

March 2017

> EXCERIA PRO[™]- M402

UHS-I microSDHC[™] & microSDXC[™] CARDS WITH ADAPTOR

EXCERIA $\mathsf{PRO}^{\mathsf{m}}$ storage solutions are ideal for use in action-cameras and other wearables.

M402 is perfect for 4K video recording in the fastest and toughest situations as well as for capacity expansion for your smartphone. The new Application Performance Class A1^{*1} gives you high confidence level and reliability when storing and running Android applications on microSD cards^{*2} at optimal levels.

The series is made for hard conditions: waterproof, shockproof, X-Ray proof and temperature proof, plus the card inlcudes a data recovery software. The SD adaptor included with the M402 Package gives you a wide variety of use options.





SPECIFICATIONS

	EXCERIA PRO™ M402 microSDHC™ & microSDXC™ Cards		
Overview:			
Capacity	16GB, 32GB, 64GB,128GB * ³		
Interface	UHS-I		
Speed Class	UHS Speed Class 3 *4		
Write Speed	Up to 95 MB/s * ⁵		
Read Speed	Up to 95 MB/s		
Application Performance Class	Class 1 A1*1		
Random Read IOPS *1	1500		
Write IOPS *1	500		
Sustained Sequential performance	10MB/s		
Warranty	5 Years		
Physical Specification:			
Dimensions	15 mm (L) x 11 mm (W) x 1.0 mm (H)		
Weight	Approx. 0.4g		
Environmental:			
Operating Tomp	25°C to 185°C		

Operating remp.		-23 C 10 +03 C			
Storage Temp.		-40°C to +85°C			
	16GB	32GB	64GB	128GB	
Model Numbers:					
EAN Code	4047999410461	4047999410478	4047999410485	4047999410492	

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EAN Code	4047999410461	4047999410478	4047999410485	4047999410492
Part Number	THN-M402S0160E2	THN-M402S0320E2	THN-M402S0640E2	THN-M402S1280E2
Blister Dimensions	152 mm (L) x 101mm (W) x 5mm (H)			
MOQ	10 pcs			





> TOSHIBA – THE INVENTOR OF FLASH MEMORY

In 1984, Toshiba developed a new type of semiconductor memory called flash memory, leading the industry into the next generation ahead of its competitors.

Some time later in 1987, NAND flash memory was developed, and this has since been used in a variety of memory cards and electronic equipments. The NAND flash market has grown rapidly, with flash memory becoming an internationally standardized memory device. Toshiba, the inventor of flash memory, has carved out a path to a new era in which we are all able to carry videos, music and data with us wherever we go.

History of Flash Memory		
1984	Developed NOR-type Flash Memory	
1987	Developed NAND-type Flash Memory	
Jul. 2000	Released SD™ Memory Card	
Jun. 2003	Released miniSD™ Memory Card	
Dec. 2003	Released USB Flash Memory	
Jul. 2006	Released microSD™ Memory Card	
Oct. 2006	Released SDHC™ Memory Card	
May. 2010	Released SDXC [™] Memory Card	
Sep. 2010	Developed SDHC Memory Card – World's fastest*6	
Sep .2011	Developed World's first SDHC Memory Card with Embedded Wireless LAN, FlashAir™	
Mar. 2012	Released the new brand EXCERIA™	
Jul. 2013	Developed EXCERIA™ UHS II World's fastest Write Speed	
Feb. 2015	Developed World's first SD Card with built-in NFC	
Sep. 2015	Developed World's first SDHC Memory Card with Embedded TransferJet [™] - Technology	
Mar. 2016	Developed EXCERIA™ microSD UHS-II World's fastest Write Speed*6	



- *1 A1 classification is defined in the latest SD Association card specification 5.1, and specifies at least 1500 random read IOPS (Input-Output access Per Second), 500 random write IOPS and sustained sequential performance of 10MB/s.
- *2 Storing and operation of apps in a card is determined by host device and/or apps.
- *3 One Gigabyte (1GB) means 109 = 1,000,000,000 bytes using powers of 10. A computer operating system, however, reports storage capacity using powers of 2 for the definition of 1GB= 230 = 1,073,741,824 bytes and therefore shows less storage capacity. Available storage capacity (including examples of various media files) will vary based on file size, formatting, settings, software and operating system and other factors.
- *4 Read/write data transfer rate based on SD standard. Full HD or 4K video recording operation may vary depending on devices you use and other factors such as file attributes and/or size.
- *⁵ MB/s is calculated as 1,000,000 bytes/s. The maximum transfer speed is the best value obtained under specific conditions in Toshiba's test environment and Toshiba does not warrant the speed in the equipment to be used. The read/write speed varies depending on the conditions of the equipment to be used. Conventionally, the transfer rate of the SD interface is lower than the UHS-I interface.
- *6 On the date of release

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The information contained herein is subject to change without notice.