

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.



UFS – MUM7 Series

To enhance user experience in the cockpit and enable autonomous car, automakers are paying more and more attention to the storage technologies which can accelerate these systems. UFS is exactly the next-generation solution that is faster than eMMC.

Phison has been developing the most sophisticated NAND storage solutions since 2000. The company is now introducing an automotive UFS solution called MUM7. MUM7 is compliant with AEC-Q100, IATF16949 and other certifications required by automotive industry customers. We leverage our years of expertise in UFS technology for the consumer market to make advanced UFS technology for the automotive industry applications.

UFS – MUM76C

Controller	PS8317		
Capacity ¹	64GB	128GB	256GB
Interface	UFS2.2		
Form Factor	UFS		
Performance ^{2,3,4}			
Sequential Read	800 MB/s	1000 MB/s	1000MB/s
Sequential Write	400MB/s	800 MB/s	950MB/s
4K Random Read	40K (IOPS)	65K (IOPS)	120K(IOPS)
4K Random Write	75K (IOPS)	150K (IOPS)	190K(IOPS)
Power			
Supply Voltage	VCC=3.3V, VCCQ=1.8V		
Temperature			
Operating	AEC-Q100 Grade 3, -40°C ~ 85°C		
Non-Operating	AEC-Q100 Grade 3, -40°C ~ 85°C		
Advanced Features	<ul style="list-style-type: none"> - Write Booster - Host Performance Booster (HPB 2.0) 		

⁽¹⁾ 1GB = 1,000,000,000 bytes

⁽²⁾ 1MB/s = 1,000,000 bytes / second

⁽³⁾ Performance test is based on below test environment.

a. Intel Gen3 Z270 + PLDA Gen3 switch

b. Intel Gen3 Z370 + PLDA Gen3 switch

c. Sequential Performance is based on 1GB range, chunk size 512KB

Random Performance is based on 1GB range, chunk size 4 KB

⁽⁴⁾ Power consumption values given for an 2 lane bus width, a clock frequency of 26MHz, 100ms RMS current value, VCC: 3.3 ± 5%. VCCQ = 1.8V ± 5%. Ta = 250 C



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UFS MUM76D

Controller	PS8317		
Capacity ¹	64GB	128GB	256GB
Interface	UFS3.1		
Form Factor	UFS		
Performance ^{2,3,4}			
Sequential Read	800 MB/s	1500 MB/s	1650MB/s
Sequential Write	420MB/s	800 MB/s	1100MB/s
4K Random Read	40K (IOPS)	75K (IOPS)	135K(IOPS)
4K Random Write	75K (IOPS)	150K (IOPS)	220K(IOPS)
Power			
Supply Voltage	Vcc =2.5V, Vccq = 1.2V		
Temperature			
Operating	AEC-Q100 Grade 2, -40°C ~ 105°C AEC-Q100 Grade 3, -40°C ~ 85°C		
Non-Operating	AEC-Q100 Grade 2, -40°C ~ 105°C AEC-Q100 Grade 3, -40°C ~ 85°C		
Advanced Features	<ul style="list-style-type: none"> - Write Booster - Host Performance Booster (HPB 2.0) 		

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