

iNAND® MC EU521 UFS 3.1 Embedded Flash Drive

Ready for 5G devices with industry leading turbo Sequential Write speeds and 96-Layer 3D NAND technology



Key Benefits

Performance

- iNAND® SmartSLC technology Gen 6 is ready for 5G devices with turbo Sequential Write speeds up to 800MB/s.
- iNAND® SmartSLC technology provides an exceptional user experience by maintaining high SLC (Single Level Cell) performance as the device approaches its maximum storage capacity by utilizing the SLC buffer to bypass the fragmented media condition.

Design

- UFS 3.1 coupled with industry leading 96-Layer 3D NAND technology delivers an energy-efficient storage solution, superior turbo Sequential Write speeds and high capacities for flagship and 5G mobile devices².
- Full vertical integration: UFS controller, 3D NAND technology, firmware, assembly and test, designed and developed by Western Digital.
- Capacities from 128GB³ to 256GB in a small form factor allow for scalability and design flexibility.

Main Features

- UFS 3.1, Gear4, 2-Lane
- iNAND® SmartSLC Gen 6 technology
- UFS 3.1 RPMB multi-region configuration
- UFS 3.1 Error History
- UFS 3.1 Thermal notification
- Field Firmware Upgrade (FFU)

5G Networks have launched in 2019 with ultra-fast speeds, low latency, lower power, and high network capacities, transforming not only smartphones, but billions of interconnected Internet of Things (IoT) devices.

5G data networks have enabled Artificial Intelligence (AI) on many devices. Edge computing will be widely utilized with data captured, processed and transmitted instantaneously at the edge. There are over 5 billion smartphone subscriptions worldwide¹ making the smartphone the leading platforms for smart data. AI is becoming prevalent on smartphones, enabling OEMs and developers to create powerful new consumer features.

Augmented Reality, Virtual Reality and gaming, enabled with 5G low latency, will create new and exciting worlds to play, work and learn in. 5G smartphones allow rapid transfer of media, enabling users to download a 2 hour movie in under 4 seconds and upload photos to the cloud in record time.

To take advantage of these 5G applications and features, devices will need higher capacities and the high performance of the latest UFS 3.0 specification.

Western Digital's iNAND® MC EU521 EFD, featuring Turbo Sequential Write Speeds of up to 800MB/s⁴, offers UFS 3.1 JEDEC-compliant Write Booster Storage Technology for Smartphones. The EU521 extends industry leading write performance to market segments requiring the performance of SmartSLC™ technology. iNAND® SmartSLC technology will continue to work with WriteBooster to offer persistence of performance even under fragmented and full media conditions. With 96L 3D NAND technology, the EU521 is designed to meet 5G flagship smartphone requirements.

Capacity ³	Package Size	UFS Version
128GB	11.5×13×1.0mm	UFS 3.1
256GB	11.5×13×1.0mm	UFS 3.1

¹ Ericsson Mobility Report, November 2018

² Compatible with Android™, and Chrome mobile operating systems.

³ 1GB = 1 billion bytes. Actual user capacity may be less depending on operating environment.

⁴ 1 MB/s = 1 million bytes per second. Based on internal testing; performance may vary depending upon host device, usage conditions, drive capacity, and other factors.

Contact Information

For all inquiries, please email:
OEMProducts@WDC.com

For more information, please visit:
www.WesternDigital.com

Western Digital Corporation | 5601 Great Oaks Parkway | San Jose | CA 95119 | USA

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