SD 2.0 Card™

Product Specification

Version 1.0

Table of Contents

Change History

Version	Date	Description
1.0	2006/10/12	New Release

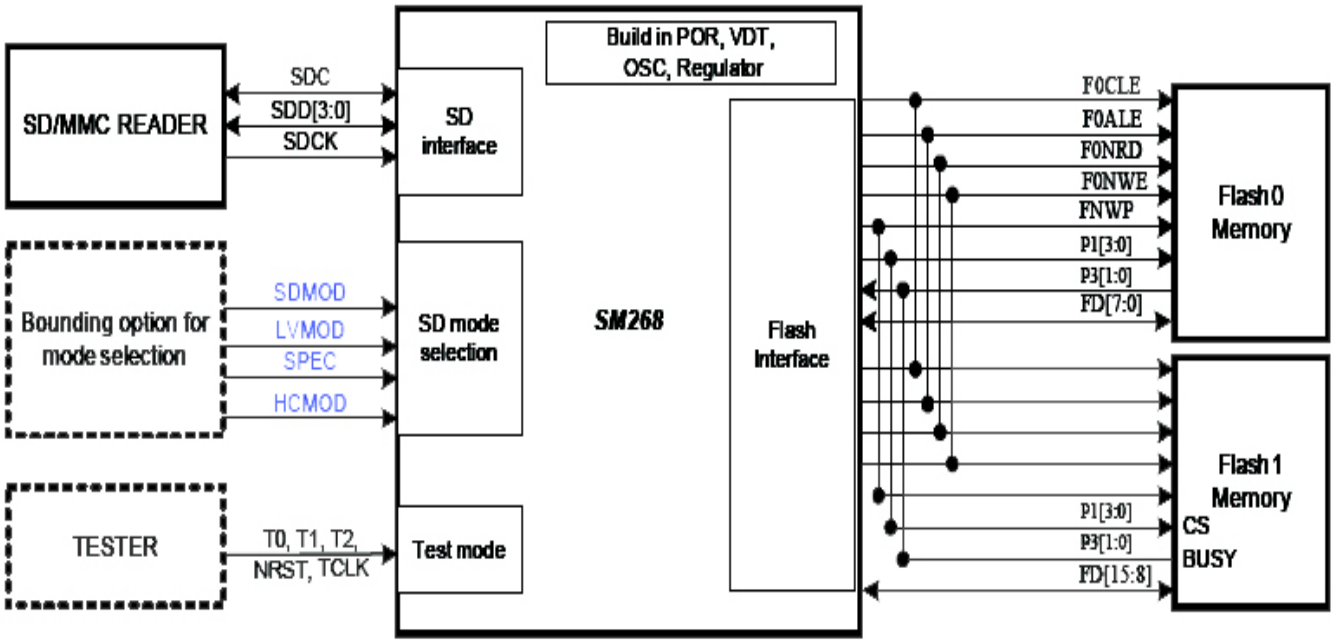
A. Product Outline

The TwinMOS **SD2.0 Memory Card ™** consists of **SD 2.0 Memory Card ™** Controller , which supports most regular and compatible NAND type flash memory. It is the best choice for consumer to download to your PC, you can organize and store the files as you wish. The **SD2.0 Memory Card ™** is meet SDHC specification V2.0.

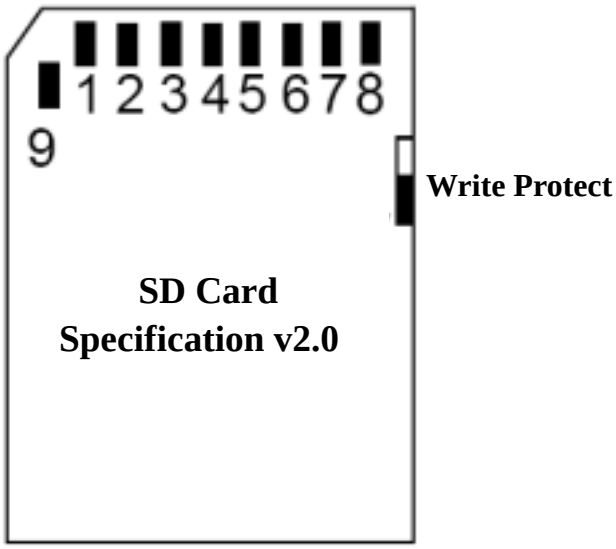
B. Features

- Support SD memory card specification V2.0 and V1.01, V1.1
- Support CPRM
- Targeted for portable and stationary applications
- Designed for read-only and read / write cards
- Card Detection (Insertion /Removal)
- Card removal during read operation will never harm the content
- Forward compatibility to MultiMedia Card
- Supports firmware ISP (in system programming)
- Support SD command class :Class 2 , Class 4 , Class 6
- Operating Voltage range：1.8V or 3.3V
- Correction of memory field errors
- Comfortable erase mechanism
- Total memory capacity up to 32GBytes
- SMI SM268 Flash Controller inside
- Flash Memory Support
  - SLC / MLC NAND Flash Support
  - Samsung/ST-Micro/Hynix SLC /MLC NAND type Flash

C. Block Diagram



D. Pin Assignments



.	SD Mode			SPI Mode		
	Pin Name	**Type**	**Remark**	**Pin Name**	**Type**	**Remark**
1	Det / D03	I/O/P	Card Detect / Data Line(bit3)	CS	I	Chip Select (Truth when Neg.)
2	CMD	P	Command/Response	Din	I	Data in
3	Vss	S	Ground	Vss	S	Ground
4	Vdd	S	Supply Voltage	Vdd	S	Supply Voltage
5	CLK	I	Clock	SCLK	I	Clock
6	Vss	S	Ground	Vss	S	Ground
7	D00	I/O/P	Data Line(bit0)	Dout	O/P	Data out
8	D01	I/O/P	Data Line(bit1)	RSV		
9	D02	I/O/P	Data Line(bit2)	RSV		

[remark]

1. I ：Input
2. O：Output using push-pull drivers
3. P：I/O using Push Pull Drivers
4. S：Power Supply

E. Physicial Specifications

[Unit] mm

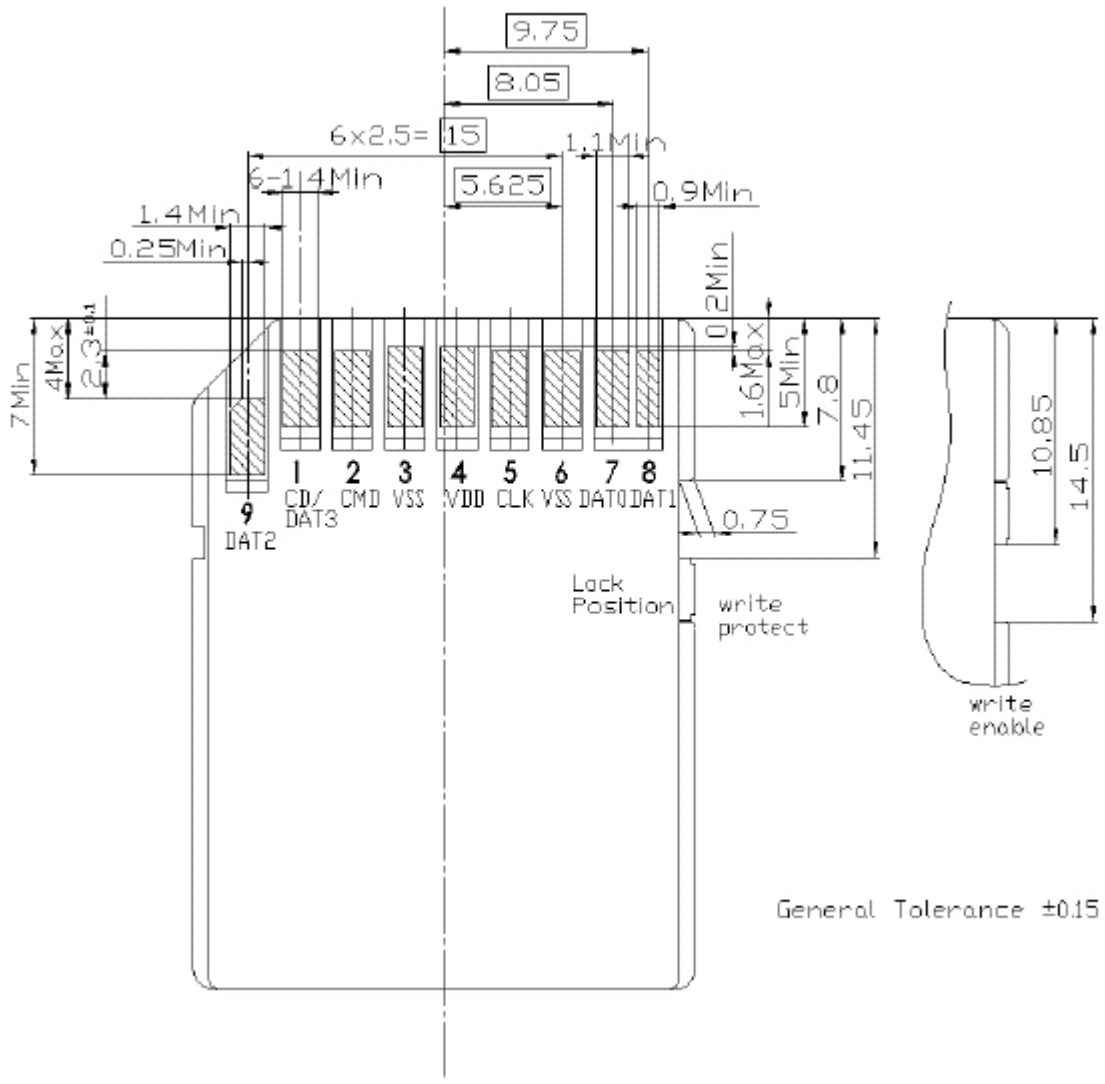


Fig- 1 Top Side of SD Housing

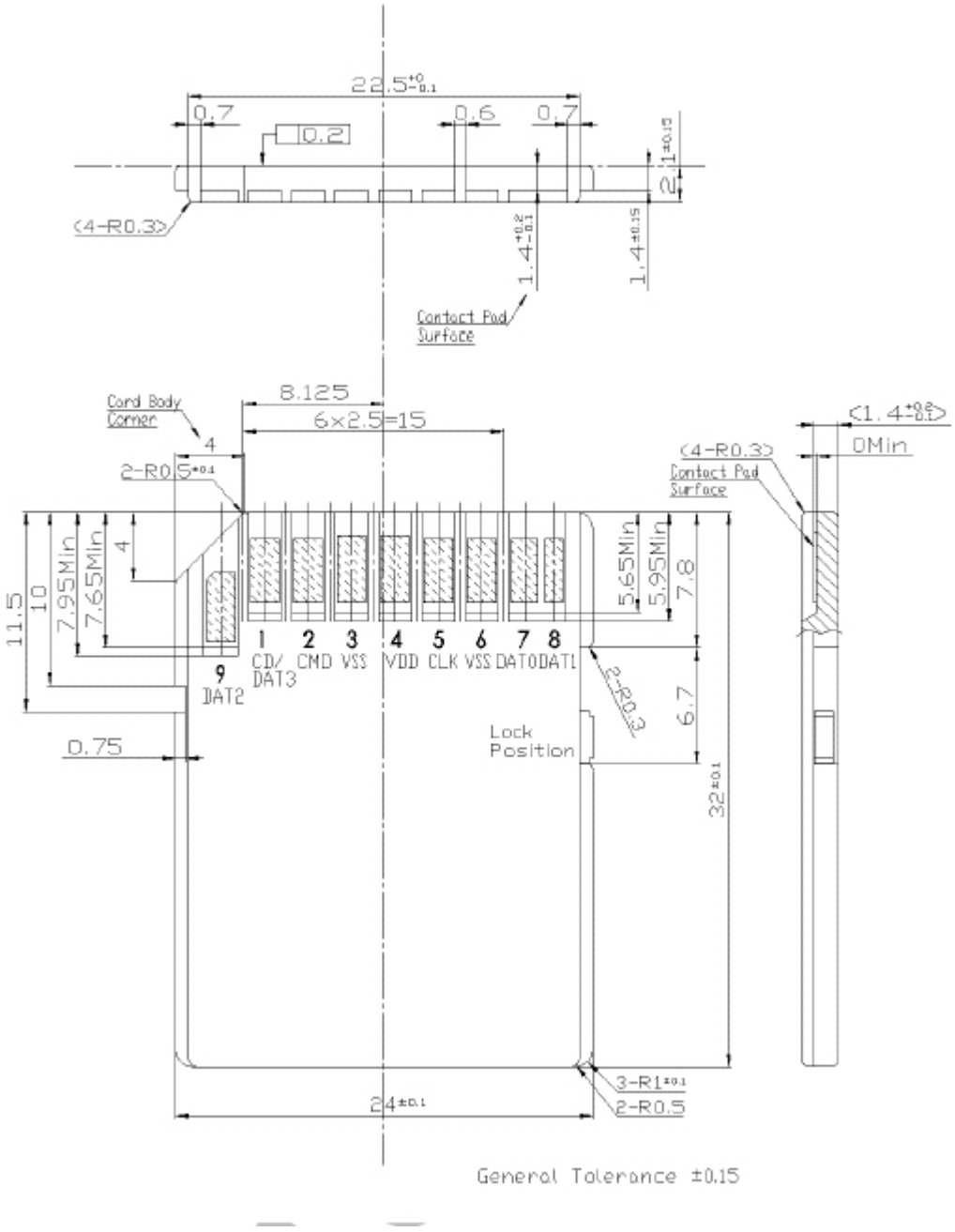


Fig- 2 Bottom Side of SD Housing