Samsung microSD UHS-I Card : EVO Plus Lineup

2020 Data Sheet

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[1)]	63,988,301,824 Bytes[1)]	128,010,158,080 Bytes[1)]	256,020,316,160 Bytes[1)]	512,007,077,888Bytes[1)]
	Bus Speed Mode	UHS-I SDR104[2)]				
	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[3)]	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[3)]	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[4)]	Waterproof (IEC 60529, IPX7), Temperature-proof,				
		X-ray-proof, Magnetic-proof				
EMC Certifications		FCC, CE, VCCI, RCM				
Warranty		10 year limited[5)]				

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