HHW Corp. Flash Media Products



Issue Date: December 22, 2024
Revision: 1.1

Revision History

Rev. No.	History	Issue Date	Remarks
1.1	Initial Release	Dec 22, 2024	Preliminary

杭州海微科技有限公司
www.hanhai-tech.com

THIS DOCUMENT IS PROVIDED “AS IS” WITH NO WARRANTIES WHATSOEVER, INCLUDING ANY WARRANTY OF MERCHANTABILITY, NON-INFRINGEMENT, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY WARRANTY OTHERWISE ARISING OUT OF ANY PROPOSAL, SPECIFICATION OR SAMPLE.
HHW Corporations disclaims all liability, including liability for infringement of any proprietary rights, relating to use of information in this document. No license, expressed or implied, by estoppels or otherwise, to any intellectual property rights is granted herein.
*Third-party brands, names, and trademarks are the property of their respective owners.

Datasheet
Secure Digital Card

PRODUCT DESCRIPTION

SD Memory card (Secure Digital Memory Card) is a memory card that is specifically designed to meet the security, capacity, performance and environment requirements. The SD Memory Card will include a copyright protection mechanism that complies with the security of the SDMI standard and will be faster and capable for higher memory capacity. The SD Memory Card communication is based on an advanced 9-pin interface (Clock, Command, 4x Data and 3x Power lines) designed to operate in at maximum operating frequency of 50 MHz and low voltage range.

HHW's SD memory card is designed with industry leading edge micro controllers and 3D TLC flash to achieve high level performance, reliability and endurance. SD memory card is optimized for OEM applications where device life is the top priority.

FEATURES

- Compliance:
  - x SD specification version3.0
- Operating voltage range
  - x 2.7-3.6 V

- Power Consumption Note
  - x Standby Current <250uA
  - x Read Current <400mA
  - x Write Current <400mA
- Performance:
  - x Read Speed(Min): 60MB/s
  - x Write Speed(Min): 30MB/s

- Available Storage Capacities:
  - x 256GB

- Operating Temperature : 0 ^{o}C to 70 ^{o}C ;

- Storage Temperature : 0 ^{o}C to 70 ^{o}C ;

- Flash Type :TLC NAND Flash

杭州翰海微科技有限公司 www.hanhai-tech.com

1.1 AC Characteristics

Figure 3-4a: Timing diagram (default mode)

Table 3-4a: AC Characteristics (Default mode)

Parameter	Symbol	Min	Max	Unit	Remark
Clock CLK (All values are referred to min (VIH) and max (VIL)					
Clock frequency data transfer mode	fPP	0	25	MHz	Ccard <= 10pf (1 card)

杭州瀚海微科技有限公司 www.hanhai-tech.com

2 PHYSICAL DIMENSIONS

Table 4-1: Physical Dimensions

Length	32.0mm (+/- 0.1mm)
Width	24.0mm (+/- 0.1mm)
Thickness	2.1mm (+/- 0.15mm)

2.1 Package Dimensions

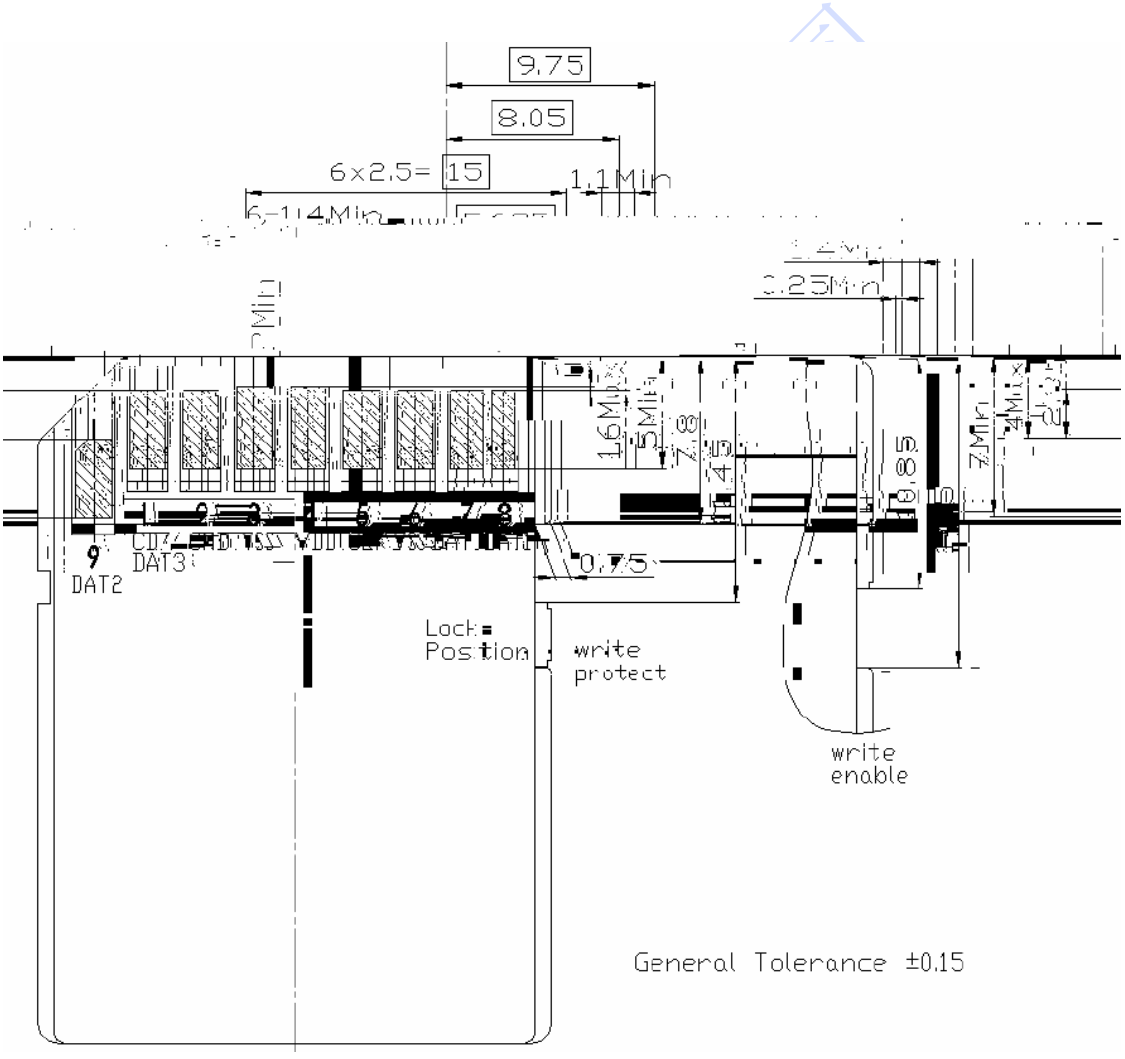


Figure 4-1a: SD card dimension

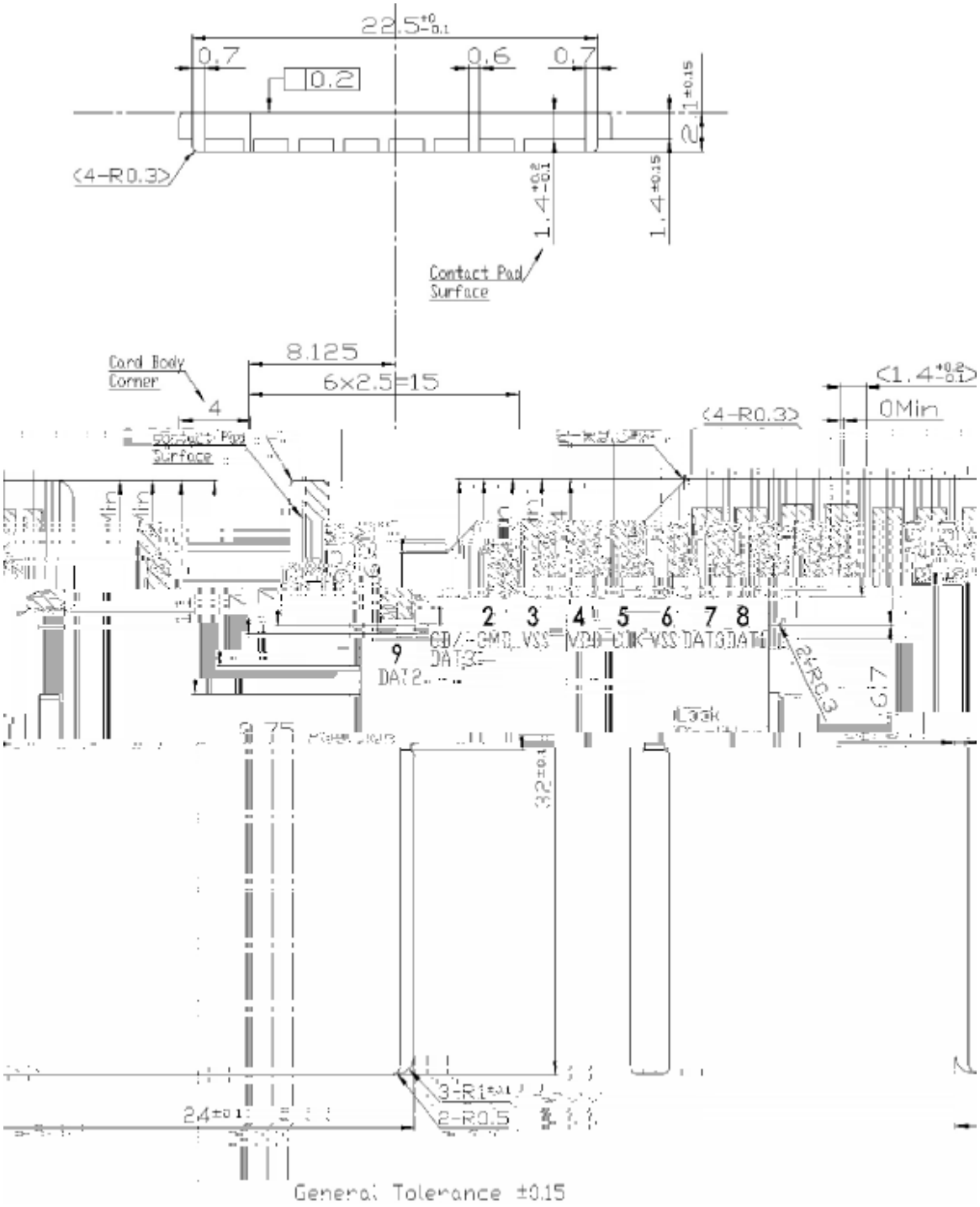


Figure 4-1b: SD card dimension

3 Part Number and Ordering Information

1.

	SD Card(TLC)	
Capacity	Normal-Temperature	Wide-temperature
256GB	**HHW256GSDT-D1**	

杭州瀚海微科技有限公司
www.hanhai-tech.com