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www.highpoint-tech.com

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USB 2.0 is the most popular way to connect external drives to a PC, but many drive enclosures also sport external serial ATA (eSATA) ports. That's because USB 2.0 peaks at a theoretical bandwidth of 480 megabits per second, while SATA II can pump a full 3 gigabits per second. Try backing up your 500GB hard drive to an external USB device and you'll understand the need for extra speed. Gain that bandwidth by installing your own eSATA ports using a card like the RocketRaid 2302—and get redundant RAID backup at the same time.

To install, just find a free PCIe port on your motherboard and plug the card in. The small PCIe ports are described as *x1* (pronounced “by 1”), which means that they have a single-lane connection, while the big ones (traditionally used by graphics cards) are *x16*. Some motherboards also have *x4* ports, which may or may not be physically smaller than *x16* ports. The RocketRAID runs at *x1* speeds, so you'll need to plug it into a *x1* port if you have one, or an available *x16* port; many PCs have two, and they autoconfigure for the appropriate speed.

The 2302 card has four SATA ports, two external and two internal, but it isn't

limited to four drives. With an external port multiplier, you can connect up to five drives per port—although you'll need an external drive bay that acts as a port multiplier. Connecting one, such as the Proavio EB8-PM (www.proavio.com), is as simple as plugging in an eSATA cable.

There are many ways to configure your drives. You can plug one in directly, or create a more complex RAID array in configurations up to RAID 5. You can even combine internal and external drives in the RAID array. Still not satisfied? Seek out the RocketRAID 2522 instead. Using two mini-SAS (Serial Attached SCSI) connectors, it can support up to 40 external drives.

