

## EMBEDDED AUTOMOTIVE SOLUTIONS



## We power intelligent cars

With over twenty years of NAND storage experience, we provide one of the most reliable and comprehensive automotive product portfolios on the market. We are committed to providing state-of-the-art NAND storage solutions that support IVI, ADAS, and connectivity applications in modern vehicles of today and the future.

Phison is a proud member of AECC (Automotive Edge Computing Consortium), Renesas R-car Consortium and MIH EV Platform.



### microSD/ SD Card

SD and microSD cards are typically used for dash cameras in the car. It is a technology that has been prevailing for many years, but Phison keeps innovating to make it much more reliable, durable, faster and in higher capacities to enable seamless recording in high resolution cameras for the vehicles.

The newest automotive SD/microSD solution – MiM series will be based on PS8132 controller and it will further enable the newest NAND flash in the market. It is also compliant with AEC-Q100, IATF16949 and other certifications required for automotive industry applications. Phison's storage solutions assure drivers that the recorded data on camera will be safe.

# microSD/SD Card – MiM Series

Controller	PS8132			
Capacity <sup>1</sup>	64GB	128GB	256B	512GB
Interface	UHS104			
Form Factor	microSD			
<b>Performance</b> <sup>2 3 4</sup>				
Sequential Read	90MB/s	95MB/s	95MB/s	95MB/s
Sequential Write	40MB/s	90MB/s	90MB/s	90MB/s
4K Random Read	4000 IOPS	4000 IOPS	4000 IOPS	4000 IOPS
4K Random Write	2000 IOPS	2000 IOPS	2000 IOPS	2000 IOPS
<b>Power</b>				
Supply Voltage	V <sub>DD</sub> = 2.7V ~3.6V			
Active (Average) <sup>5</sup>	< 200mA			
<b>Temperature</b>				
Operating	Gold: -25°C ~ 85°C Diamond: -40°C ~ 85°C			
Non-Operating	-40°C ~ 85°C			
<b>Advanced Features</b>	<ul style="list-style-type: none"> <li>-SMART Tool (Health Monitor)</li> <li>- Power Loss Protection</li> <li>- Advanced Wear-Leveling</li> <li>- Auto Read Refresh</li> <li>- Field Firmware Update (FFU)</li> </ul>			

<sup>(1)</sup> 1GB = 1,000,000,000 bytes

<sup>(2)</sup> 1MB/s = 1,000,000 bytes / second

<sup>(3)</sup> Performance test is based on blew test environment.

a. Sequential Performance: TESTMETRIX VTE4100; Test Data Length: (UHS-I:500MB)

b. Random Performance: TESTMETRIX VTE4100; Application Performance script (4KB data size)

<sup>(4)</sup> Power consumption values given for UHS104 (208MHz) bus speed, 100ms RMS current value, VDD= 3.3V ± 5% , Ta = 250 C



THE DATA WITHIN THIS SPECIFICATION IS SUBJECT TO CHANGE BY PHISON WITHOUT NOTICE. PERFORMANCE NUMBERS MAY VARY BASED ON SYSTEM CONFIGURATION AND TESTING CONDITIONS.

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