

# Samsung microSD UHS-I Card : EVO Plus Lineup

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2020 Data Sheet

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Revision 1.1



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## 1. INTRODUCTION

Samsung's EVO Plus microSD leverages Samsung's advanced NAND technology to achieve impressive speed and capacity improvements, most notable in the EVO Plus 512GB, 256GB, 128GB, 64GB, and 32GB, which now reach industry maximum UHS-I read speeds of 100 MB/s (32GB up to 95MB/s). EVO Plus microSD cards provide a more apposite answer for consumers looking to store heavy-loaded, high-resolution photography, videos and files.

## 2. PRODUCT FEATURES

| Samsung EVO Plus               |  |                                    |                                    |                                     |                                     |                                     |
|--------------------------------|--|------------------------------------|------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Hardware Information           | Form Factor                                      | microSDHC™, microSDXC™             |                                    |                                     |                                     |                                     |
|                                | User Capacity                                    | 32GB                               | 64GB                               | 128GB                               | 256GB                               | 512GB                               |
|                                |  | 31,998,345,216 Bytes <sup>1)</sup> | 63,988,301,824 Bytes <sup>1)</sup> | 128,010,158,080 Bytes <sup>1)</sup> | 256,020,316,160 Bytes <sup>1)</sup> | 512,007,077,888 Bytes <sup>1)</sup> |
|                                | Bus Speed Mode                                   | UHS-I SDR104 <sup>2)</sup>         |                                    |                                     |                                     |                                     |
|                                | Dimensions                                       | 15 x 11 x 1 (mm) (L x W x H)       |                                    |                                     |                                     |                                     |
| Weights                        | Approx. 0.25g (Card only)                        |                                    |                                    |                                     |                                     |                                     |
| Performance                    | Speed Class                                      | Class 10                           |                                    |                                     |                                     |                                     |
|                                | Speed Grade                                      | Grade 1 (U1)                       |                                    |                                     | Grade 3 (U3)                        |                                     |
|                                | Sequential Read <sup>3)</sup>                    | Up to 95MB/s                       | Up to 100 MB/s                     | Up to 100 MB/s                      | Up to 100 MB/s                      | Up to 100 MB/s                      |
|                                | Sequential Write <sup>3)</sup>                   | Up to 20 MB/s                      | Up to 20 MB/s                      | Up to 60 MB/s                       | Up to 90 MB/s                       | Up to 90 MB/s                       |
| Reliability                    | Temperature                                      | Operating : -25°C to 85°C          |                                    |                                     |                                     |                                     |
|                                |  | Non-Operating : -40°C to 85°C      |                                    |                                     |                                     |                                     |
|                                | Durability                                       | 10,000 mating cycles               |                                    |                                     |                                     |                                     |
| 4-Proof Features <sup>4)</sup> | Waterproof (IEC 60529, IPX7), Temperature-proof, |                                    |                                    |                                     |                                     |                                     |
|                                | X-ray-proof, Magnetic-proof                      |                                    |                                    |                                     |                                     |                                     |
| EMC Certifications             |  | FCC, CE, VCCI, RCM                 |                                    |                                     |                                     |                                     |
| Warranty                       |  | 10 year limited <sup>5)</sup>      |                                    |                                     |                                     |                                     |

- 1) 1GB=1,000,000,000 bytes. Actual usable storage capacity may vary. User capacity measured with SD Formatter 3.1 tool with FAT file system.
- 2) SDR104: 1.8V Signaling, Frequency up to 208 MHz, up to 104MB/sec, Max. Current Consumption 800mA (varies by test conditions)
- 3) Performance results are based on internal testing conditions. Transfer speeds may vary by host device.
- 4) Operating temperatures of -25°C to 85°C (-13°F to 185°F), non-operating temperatures of -40°C to 85°C (-40°F to 185°F). Withstands standard airport x-ray machines (Up to 100mGy) and the magnetic field equivalent of a high-field MRI scanner (Up to 15,000 gauss).
- 5) Warranties provided herein do not extend to any use of the product for or with continuous recording instruments or any other write-intensive devices, including without limitation security cameras, surveillance systems, dashboard cameras, blackbox cameras, internet protocol/network cameras, continuous recording set top box devices and continuous data logging devices like servers, dedicated devices for benchmarking test, the primary drive for certain devices and any other excessive uses.

### 3. PRODUCT LINEUP

| Form Factor | Lineup   | Density | Model Name |
|-------------|----------|---------|------------|
| microSD     | EVO Plus | 32GB    | MB-MC32G   |
|             |          | 64GB    | MB-MC64H   |
|             |          | 128GB   | MB-MC128H  |
|             |          | 256GB   | MB-MC256H  |
|             |          | 512GB   | MB-MC512H  |

### 4. REVISION HISTORY

| Revision Number | Description                 | Revision Date |
|-----------------|-----------------------------|---------------|
| 1.0             | Initial Release             | Mar. 2018     |
| 1.1             | NAND Change (V4→V5) Updated | May. 2020     |