Western Digital.

iNAND® MC EU511 UFS 3.0 Embedded Flash Drive

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



5G Networks are launching 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 will enable 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 EU511 EFD is ready for 5G devices, with turbo Sequential Write speeds up to 750MB/s, SmartSLC Gen 6 and industry leading 96-layer 3D NAND. Combined with higher capacities up to 512GB and nearly doubling read speeds compared to its predecessor, the MC EU511 will enable consumers to thrive in the 5G data revolution.

Capacity ³	Package Size	UFS Version	Part Number
64GB	11.5×13×1.0mm	V3.0 HS-G4	SDINEDK4-64G
128GB	11.5×13×1.0mm	V3.0 HS-G4	SDINEDK4-128G
256GB	11.5×13×1.0mm	V3.0 HS-G4	SDINEDK4-256G
256GB	11.5×13×1.0mm	V3.0 HS-G4	SDINEDK4-256G-P
512GB	11.5×13×1.0mm	V3.0 HS-G4	SDINEDK4-512G-P

- ¹ Ericsson Mobility Report, November 2018
- ² Compatible with Android™, Chrome and Windows® mobile operating systems.
- ³ 1GB = 1,000,000,000 bytes. Actual user capacity less.

Key Benefits

Performance

- iNAND* SmartSLC Gen 6 is ready for 5G devices with turbo Sequential Write speeds up to 750MB/s.
- Up to 75% Random Read and 27% Random Write performance improvement compared to predecessor product to enable Machine Learning, Augmented Reality and Virtual Reality workloads.
- Nearly double the Sequential Read speed compared to predecessor product.
- 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 3.0 coupled with industry leading 96-Layer 3D NAND technology delivers an energyefficient 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 64GB to 512GB in a small form factor allow for scalability and design flexibility.

Main Features

- UFS 3.0, Gear4, 2-Lane
- iNAND® SmartSLC Gen 6 technology
- UFS 3.0 RPMB multi-region configuration
- UFS 3.0 Error History
- UFS 3.0 Thermal notification
- Field Firmware Upgrade (FFU)

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

© 2019 Western Digital Corporation or its affiliates. All rights reserved. Western Digital, Western Digital logo and iNAND are registered trademarks or trademarks of Western Digital Corporation or its affiliates in the US and other countries. All other marks are the property of their respective owners.

WD_iNAND_MC_EU511_EmbeddedFlash_PB_021219