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SATA reaches version
3.0
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[SATA 3.0 Specifications Are Officially Available](#)

6Gb/s connection link and backward compatibility

The group responsible for the developing, managing and driving adoption of the Serial ATA specifications has officially announced the specs of the next-generation SATA Revision 3.0 interface, which will eventually replace today's standard SATA 2.0 technology. As mentioned in previous reports, the new SATA interface further boosts the connectivity speed of today's hard disk drives, solid drives, optical drives and tape drives, by doubling the speed of SATA 2 devices. In addition to the 6Gb/s link enabled by the new interface, SATA 3 also provides users with a couple of new features, specifically meant to improve the connection between today's storage devices.

"As speed becomes critical to today's storage, the SATA Revision 3.0 specification doubles the maximum transfer speed enabled by technology, paving the way for a new generation of faster SATA products," said Knut Grimsrud, SATA-IO president. "SATA-IO members will be able to design for their customers products with the speed they crave, without compromising the quality and performance they've come to expect from SATA technology."

Following the official announcement from SATA-IO, several companies are likely to announce their latest storage solutions, featuring the newly-announced specifications. In addition, with Computex 2009 just days away from debut, by this time next week, we might also see a number of demonstrations of the next-generation storage interface. Among some of the features that have been enabled with the new SATA 3.0 interface, the group has highlighted the following:

- A new Native Command Queuing (NCQ) streaming command to enable isochronous data transfers for bandwidth-hungry audio and video applications
- An NCQ Management feature that helps optimize performance by enabling host processing and management of outstanding NCQ commands
- Improved power management capabilities
- A small Low Insertion Force (LIF) connector for more compact 1.8-inch storage devices
- A connector designed to accommodate 7mm optical disk drives for thinner and lighter notebooks
- Alignment with the INCITS ATA8-ACS standard

We should also mention that SATA 3 is backwards compatible with current SATA 2 devices, which means users will not be required to upgrade in order to enjoy the upcoming wave of SATA 3-based devices.