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Hitachi Announces 250GB Hybrid Laptop Hard Drives for 2007

Flash memory and magnetic support join hands

Hitachi always plans ahead what to release next. Ok; so you know that they use perpendicular recording technology. But what they really want is to merge the hard drive with a small amount of flash memory which will be used as an extended cache. Because flash memories have generally very low access times and they also react instantaneously no matter where the data is (in opposition, a hard disk tends to react more slowly if the needed data is far from the location which is currently read) they can be successfully used as large cache memories, especially if there is a significant gap between the internal speed of a hard drive and the speed of the bus connected to it. In this general flash frenzy, Hitachi hopes to launch several laptop models such as a 200GB 7200rpm model and an even larger 250GB 5400rpm model. They also figured out a way to produce a 750GB version by 2010. Today, Hitachi's largest laptop hard drive is a 160GB 5400rpm model. Well, that's about to change. The really interesting thing when it comes to flash memory is the fact that it generally lowers power consumption because a large buffer allows the platters to spin only if necessary, keeping most of the used data in the buffer, rather than "talking" to the hard drive all the time. Other than Perpendicular Recording and the use of flash chips, future laptop hard drives coming from Hitachi will also feature a fully functional encryption system based on the Advanced Encryption Standard (AES) making these mobile solutions very attractive for users in need of both security and storage capacity. What remains to be seen is how well laptop makers will receive all these promises, since Hitachi is not exactly among the preferred mobile hard drives supplier, reason for which they keep on investing in new technologies. I must say that this time they're onto something.