### **High Capacity for SD Family**

#### What are SDHC, miniSDHC, and microSDHC?



The SD High Capacity (SDHC<sup>TM</sup>) card, miniSD High Capacity (miniSDHC<sup>TM</sup>) card, and microSD High Capacity (microSDHC<sup>TM</sup>) card are the new SD<sup>TM</sup> memory cards based on the SDA 2.00 specification, introduced by the SD Card Association. This new SDA 2.00 specification enables SD cards to reach higher capacities:  $4GB - 32GB^*$ .



Because SDHC, miniSDHC, and microSDHC cards are recognized by new SDHC, miniSDHC, microSDHC host devices differently than standard SD, miniSD, and microSD cards, they are **not** backwards compatible with legacy SD, miniSD, and microSD format host devices. Standard SD, miniSD, and microSD cards are forward compatible with new SDHC, miniSDHC, and microSDHC host devices.



Legacy SD/miniSD/microSD host devices and SD/miniSD/microSD cards (up to 2GB) are FAT 16 file system compatible, while the new SDA version 2.00 file system specification defines a SD FAT 32 file system for the new SDHC/miniSDHC/microSDHC host devices and cards.

Be aware of non-SDA 2.00 specification compliant SD 4GB, miniSD 4GB, and microSD 4GB cards on the market. If these non-compliant SD/miniSD/microSD 4GB cards record data in a SDHC host, and are then used in a legacy SD/miniSD/microSD host, issues and problems may occur. File system incompatibility, data corruption, and potentially you may actually lose the data/pictures. In addition, if these non-compliant SD/miniSD/microSD 4GB cards are inserted into a legacy SD/miniSD/microSD host device, the host device may not recognize/utilize the card as 4GB, and it instead may read as a 2GB card. If the SD/miniSD/microSD 4GB card does not have SDHC/miniSDHC/microSDHC on it, it is not SD 2.00 compliant.

More SDHC, miniSDHC, microSDHC compatible devices are expected to be available in 2007. To ensure compatibility, look for the SDHC/miniSDHC/microSDHC logo on cards and host devices (cameras, camcorders, etc.)

## Compatibility with SDHC/miniSDHC/microSDHC 4GB:

4GB SDHC/miniSDHC/microSDHC cards can only work with SDHC/miniSDHC/microSDHC compatible host devices. To ensure compatibility, look for the SDHC, miniSDHC, microSDHC logo on the packaging. Please check with your device manufacturer for their current/future supported SDHC/miniSDHC/microSDHC devices.



#### Helpful Tips when buying 4GB SDHC/miniSDHC/microSDHC cards

- 1. Please check if your host device accepts SDHC/miniSDHC/microSDHC cards
  - a. SDHC/miniSDHC/microSDHC logo may appear on packaging or manual
  - b. Contact the host device manufacturer



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 c. Check SanDisk's website for known SDHC/miniSDHC/microSDHC compatible host devices

#### http://www.sandisk.com/sdhc

- 2. Look for SDHC/miniSDHC/microSDHC logo on card and packaging itself
  - a. 4GB SD/miniSD/microSD cards without SDHC/miniSDHC/microSDHC logo are non-compliant with the SDA 2.00 specification.

#### **Helpful FAQs**

## Q: What are the differences between a standard SD/miniSD/microSD card and the new SDHC/miniSDHC/microSDHC card?

**A:** While identical in shape, the new SDHC, miniSDHC, and microSDHC cards are technically different than standard SD, miniSD, and microSD cards in how they are recognized by a host device. This difference allows manufacturers like SanDisk to produce higher capacity cards, from 4-gigabytes all the way up to 32-gigabytes. The SDHC, miniSDHC, and microSDHC cards will have new logos and are only compatible with host devices that are also SDHC, miniSDHC, and microSDHC compliant.

#### Q: How do I know if I own a compatible device?

**A:** Most compatible devices such as digital cameras, digital video camcorders, and mobile phones will feature the approved SDHC/miniSDHC/microSDHC logo either on their package, manual, or both. SanDisk will also feature a compatibility guide on <a href="https://www.sandisk.com/SDHC">www.sandisk.com/SDHC</a>

# Q: What will happen if I use an SDHC/miniSDHC/microSDHC 4GB card in my standard SD/miniSD/microSD device?

**A:** Legacy devices cannot recognize the SDHC/miniSDHC/microSDHC memory card. SanDisk recommends using standard SD/miniSD/microSD cards up to 2-gigabytes.

#### What is Class Speed Rating?

The SD Association has created and defined 3 speed classes to help you identify speed and performance capabilities/minimum requirements of SD/SDHC, miniSD/miniSDHC, and microSD/microSDHC cards and the host products. The SD Speed Class Ratings specify a minimum sustained write speed for SDHC/miniSDHC/microSDHC cards (Class 2: 2 MB/s; Class 4: 4 MB/s; Class 6: 6 MB/s\*).

OPTION 1	OPTION 2
CLASS	<b>e</b>
CLASS4	<b>@</b>
CLASS(6)	6

You can look for the Speed Class Logo to identify the performance class of your memory cards and host devices.

**NOTE:** SD, miniSD, microSD, SDHC, miniSDHC, microSDHC, and the SDHC, miniSDHC, microSDHC logos are trademarks.

\*1 megabyte (MB) = 1 million bytes; 1 gigabyte (GB) = 1 billion bytes.

