

Features

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

1. Description

The AT45DCB008, AT45DCB004 and AT45DCB002 are 2.7-volt only SPI compatible serial interface DataFlash[®] Cards. They are offered in 8-megabyte (64-Mbit), 4-megabyte (32-Mbit) and 2-megabyte (16-Mbit) densities. These 7-pin cards are 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.

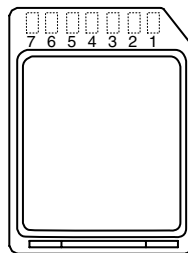
For detailed device specifications, please refer to the corresponding DataFlash datasheets:

- AT45DCB008 reference AT45DB642
- AT45DCB004 reference AT45DB321B
- AT45DCB002 reference AT45DB161B

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



**8-megabyte,
4-megabyte,
and 2-megabyte
2.7-volt Only
DataFlash[®]
Cards**

**AT45DCB008
AT45DCB004
AT45DCB002**





2. Ordering Information

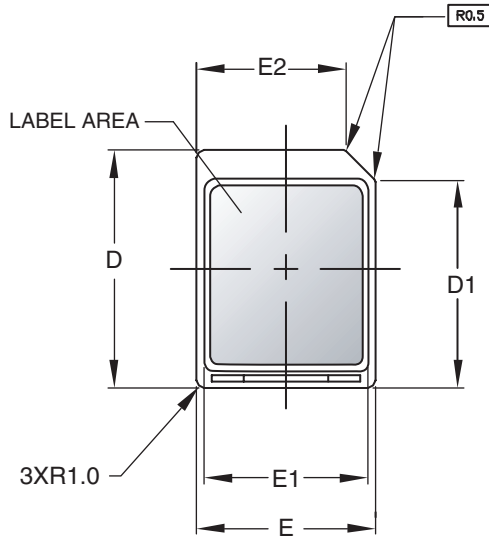
f _{sck} (MHz)	I _{cc} (mA)		Ordering Code	Package	Operation Range
	Active	Standby			
20	10	0.01	AT45DCB008 AT45DCB004 AT45DCB002	7DF1 ⁽¹⁾	Industrial (-40°C to 85°C)

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

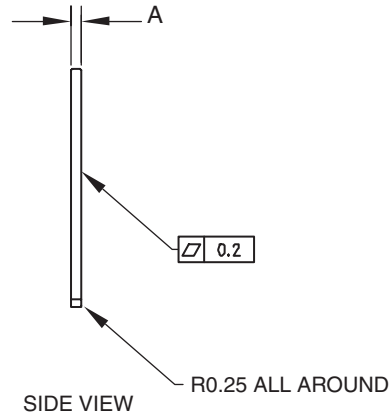
Package Type	
7DF1	7-lead, 2.5 mm Pitch 24 x 32 x 1.4 mm Body DataFlash Card

3. Packaging Information

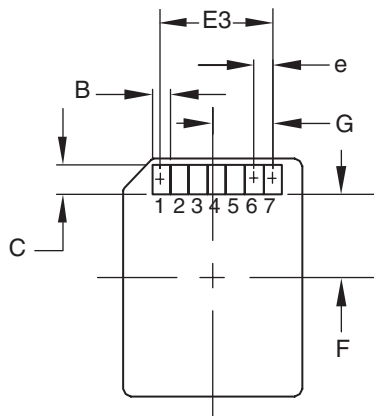
3.1 7DF1 – DataFlash Card



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			

11/10/05



2325 Orchard Parkway
San Jose, CA 95131

TITLE

7DF1, 7-pad, 2.5 mm Pitch 24 x 32 x 1.4 mm Body DataFlash Card

DRAWING NO.

7DF1

REV.

B



4. Revision History

Revision Level – Revision Date	History
A – November 2001	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



Atmel Corporation

2325 Orchard Parkway
San Jose, CA 95131, USA
Tel: 1(408) 441-0311
Fax: 1(408) 487-2600

Regional Headquarters

Europe

Atmel Sarl
Route des Arsenaux 41
Case Postale 80
CH-1705 Fribourg
Switzerland
Tel: (41) 26-426-5555
Fax: (41) 26-426-5500

Asia

Room 1219
Chinachem Golden Plaza
77 Mody Road Tsimshatsui
East Kowloon
Hong Kong
Tel: (852) 2721-9778
Fax: (852) 2722-1369

Japan

9F, Tonetsu Shinkawa Bldg.
1-24-8 Shinkawa
Chuo-ku, Tokyo 104-0033
Japan
Tel: (81) 3-3523-3551
Fax: (81) 3-3523-7581

Atmel Operations

Memory

2325 Orchard Parkway
San Jose, CA 95131, USA
Tel: 1(408) 441-0311
Fax: 1(408) 436-4314

Microcontrollers

2325 Orchard Parkway
San Jose, CA 95131, USA
Tel: 1(408) 441-0311
Fax: 1(408) 436-4314

La Chantrerie
BP 70602
44306 Nantes Cedex 3, France
Tel: (33) 2-40-18-18-18
Fax: (33) 2-40-18-19-60

ASIC/ASSP/Smart Cards

Zone Industrielle
13106 Rousset Cedex, France
Tel: (33) 4-42-53-60-00
Fax: (33) 4-42-53-60-01

1150 East Cheyenne Mtn. Blvd.
Colorado Springs, CO 80906, USA
Tel: 1(719) 576-3300
Fax: 1(719) 540-1759

Scottish Enterprise Technology Park
Maxwell Building
East Kilbride G75 0QR, Scotland
Tel: (44) 1355-803-000
Fax: (44) 1355-242-743

RF/Automotive

Theresienstrasse 2
Postfach 3535
74025 Heilbronn, Germany
Tel: (49) 71-31-67-0
Fax: (49) 71-31-67-2340

1150 East Cheyenne Mtn. Blvd.
Colorado Springs, CO 80906, USA
Tel: 1(719) 576-3300
Fax: 1(719) 540-1759

Biometrics/Imaging/Hi-Rel MPU/ High-Speed Converters/RF Datacom

Avenue de Rochepleine
BP 123
38521 Saint-Egreve Cedex, France
Tel: (33) 4-76-58-30-00
Fax: (33) 4-76-58-34-80

Literature Requests

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