Written by Frederick Douglas 20 May 2020

The SD Association (SDA) announces the SD 8.0 specification-- leveraging the PCIe 4.0 specification to create faster SD Express memory cards, with data transfer rates reaching up to 4GB/s.



SD Express uses the PCIe 4.0 specification and the latest NVMe specification (up to 1.4). The SD 8.0 specification provides to transfer speed options for SD Express memory cards through support for either PCIe 3.0 x2 or PCIe 4.0 x1 with up to 2GB/s and with PCIe 4.0 x2 technology with up to 4GB/s. SD Express cards based on PCIe 4.0 x1 architecture use the same form factor as SD 7.0 cards, with a second row of pins, while cards supporting dual PCIe lanes (PCIe 3.0 x2 or PCIe 4.0 x2) have three rows of pins.

The result, the association says, is high-performance cards able to handle data-intensive applications such as wired or wireless communications, 8K video capture and playback, speed-hungry applications running on cards and mobile devices, multi-channel IoT devices and future gaming systems. Such cards will remain backwards compatible, and will come in the SDHC, SDX and SDUC formats.

Manufacturers can check two SDA white papers for an in-depth look into SD 8.0, namely "SD Express Cards with PCIe and NVMe Interfaces," and "SD Express and microSD Express Memory Cards: The Best Choice for Your Future Product Designs."

Go SD Express Delivers New Gigabyte Speeds for SD Memory Cards