yet been disclosed.