Written by Frederick Douglas 26 February 2019

The SD Association takes to MWC 2019 to reveal the next generation of tiny memory cards-microSD Express, offering the PCI Express and NVMe interfaces to allowing data transfers reaching up to 985MB/s.



microSD Express retains the legacy microSD interface, allowing for backwards compatibility. As defined in the SD 7.1 specification, microSD Express cards will be available in a range of capacities, including microSDHC Express, microSDXC Express and microSDUC Express, all delivering the speeds necessary to transfer the large amounts of data generated by data-intense communications, speed hungry applications, multi-channel IoT devices, autonomous use, higher resolution mobile video and VR.

The PCIe 3.1 specification includes low power sub-states (L1.1, L1.2), enabling low power SD Express implementations for the mobile market. In addition, SD Express cards with significantly higher data transfer rates should consume less power than traditional microSD memory cards, while keeping the same maximum consumed power. The cards also allow for options provided by the PCIe and NVMe protocols, such as Bus Mastering, Multi Queue (without locking mechanism) and Host Memory Buffer.

The SD Association does not tell when memory card makers will start producing microSD Express products.

Go microSD Express: The Fastest Memory Card for Mobile Devices