### RAM

Single-sided RAM has memory modules that are organized into a single logical bank; double-sided RAM has modules organized into two banks.

- The computer can access data in only one bank at a time. Therefore, single-sided RAM allows access to all the memory; double-sided RAM requires the computer to switch between banks.
- Originally, double-sided RAM had modules on both sides of the circuit board, and single-sided RAM had modules on only one side. However, you can also have double-sided RAM with modules on only one side. The memory is divided into separate banks internally.
- Single-sided memory of the same capacity as double-sided memory uses half the number of memory modules. The modules are denser, with a higher individual capacity.
- Most motherboards support both single-sided and double-sided memory.
  However, verify compatibility before purchasing.
- The use of single-sided and double-sided RAM varies among motherboards. You might find older motherboards:
  - Are unable to use double-sided memory.
  - Allow double-sided memory but can use only up to half the total memory when all memory slots are filled.
  - Do not allow mixing single-sided and double-sided together.

### CD ROM

- Read Only Memory (ROM)
- 737 MB error correction
- 847 MB total
- 150 KBps

### CD RW

- Re-Writeable
- 650 MB capacity

Burn, Erase, Read

## DVD

- Digital Versatile(Video) Disc (DVD)
- Holds
- Video
- Audio
- Data
- 4.7 GB capacity

## **DVD ROM**

- 4.7 GB capacity
- Read Only Memory
- 11 Mbps

## **DVD RW**

- 4.7 Gb
- Read/Write
- Portable
- Crystal encoding
- Limited life

# **Dual Layer**

- 8.5 GB capacity
- Backward compatible for older systems
- Opposite Track Path (OTP)
- Slower write speeds

# Blu-ray

- 25 GB capacity
- double layer disc 50 GB capacity
- reads data at 4.5 MBps