

## 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  $\mu$ A CMOS Standby Current Typical
- Industrial Temperature Range

## Description

The AT45DCB008, AT45DCB004 and AT45DCB002 are 2.7-volt only SPI compatible serial interface DataFlash<sup>®</sup> 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.

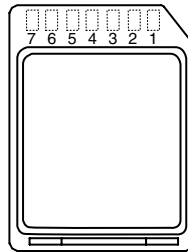
For detailed device specifications, please refer to the corresponding DataFlash datasheets:

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

## Pin Configuration

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

DataFlash Card  
Top View



**8-megabyte,  
4-megabyte,  
and 2-megabyte  
2.7-volt Only  
DataFlash<sup>®</sup>  
Cards**

**AT45DCB008  
AT45DCB004  
AT45DCB002**





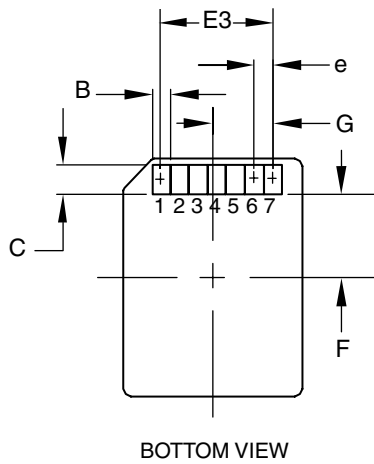
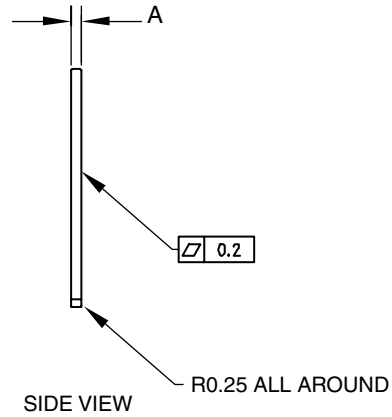
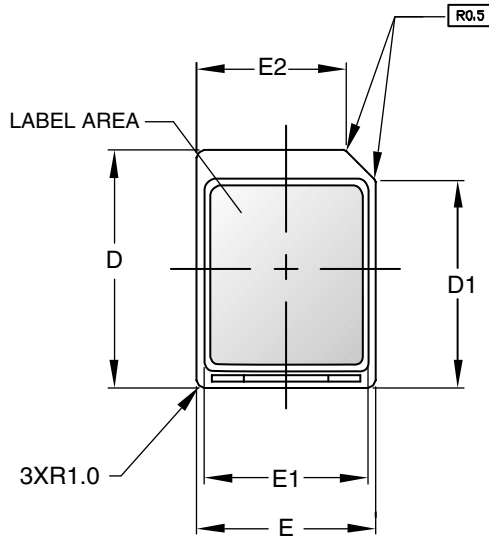
## Ordering Information

f <sub>sck</sub> (MHz)	I <sub>cc</sub> (mA)		Ordering Code	Package	Operation Range
	Active	Standby			
20	10	0.01	AT45DCB008 AT45DCB004 AT45DCB002	7DF1	Industrial (-40°C to 85°C)

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

Packaging Information

7DF1 – DataFlash Card



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	20.00 REF			
G	15.00 TYP			
e	2.50 TYP			

10/09/01



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.

A





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