



[home](#) [tech news](#) [hacking](#) [tutorial](#) [open source](#) [Online Songs](#) [ebookXone](#) [downloads](#) [photoXone](#) [about](#)

TUESDAY, SEPTEMBER 22, 2009

## Different types of Hard Disk Drive



**Hard Disk Drive** - It is a non-volatile storage device which stores digitally encoded data on rapidly rotating platters with magnetic surface.

Types of HDD :

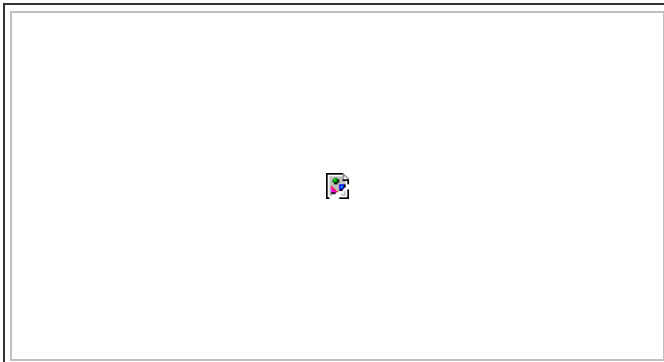
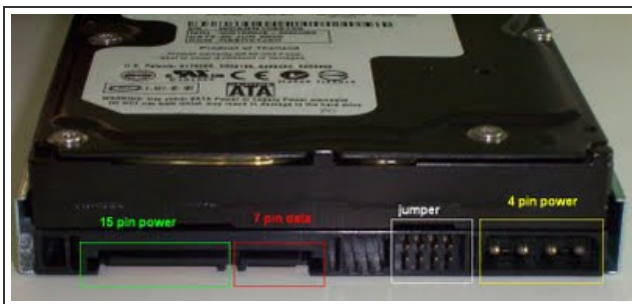
1. **IDE** : Integrated Drive Electronics. IDE drives are also known as PATA drives( Parallel advance technology attachment )
2. **SATA** : Serial advance technology attachment
3. **SCSI** : Small Computer System Interface. SCSI is pronounced as scuzzy.
4. **SAS** : Serial Attached SCSI

IDE / PATA (Integrated Drive Electronics Drive / Parallel Advance Technology Attachment Drive)



- IDE/PATA Drives have usually 40 pins.
- IDE/PATA Drives offer 133 MB/sec transfer rate.
- It sends 8 bit data at a time.
- PATA Cables are used to connect PATA HDD. Two drives can be connected in a single pata cable. One as master and other as slave. The configuration of master and slave is done by different combination of jumpers in the hdd.

## SATA (Serial Advance Technology Attachment Drive)



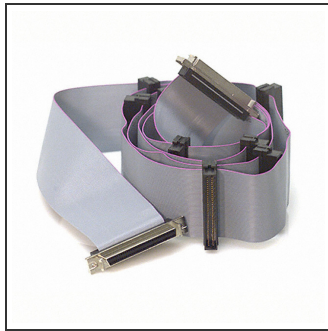
- SATA Drives have usually 7 pins, 4 pins in pair of two for sending and receiving data and rest 3 pins are grounded.
- SATA Drives offers generally 300MB/sec transfer rate.

9/7/2011

## Different types of Hard Disk Drive | Tech...

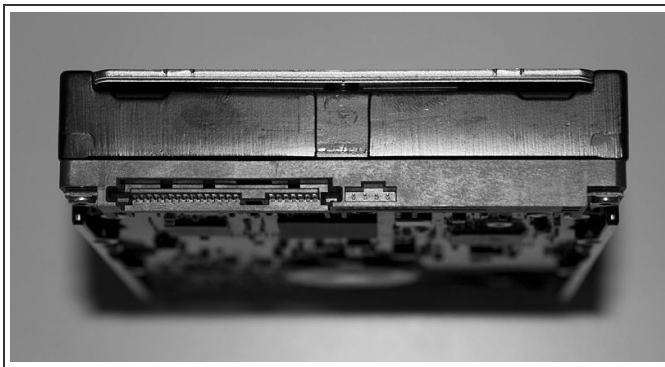
- It sends data bit by bit.
- SATA Cables are used to connect SATA HDD. Only one drive can be connected in a single sata cable.

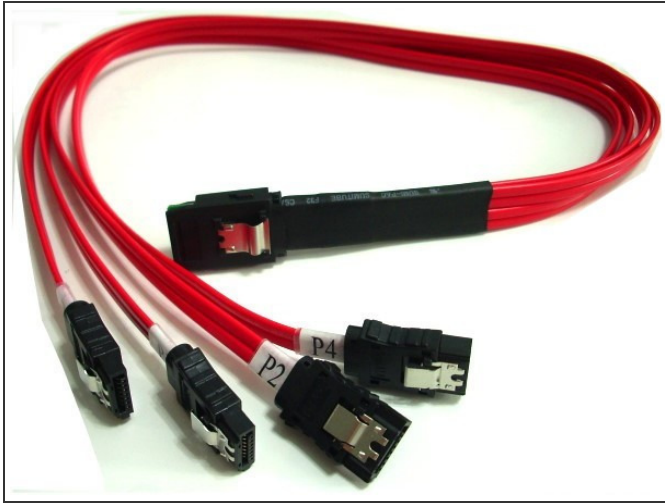
### SCSI (Small Computer System Interface Drive)



- SCSI Drives have usually 50 to 68 pins.
- SCSI Drive offers generally 640MB/sec transfer rate.
- This drives are hot swappable.
- SCSI cables are used to connect SCSI HDD. Maximum of 16 drives can be connected in a single scsi cable. Each hdd have a 8 bytes hexadecimal code known as **WWN** (world wide name) for its identification in the cable.

### SAS(Serial Attached SCSI Drive)





- SAS Drives generally offers 805 MB/sec transfer rate.
- This drives are hot swappable.
- SAS Cables are used to connect SAS Drives. Maximum of 128 drives can be connected in a single sas cable.

