

Flash Products

MEMORY • FLASH • DISPLAYS • EMBEDDED

XceedLite IDE Flash Drive

SMART's XceedLite IDE Flash drives are designed for applications which require high random access performance, high reliability and low power consumption under a wide range of operating temperatures and conditions. These rugged, industrial grade solid-state drives are an ideal code and data storage solution realized in industry standard 1.8" & 2.5" and 40-pin & 44-pin Mini IDE form factors.

SMART's The XceedLite IDE Flash drives work like standard hard drives but offer the speed, transportability and reliability of solid-state devices. These drives contain no moving parts, enabling zero noise emission systems, and they also afford extreme device longevity in mobile and embedded computing, Internet appliances, telecom and networking applications. They are available in densities from 64MB to 16GB with optional enclosures*.

SMART's XceedLite Flash drives offer much faster random access time than mechanical hard disks, and this increased performance means that operating systems boot considerably faster and application programs start up more quickly.

**2.5" available enclosed only and all Mini IDE drives only available without enclosure.*



XceedLite IDE Flash Drive Specifications:

Performance

- Sustained Write (Host to Flash): up to 25MB/s
- Sustained Read up to 47MB/s
- Capacities from 64MB to 16GB
- Interface transfer rate up to (PIO Mode 6 /Multi-Word DMA Mode 2/Ultra DMA Mode 5)
- High Reliability: 2 million erase/program cycles
- Minimum 10 years data retention
- Internal ECC for max. data integrity

Power

- Voltage (VCC): 5.0V±10% 3.3V±5%
- Read: 250mA(max) 40mA(max)
- Write: 250mA(max) 40mA(max)

Environmental

- Operating Temperature:
0°C to +70°C (Industrial grade)
& -40°C to +85°C (Industrial temp.)

Physical

- Physical Size:
Length x Width x Height
- 1.8" IDE with enclosure
3.00" x 2.00" x 0.35"
- 2.5" IDE with enclosure
3.95" x 2.75" x 0.25"
- 40-pin Mini-IDE
2.135" x 1.145" x 0.5"
- 44-pin Mini-IDE
1.25" x 2.25" x 0.35"
- 100% compatibility with IDE (PC/AT) interface for seamless incorporation in most embedded platforms
- Drop-in replacement for HDD



1.8" IDE Drive Part Numbers

SMART Part Number	Chip Density	Physical Capacity	Sector Card	Head	Cylinder	Sector Track	Un-Formatted Capacity
SG9 IDE1D 64SMC5x	512Mb	64MB	124,992	16	124	63	63,995,904
SG9 IDE1D 128SMC1x	1Gb	128MB	252,000	16	250	63	129,024,000
SG9 IDE1D 256SMC1x	1Gb	256MB	504,000	16	500	63	258,048,000
SG9 IDE1D 512SMC2x	2Gb	512MB	1,014,048	16	1006	63	519,192,576
SG9 IDE1D 1GSMC4x	4Gb	1GB	2,016,000	16	2000	63	1,032,192,000
SG9 IDE1D 2GSMC9x	8Gb	2GB	4,061,232	16	4029	63	2,079,350,784
SG9 IDE1D 4GSMC9x	8Gb	4GB	8,124,480	16	8060	63	4,159,733,760
SG9 IDE1D 8GSMCAx	16Gb	8GB	16,250,976	16	16122	63	8,320,499,712

x: Operating Temperature Range, Blank - Industrial Grade, I - Industrial Temp

2.5" IDE Drive Part Numbers

SMART Part Number	Chip Density	Physical Capacity	Sector Card	Head	Cylinder	Sector Track	Un-Formatted Capacity
SG9IDE2C64SME5x	512Mb	64MB	123,904	8	484	32	63,438,848
SG9IDE2C128SME1x	1Gb	128MB	248,064	8	969	32	127,008,768
SG9IDE2C256SME1x	1Gb	256MB	497,152	16	971	32	254,541,824
SG9IDE2C512SME2x	2Gb	512MB	994,896	16	987	63	509,386,752
SG9IDE2C1GSME4x	4Gb	1GB	1,989,792	16	1,974	63	1,018,773,504
SG9IDE2C2GSME9x	8Gb	2GB	3,915,072	16	3,884	63	2,004,516,864
SG9IDE2C4GSMEAx	16Gb	4GB	7,831,152	16	7,769	63	4,009,549,824
SG9IDE2C8GSMEBx	32Gb	8GB	15,596,784	16	15,148	63	7,985,553,408
SG9IDE2C16GSMEBx	32Gb	16GB	31,195,136	16	16,384	63	15,971,909,632

x: Operating Temperature Range, Blank - Industrial Grade, I - Industrial Temp

40 Pin Mini-IDE Part Numbers

SMART Part Number	Chip Density	Physical Capacity	Sector Card	Head	Cylinder	Sector Track	Un-Formatted Capacity
SG9IDE4F64SMC5x	512Mb	64MB	124,992	16	124	63	63,995,904
SG9IDE4F128SMC1x	1Gb	128MB	252,000	16	250	63	129,024,000
SG9IDE4F256SMC1x	1Gb	256MB	504,000	16	500	63	258,048,000
SG9IDE4F512SMC2x	2Gb	512MB	1,014,048	16	1006	63	519,192,576
SG9IDE4F1GSMC4x	4Gb	1GB	2,016,000	16	2000	63	1,032,192,000
SG9IDE4F2GSMC9x	8Gb	2GB	4,061,232	16	4029	63	2,079,350,784
SG9IDE4F4GSMC9x	8Gb	4GB	8,124,480	16	8060	63	4,159,733,760
SG9IDE4F4GSMCAx	16Gb	4GB	8,124,480	16	8060	63	4,159,733,760

x: Operating Temperature Range, Blank - Industrial Grade, I - Industrial Temp

44 Pin Mini-IDE Part Numbers

SMART Part Number	Chip Density	Physical Capacity	Sector Card	Head	Cylinder	Sector Track	Un-Formatted Capacity
SG9IDE5F64SMC5x	512Mb	64MB	124,992	16	124	63	63,995,904
SG9IDE5F128SMC1x	1Gb	128MB	252,000	16	250	63	129,024,000
SG9IDE5F256SMC1x	1Gb	256MB	504,000	16	500	63	258,048,000
SG9IDE5F512SMC2x	2Gb	512MB	1,014,048	16	1006	63	519,192,576
SG9IDE5F1GSMC4x	4Gb	1GB	2,016,000	16	2000	63	1,032,192,000
SG9IDE5F2GSMC9x	8Gb	2GB	4,061,232	16	4029	63	2,079,350,784
SG9IDE5F4GSMC9x	8Gb	4GB	8,124,480	16	8060	63	4,159,733,760
SG9IDE5F4GSMCAx	16Gb	4GB	8,124,480	16	8060	63	4,159,733,760
SG9IDE5F8GSMCAx	16Gb	8GB	16,250,976	16	16122	63	8,320,499,712

x: Operating Temperature Range, Blank - Industrial Grade, I - Industrial Temp