Features

- **MultiMediaCard (MMC) Form Factor**
- **Single 2.7V to 3.6V Supply**
- **40 MHz Max Clock Frequency**
- **Serial Peripheral Interface (SPI) Compatible**
- **Low Power Dissipation**
  - **10mA Active Read Current Typical**
  - **6µA CMOS Standby Current Typical**
- **Industrial Temperature Range**
- **Pb-free/RoHS-compliant Package**

4-megabyte 2.7-volt DataFlash® Card

AT45DCB004C

1. Description

The AT45DCB004C is 2.7-volt SPI compatible serial interface DataFlash® Card. This 7-pin card is form factor compatible to the MultiMediaCard standard leveraging on a wide range of low cost connectors that are commercially available. Additionally, the DataFlash Card is pinout compatible to the SPI version of the MMC card.

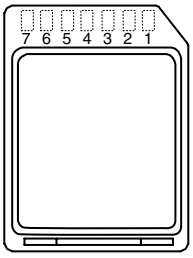
The small form factor and simple interface make the DataFlash Card ideal for a wide variety of data- and program code-storage applications where a removable storage medium is required. Applications range from voice/audio, text or image storage to software applications, system upgrades and software patches.

For detailed device specifications, please refer to the AT45DB321C DataFlash datasheet.

Table 1-1. Pin Configuration

Pin	Pin Name	Function
1	$\overline{CS}$	Chip Select
2	SI	Serial Input
3	GND	Ground
4	VCC	Supply
5	SCK	Serial Clock
6	NC	No Connect
7	SO	Serial Output

Figure 1-1. DataFlash Card - Top View



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2. Ordering Information

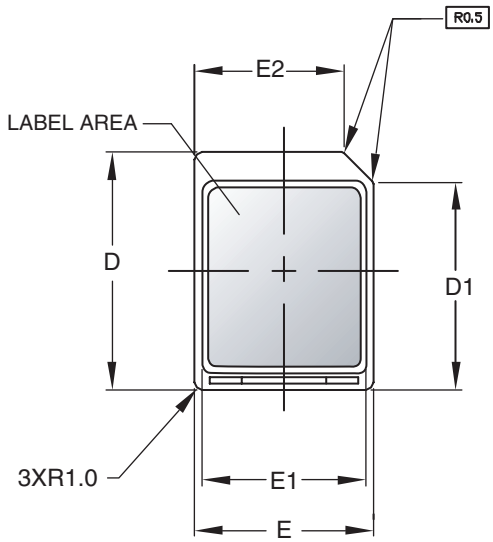
f_{SCK} (MHz)	I_{CC} (mA)		Ordering Code	Package	Operation Range
	Active	Standby			
40	15	0.015	AT45DCB004C	7DF1[1]	Industrial (-40°C to 85°C)

Note: 1. The 7DF1 is a Pb-free/RoHS-compliant package.

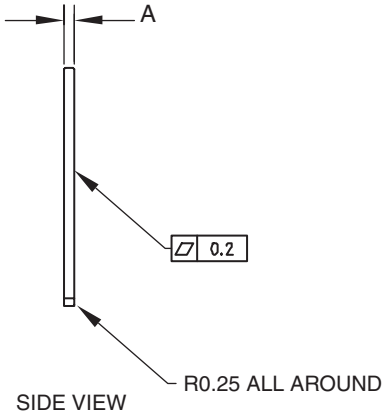
Package Type	
7DF1	7-lead, 2.5 mm Pitch 24 x 32 x 1.4 mm Body DataFlash Card

3. Packaging Information

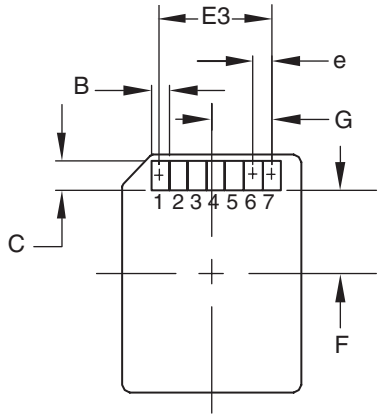
3.1 7DF1 – DataFlash Card



TOP VIEW



SIDE VIEW



BOTTOM VIEW

COMMON DIMENSIONS
(Unit of Measure = mm)

SYMBOL	MIN	NOM	MAX	NOTE
A	1.30	1.40	1.50	
B		2.40 TYP		
C		4.00 TYP		
D	31.90	32.00	32.10	
D1		28.00 REF		
E	23.90	24.00	24.10	
E1		22.00 REF		
E2		20.00 REF		
E3		15.00 TYP		
F		11.20 REF		
G		8.13 TYP		
e		2.50 TYP		

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	TITLE	DRAWING NO.	REV.
2325 Orchard Parkway San Jose, CA 95131	**7DF1**, 7-pad, 2.5 mm Pitch 24 x 32 x 1.4 mm Body DataFlash Card	7DF1	B

4. Revision History

Revision Level – Revision Date	History
A – June 2005	Initial release
B – March 2006	Added text to indicate that DataFlash cards are Pb-free
C – April 2006	Added text to indicate that DataFlash cards are RoHS compliant

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