

CF Card XL & XL+

SMART Modular Technologies' CF Card XL and XL+ products offer reliable, high performance in an industry standard CompactFlash® (CF) form factor. The industrial-grade CF Card XL and XL+ products specifically support the OEM markets of networking, telecommunication and data communication, embedded computing, medical, and industrial applications.

Available in capacities from 512MB to 64GB, SMART's CF Card offers an advanced static wear leveling algorithm for extending product lifespan in the most demanding OEM applications. Additionally, SMART has designed its product using single-level cell (SLC). SLC NAND Flash technology is used for the enhanced data integrity and life time expectation in critical embedded applications.

The entire CF Card XL and XL+ Flash product line supports self-monitoring analysis and reporting technology (S.M.A.R.T.), which is designed to reduce field failures and unscheduled service maintenance. By providing an accurate forecast of the expected lifespan, S.M.A.R.T. enables a reliable monitoring application that efficiently supports the CF Card Flash product in the field and guarantees 24/7 service availability.

Features & Benefits

- Highly reliable SLC NAND Flash technology
- Static and dynamic wear leveling
- Field upgradeable firmware
- RoHS-6 compliant
- Self-Monitoring Analysis and Reporting Technology (S.M.A.R.T.) support

Product Family Overview

	Capacity	Performance Sequential		
CF Card XL				
50-Pin	128MB to 8GB	R/W up to 30/12 MB/s		
CF Card XL+				
50-Pin	512MB to 64GB	R/W up to 55/27 MB/s		



Applications

- Gaming
- Communications
- Defense
- Industrial control equipment
- Networking
- Printers

Specifications

	CF Card XL	CF Card XL+	
Performance			
Read (maximum)	up to 30MB/s	up to 55MB/s	
Write (maximum)	up to 12MB/s	up to 27MB/s	
Reliability			
Data Reliability	1 non-recoverable error in 10 ¹⁴ Bits, Read		
Data Retention	10 years >90% life remaining 1 year at the end of life		
Endurance	CF Card XL: TBW = 5 Tbytes per 1GB capacity CF Card XL+: TBW = 3 Tbytes per 1GB capacity		
Power			
VCC 5.0V (+10%)	5.0V+10% 3.3V+5%		
Read	< 200mA		
Write	< 200mA		
Idle	< 4mA		
Environmental			
Shock (operational)	50G @ 11ms		
Vibration	15G peak to peak		
Operating Temperature - Commercial	0ºC to 70ºC		
Operating Temperature - Industrial	-40ºC to +85ºC		
Storage temperature	-55°C to +85°C		
Humidity	5% to 95%		
Physical			
Length	1.433 in. (36.40 mm.)		
	1.685 in. (42.80 mm.)		
Width		·	
Thickness	0.130 in. (3.3	30 mm.)	

Ordering Information

Part Number	Capacity			
CF XL Commercial Grade (0°C to +70°C)				
SS9FD128H3B1CS01	128MB			
SS9FD256H3B1CS01	256MB			
SS9FD512H3B2CS01	512MB			
SS9FD01GH3B4CS01	1GB			
SS9FD02GH3B8CS01	2GB			
SS9FD04GH3BACS01	4GB			
SS9FD08GH3BACS01	8GB			
CF XL Industrial Grade (-40°C to +85°C)				
SS9FD128H3B1IS01	128MB			
SS9FD256H3B1IS01	256MB			
SS9FD512H3B2IS01	512MB			
SS9FD01GH3B4IS01	1GB			
SS9FD02GH3B8IS01	2GB			
SS9FD04GH3BAIS01	4GB			
SS9FD08GH3BAIS01	8GB			
CF XL+ Commercial Grade (0°C to +70°C)				
SG9CF512HYD2A	512MB			
SG9CF1GHYD4A	1GB			
SG9CF2GHYD9A	2GB			
SG9CF4GHYD9A	4GB			
SG9CF8GHYDB	8GB			
SG9CF16GHYDC	16GB			
SG9CF32GHYDD	32GB			
SG9CF64GHYDD	64GB			
CF XL+ Industrial Grade (-40°C to +85°C)				
SG9CF512HYD2AI	512MB			
SG9CF1GHYD4AI	1GB			
SG9CF2GHYD9AI	2GB			
SG9CF4GHYD9AI	4GB			
SG9CF8GHYDBI	8GB			
SG9CF16GHYDCI	16GB			
SG9CF32GHYDDI	32GB			
SG9CF64GHYDDI	64GB			

Note: All available in industrial grade. 1CHS not supported at this capacity

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