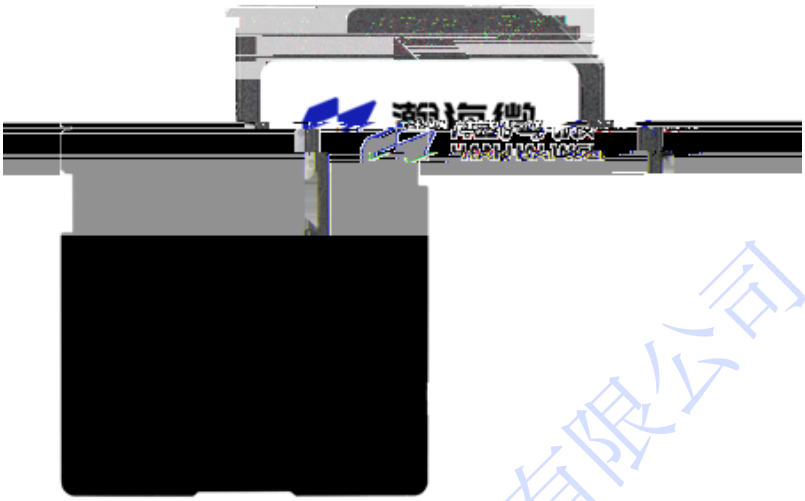
HHW Corp. Flash Media Products



Issue Date: December 22, 2017
Revision: 1.0

Revision History

Rev. No.	History	Issue Date	Remarks
1.0	Initial Release	June 30, 2017	Preliminary

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1 General Description

The HHW Corporation SD memory card contains a Hyperstone designed Flash controller, programmable firmware and flash memory module(s). The proprietary space manager architecture in the controller maximizes read/write data rate performance to and from the host and flash memory, eliminating firmware delays during sector read and write operations. The Hyperstone Flash controller,

2 PRODUCT SPECIFICATION

2.1 Electrical Interface

Table 2-

2.2 Environmental and Reliability Characteristics

Table 2-2: Environmental and Reliability Characteristics

Shock	1,500 G max. (operating/non-operating)	
Vibration	20 G peak to peak max. (operating/non-operating)	
Acoustic Noise	0 dB	
Humidity	95%	
Altitude	80,000 ft max.	
Data Retention	10 years	10 yars

2.4 POWER CYCLYING TEST

Dynamic Read/Write Test

- o
- o
- o
- o

Protection for Static Area Test

- o
- o
- o
- o

- o
- o

3 ELECTRICAL SPECIFICATION

3.1 Absolute Maximum Ratings

Table 3-1: Absolute Max. Ratings

Parameters	Symbol	Min	Max	Unit
Storage Temperature	Tstg	-55	+95	°C
Input Power	Vdd	3.0	3.6	V
Voltage on any pin except Vcc with respect to GND	V	0.5	Vcc+0.5	V
Input Current	I	2	80	mA

NOTE: Stress above those listed under Absolute Maximum Ratings may cause permanent DANage to the device. This is a stress rating only and functional operation of the device at these or any conditions above those indicated in the operational sections of this specification is not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

3.2 Recommended Operating Conditions

Table 3-2: Operating 5229impli11 (e)-6(r)-Tw1012 (p)5(l)1 (i)1 (m)12 ()-26125 1 re9rgYf-2 041041v2.m(6010

3.4 AC Characteristics

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

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

Parameter	Symbol	Min	Max	Unit	Remark

Figure 3-4b: Timing diagram (high-speed mode)

Table 3-4b: AC Characteristics (high-speed mode)

R1

Parameter	Symbol	Min	Max	Unit

4 PHYSICAL DIMENSIONS

Table 4-1: Physical Dimensions

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

4.1 Package Dimensions

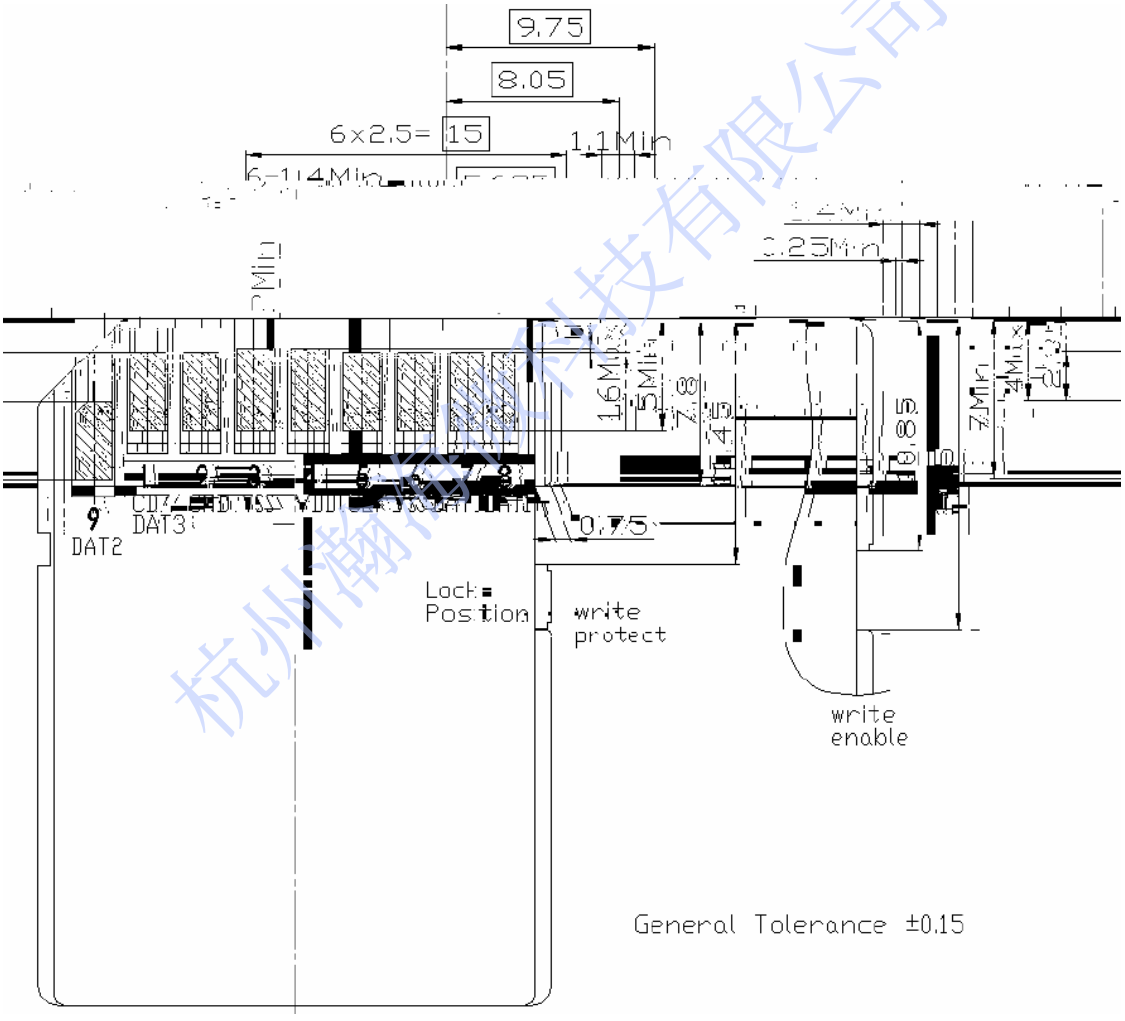


Figure 4-1a: SD card dimension

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Figure 4-1b: SD card dimension