

SATA at a Glance

The computer industry will be transitioning from Parallel ATA to Serial ATA (SATA) technology over the next couple of years. SATA brings faster data transfer speeds, better airflow, greater bandwidth, and improved reliability, productivity and scalability. SATA debuts with a data transfer speed of 150Mb per second, and succeeding generations will push the rate to 600Mb per second.



Benefits Include:

Improved wiring

Serial cables and connectors are thinner and smaller

- Maximizes system air flow

Improved reliability

Hot plug

- Greater productivity when reconfiguring a system

Better signal integrity

- Reduced data crosstalk

Point-to-point helps "isolate" failures

- Cyclical Redundancy Checking protects data

Bandwidth

Point-to-point architecture dedicates bandwidth to a device

- "Slow" devices do not impact "faster" devices

Scalability

As devices are added, performance is not degraded

SATA vs. PATA Connectors

Serial cable



Parallel cable

Maxtor Serial ATA Drive Serial Data Interface Connector

**Maxtor Serial ATA Drive
SATA power connector**
Other manufacturers ONLY provide this SATA power connector. A dongle (an adapter device) is needed to match the SATA cable to the legacy power connector. The legacy PATA power supply is the most used on current PCs

Maxtor Serial ATA Drive

Legacy Power Connector

Maxtor provides BOTH legacy PATA and new style SATA power connectors. Drive can be used with either PATA or SATA power supply. Other manufacturers DO NOT provide this connection—most popular on current PC power supplies.

Maxtor Serial ATA Drive

Diagnostic Jumper Settings

No master/slave jumpers anymore

Maxtor Parallel ATA Drive Parallel Data Interface Connector

Maxtor Parallel ATA Drive Master/Slave Jumper Settings

Maxtor Parallel ATA Drive Legacy Power Connector

For more information on SATA drives, go to www.maxtor.com and click on technologies