

## PRODUCT PORTFOLIO

### SD / microSD pSLC Cards

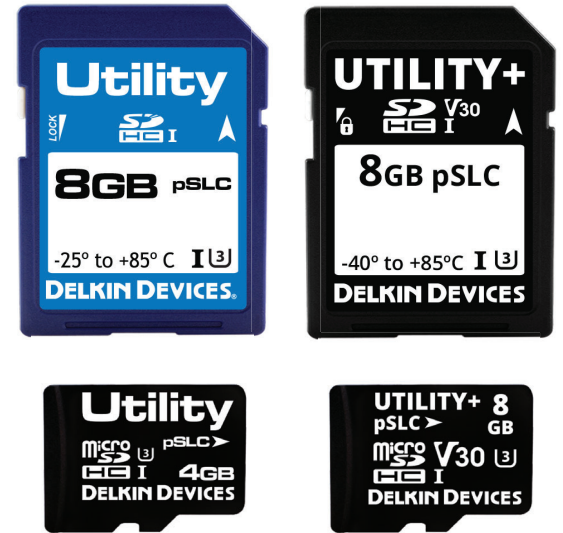
Delkin Devices offers both full-size SD and microSD cards with pSLC flash, allowing the best product selection to match any application. Delkin's pSLC cards have many benefits over standard retail consumer-grade cards, including BOM control and life cycle management.

Delkin's pSLC Utility and Utility+ SD and microSD cards are an extremely popular choice today based on their high performance, excellent reliability and wide compatibility. pSLC cards are ideal for OEM applications in industrial, medical, transportation, and other markets requiring a controlled, yet cost-effective solution.

Regardless of the product family, Delkin ensures consistent performance and host compatibility through managed configurations. Delkin locks the card configuration down to the specific controller, firmware and flash chips, with a change to any of these components dictating a new part number. When an unavoidable EOL occurs to any of these items, Delkin communicates the discontinuation in advance, providing the opportunity to place a last time buy as well as to qualify the replacement solution.

Additionally, since the Delkin Devices facility in Poway, California is the headquarters for our design, manufacturing and support teams, we can also provide customized solutions. Options include custom labels, content or image loading, conformal coating or other mechanical modifications to meet a specific need.

Contact us to ask how a card can be customized for your application.



## HIGHLIGHTS

### Four Product Families

- pSLC Flash
- Commercial & Industrial Temp
- SD 3.0

Support for SD and SPI Modes

Controlled BOM

Life Cycle Management

# SD / microSD PSLC CARDS PRODUCT MATRIX



SD Product Family	Utility pSLC SD	Utility+ pSLC SD	Utility pSLC microSD	Utility+ pSLC microSD
Interface	SD 3.0, Class 10, UHS-I		SD 3.0, Class 10, UHS-I	
Connector	Standard SD 9 pin		Standard microSD 8 pin	
Outline Dimensions	32 (± 0.10) x 24 (± 0.10) x 2.1 (± 0.15) mm		11 x 15 x 1 mm	
Flash Type	pSLC			
Density Range	4GB–32GB (SDHC)	8GB–32GB (SDHC)	4GB–32GB (SDHC)	8GB–32GB (SDHC)
Data Retention	5- 10 years - up to 10% of P/E cycles			
	1 year - at end of life / 100% of cycles			
Endurance (Raw Flash Level)	20,000 P/E cycles			
Operating Temperature	-25°C to +85°C	-40°C to +85°C	-25°C to +85°C	-40°C to +85°C
Storage Temperature	-40°C to +85°C			
Performance				
Sequential Read (MB/s)	up to 95			
Sequential Write (MB/s)	up to 85			
MTBF	≥ 3,000,000 hours (0 - 25°C)			
Shock*	1,500 G for 0.5msec			
Vibration*	20Hz ~80Hz/1.52mm displacement 80Hz~2000Hz / 20G Acceleration			
Humidity	95% RH under 40°C			
Voltage	2.7 – 3.6 V Normal			
Power Consumption	Read typically <400 mA Write typically < 400 mA Idle typically < 1000 uA			
Features & Tools	Sophisticated Wear Leveling & Bad Block management SMART Data Reporting & Dashboard Error Correction Code (ECC) Auto-Read Refresh			
Part Numbers	4GB SF04APGJN-U3000-3 8GB SF08FQYJR-U3000-3 16GB SF16FQYJR-U3000-3 32GB SF32FQYJR-U3000-3	8GB SE08FQYJR-3B000-3 16GB SE16FQYJR-3B000-3 32GB SE32FQYJR-3B000-3	4GB S404APGJN-U3000-3 8GB S408FQYJR-U3000-3 16GB S416FQYJR-U3000-3 32GB S432FQYJR-U3000-3	8GB S308FQYJR-U3000-3 16GB S316FQYJR-U3000-3 32GB S332FQYJR-U3000-3