

### Industrial PC Card PCMCIA Type II ATA



The California PC FLASH Industrial PC Card / PCMCIA ATA Flash Cards utilize **NAND Type SLC flash memory** for fast read / write times. The California PC FLASH PCMCIA ATA Flash Cards have an **INDUSTRIAL TEMPERATURE rating of -40°C to +85°C** to fulfill specialized applications in normal or harsh operating environments. With the great advantages of non-volatile and solid state, the PCMCIA ATA Flash Cards are more robust than conventional hard disk drives and consume around 10% of the power required by small mechanical disk drives. PC Card / PCMCIA ATA

Flash Cards are used with Industrial Equipment, Aviation Electronics, Handheld PCs, PDAs, Digital Cameras, Laptops, and Desktop PCs as data storages devices. When a PCMCIA ATA Flash Card is inserted into an IDE adapter, it performs like a traditional rotating disk drive or USB drive. California PC FLASH's PCMCIA ATA Flash Cards offer the ideal solution for critical applications requiring

#### Features:

- ATA/True IDE Mode compatible
- NAND type SLC flash based
- High performance and Industrial Temp **-40°C to +85°C**
- Designed for Harsh Environments
- Operating modes supports PC Card Memory Mode, PC Card I/O Mode, True-IDE Mode
- Reliable wear-leveling algorithm to ensure the best of flash endurance
- Supports DMA Modes 0 to 4
- Supports Ultra DMA Modes 0 to 6
- Data Transfer Rate of 43Mbytes/sec under UDMA modes
- +5 Volts or +3.3 Volts  $\pm 5\%$  operation
- Very Low Power Consumption
- MTBF > 2,000,000 hours
- Capacity: 32MB, 64MB, 128MB, 256MB, 512 MB, 1GB, 2GB, 4GB, 8GB, 16GB, 32GB
- Vibration: 15G peak-to-peak maximum
- Shock: 2,000G maximum
- Altitude: 50,000 feet maximum
- RoHS Compliant

California PC FLASH  
Type II PC Card  
(PCMCIA)

Industrial Grade

**-40°C to +85°C**

216 Avenida Fabricante, Ste 108  
San Clemente, CA 92672

Phone: (949) 487-1213  
Fax: (949) 487-1866

E-mail: [sales@CaliforniaPC.com](mailto:sales@CaliforniaPC.com)

For more product info visit:  
[www.CaliforniaPC.com](http://www.CaliforniaPC.com)

California Peripherals & Components, Inc.  
[www.CaliforniaPC.com](http://www.CaliforniaPC.com)





# California Peripherals & Components, Inc.

## Industrial Temperature Solid State Flash Storage

California PC FLASH  
Type II PC Card  
(PCMCIA)

Industrial Grade

-40°C to +85°C

216 Avenida Fabricante, Ste 108  
San Clemente, CA 92672

Phone: (949) 487-1213  
Fax: (949) 487-1866

E-mail: [sales@CaliforniaPC.com](mailto:sales@CaliforniaPC.com)

For more product info visit:  
[www.CaliforniaPC.com](http://www.CaliforniaPC.com)

### Performance

Data Transfer Mode	PIO 4 (default), Multiword DMA 2, UDMA 4 (other modes available)
Sequential Read	43Mbytes / sec Max. (depends on data transfer mode)
Sequential Write	35Mbytes / sec Max. (depends on data transfer mode)

### Environmental Specifications

Temperature	Operating: Non-Operating	-40°C ~ +85°C -50°C ~ +95°C
Humidity	Operating & Non-operating:	5% ~ 95% non-condensing
Acoustic Noise	Operating & Non-Operating	0dB
Vibration	Operating & Non-operating	15G
Shock	Operating & Non-operating	2000G
Altitude	Operating & Non-operating	50,000 feet

### Power Consumption

DC Input Voltage 100mV max.	+5V $\pm$ 10%
Standby Mode:	12mA
Read Mode:	95mA
Write Mode:	140mA

### Reliability

MTBF	> 2,000,000 hours
ECC	RS-code ECC capable of correcting 24 bits in a 1,024 byte data
Endurance	> 1,000,000 cycles logically contributed by wear-leveling and advanced bad sector management algorithms
Data Reliability	< 1 non-recoverable error in 10 <sup>14</sup> bits read
Data Retention	10 years
Warranty	3 Years

California Peripherals & Components, Inc.  
[www.CaliforniaPC.com](http://www.CaliforniaPC.com)





# California Peripherals & Components, Inc.

## Industrial Temperature Solid State Flash Storage

### Physical Specifications

Length	85.5 ± 0.1 mm (3.366 ± .004 in)
Width	54.4 ± 0.1 mm (2.142 ± .004 in)
Thickness	5.0 mm (0.197 inches) Body Height (Type II)
Weight (Max.)	28.6 g (1.0 oz) maximum

California PC FLASH  
Type II PC Card  
(PCMCIA)

Industrial Grade

-40°C to +85°C

### \* Part Numbers (see suffixes below)

32MB	FPCI-32MB-XXX2	2GB	FPCI-02GB-XXX2
64MB	FPCI-64MB-XXX2	4GB	FPCI-04GB-XXX3
128MB	FPCI-128MB-XXX2	8GB	FPCI-08GB-XXX3
256MB	FPCI-256MB-XXX2	16GB	FPCI-16GB-XXX3
512MB	FPCI-512MB-XXX2	32GB	FPCI-32GB-XXX3
1GB	FPCI-01GB-XXX2		

### \*Removable disk mode / data transfer mode PIO 4 by Default

- 2132 = Removable, PIO 4 (default)
- 2232 = Fixed, PIO 4
- 3332 = Auto Detect, Multi Word DMA 2
- 3132 = Removable, Multi Word DMA 2
- 3232 = Fixed, Multi Word DMA 2
- 3332 = Auto Detect, Multi Word DMA 2
- 4132 = Removable, Ultra DMA 4
- 4232 = Fixed, Ultra DMA 4
- 4333 = Auto Detect, Ultra DMA 4

\* If you need any other data transfer mode not listed above or custom CHS values, please contact us.

216 Avenida Fabricante, Ste 108  
San Clemente, CA 92672

Phone: (949) 487-1213  
Fax: (949) 487-1866

E-mail: sales@CaliforniaPC.com

For more product info visit:  
[www.CaliforniaPC.com](http://www.CaliforniaPC.com)

California Peripherals & Components, Inc.  
[www.CaliforniaPC.com](http://www.CaliforniaPC.com)

