

Multimedia Card (MMC)

It is the Flash memory card introduced in 1997 by Siemens AG and SanDisk based on the NAND based flash memory of Toshiba. It is small in size than the older Compact flash and has a size of 24mmx32mmx1.4mm just like a post stamp. Newer versions of MMC allow transfer of 4 or 8 bits at a time. MMC can be used in most of the systems that support SD cards.



MMC is designed to use in portable devices as storage medium such as Digital camera. Using a card reader, it is easy to copy the stored files from MMC to transfer them into PC. Modern computers, and laptops have SD slots, to read MMC. MMC are available in sizes up to 32 GB and are widely used in Cell phones, PDAs digital camera etc.

MMC Pin Connection

MMC has 7 pin connector arranged in one row from 1 to 7. The functions of the pins are:

Pin 1 CS – Chip Select

Pin 2 SI – Serial Input (SPI)

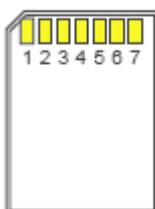
Pin 3 Gnd - Ground

Pin 4 Vcc- Voltage Supply (2.7 V or 3.6 V)

Pin 5 SCK – Serial Clock (SPI)

Pin 6 NC Not connected

Pin 7 SO Serial output (SPI)



Forms of MMC

1. RS-MMC(Reduced Size Multimedia Card)

This form of Mini MMC introduced in 2004 and having a size of 24mmx18mmx1.4mm. RS-MMC can be used in any MMC or SD card reader slot. These available in sizes up to 32 GB.

2. DV-MMC(Dual Voltage Multi Media Card)

These are Dual voltage MMC capable of operating in dual voltage of 1.8 volt and 3.3 volts. The ability to work in low voltage saves energy especially in portable devices.

3. MMC Mobile and MMC plus

These 4x versions of MMC were introduced in 2005 to support for running at very high speed of 26MHz and 52MHz. The 4x full size cards are available as MMC plus and the reduced size cards as MMC mobile.

4. Micro MMC

These are very small micro sized MMC having a dimension of 14mmx12mmx1.1mm. These are also dual voltage cards and can be used in standard MMC or SD card slot with an adaptor. These have high speed and 4 bit bus features. MMC micro are similar to micro SD in appearance but are not physically compatible and the pin connections are different.

5. Mi Card

It is one of the latest versions introduced in 2007. It is high capacity version as high as 2 Tera bytes (TB) or 2048 GB. The Mi card has two detachable portions. The small memory card fits in a USB port and also has MMC compatible pins.

D.Mohankumar

