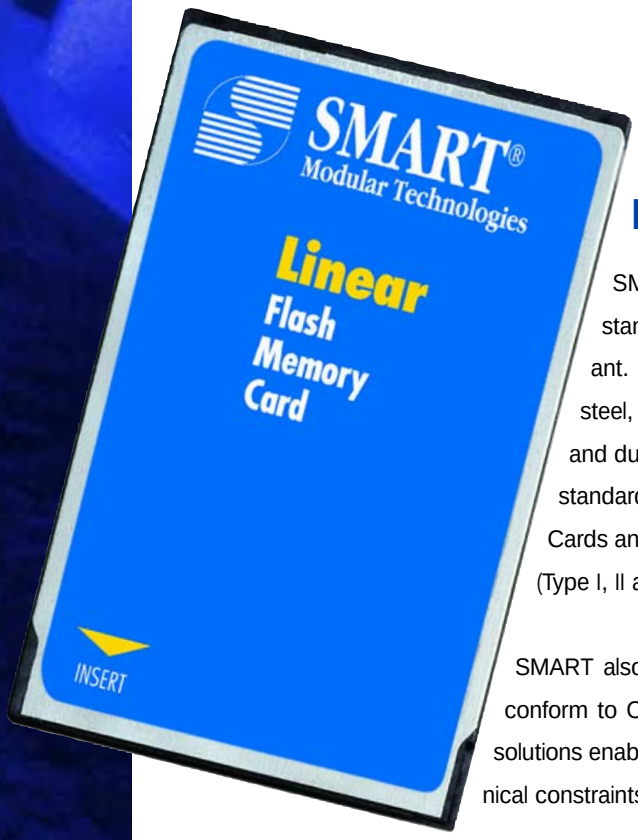
Linear Flash Cards



Linear Flash Cards

SMART Modular Technologies, Inc. offers an array of standard Linear Flash products that are PCMCIA compliant. All standard products are enclosed in a stainless steel, sonic welded case to assure performance, reliability, and durability and provide isolation from the ESD. SMART's standard products address most OEM needs for Linear Flash Cards and are available in a wide selection of capacities, sizes (Type I, II and mini) and options.

SMART also offers custom Linear Flash memory solutions that conform to OEM application and design specifications. Custom solutions enable OEMs to avoid the packaging limitations and technical constraints by offering support from conception to design.

Not only does SMART offer standard and custom solutions, but as an additional benefit to the customer, the Company offers card recycling as well. SMART's recycling program is an economical service that enables OEMs to return cards with outdated firmware, whereby SMART then cleans, verifies, re-programs and returns the recycled cards.

Standard Linear Flash Configurations

	Series 1 PC Card	Series 2 PC Card	C Series PC Card	D Series PC Card	MLC Series StrataFlash	Valu+ Series PC Card
Package	Type 1 PCMCIA	Type I PCMCIA	Type I PCMCIA	Type I PCMCIA	Type I or II PCMCIA	Type I PCMCIA
Memory Capacity	256K to 4MB	2MB to 40MB	1MB to 10MB	4MB to 40MB	8MB to 64MB	2MB to 16MB
Configuration	1 or 2 Mbit	8 or 16 Mbit	4 Mbit	16Mbit	32 or 64 Mbit	8 or 16 Mbit
Operating Voltage	12V write/ 5V read	12V/5V/3V	5V write/ 5V read	5V write/ 5V read	5V write/ 5V read	3V write/3V read 5V write/5V read
Power Standby*	1.6mA	150mA	0.7mA	100mA	150mA	150mA
Read	80mA	35mA to 70mA	45mA to 90mA	45mA to 70mA	35mA to 70mA	20mA to 70mA
Write	30mA	75mA	65mA	65mA	75mA	75mA to 125mA
Erase	30mA	50mA	50mA	65mA	50mA	50mA
Access Time	150 200ns	150ns 200ns	150ns 200ns	150ns 200ns	200ns	100ns
Temperature (Commercial)	0ºC to 70ºC	0ºC to 70ºC	0ºC to 70ºC	0ºC to 70ºC	0ºC to 70ºC	0ºC to 70ºC
Temperature (Industrial)	-40ºC to 85ºC	-40ºC to 85ºC	-40ºC to 85ºC	-40ºC to 85ºC	-40ºC to 85ºC	-40ºC to 85ºC
Reliability	100,000 cycles	100,000 cycles	1,000,000 cycles	1,000,000 cycles	100,000 cycles	100,000 cycles

* Maximum value for lowest capacity within series.

Linear Flash Options

Customized

Any customer specified Linear Flash technology including:

- Atmel
- Catalyst
- Hitachi
- Hyundai
- Sharp
- Orher

SMART plans to continue to offer new flash technologies and expand its list of semiconductor suppliers as new products are announced and available.

Packages

Available packages include:

- SOP
- TSOP
- FBGA
- Micro BGA

Programming

SMART can program and verify standard or custom memory modules. SMART can also provide memory modules with custom attribute files.

Data Mode Options

- Attribute Memory
- Hardware Reset
- Ready / Busy
- Write Protect Switch
- Address Wraparound

Data Mode

- PCMCIA Compliant 8 or 16 bit
- PCMCIA Compatible 8 or 16 bit
  - 8 bit only direct addressing
  - 16 bit only direct addressing
- JEIDA 6 .1 Compliant

Packaging and Labeling

- Standard
- Bulk Static Packed
- Custom Labeled
- Individual Plastic Sleeves
- Custom Screened
- PC Card Jewel Cases
- Ink Jet Marked

Accessories

- 12V pump adaptor
  68 pin to 68 pin PCMCIA

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