EXTENSION : APPLICATION TO SSD

Full Disk Encryption Comes to Solid State Drives

Samsung and Wave Offer Today's Mobile Professionals the Best Performance and Standards-Based Security in the Industry's First Self-Encrypting Solid State Drive (SSD)

Lee, MA and San Jose, CA-April 16, 2009-Wave Systems Corp. (NASDAQ: WAVX) and Samsung Electronics Co., Ltd., have collaborated to give professionals on the go the ultimate in hard drive security. Along with blazing speed, ultra-fast boot-up and silent operation, Samsung's new self-encrypting SSDs automatically encrypt information as it's saved to the drive, an industry first for SSDs.

Full disk encryption (FDE) has already been adopted as a standard feature available in many commercial laptop and desktop systems with hard disk drives. Samsung self-encrypting drives – 256-, 128- and 64-gigabyte SSDs – provide FDE bundled with Wave's EMBASSY® management software and are now available through at least one major OEM.

"Samsung has combined the tremendous performance advantages of solid state technology with integrated hardware encryption for drives designed especially for today's 'road warrior' professionals," said Jim Elliott, memory vice president, Samsung Semiconductor, Inc. "Business users now get the best of performance and security in a single drive. "

Solid state drives offer numerous advantages over traditional platter hard drives. SSD performance is not impacted by FDE, a drawback frequently seen with today's HDDs that use software FDE. Also, because they have no moving parts and are based around flash memory, the SSDs are far less prone to reliability issues caused by bumps and bounces from normal notebook PC use, and from excessive heat generation. They additionally boast two to five times faster overall performance, including boot-up time and application launching, as well as longer battery life in notebook PCs. Samsung self-encrypting SSDs will be available in both 1.8" and 2.5" form factors; the 1.8" being the world's first encrypted storage drive of this size. Flash memory also retains data even when the power is turned off, enabling "near-instant" turn on for the user's system, and they don't require "spin up" time that drains batteries.

Samsung's new 256GB, 128GB, and 64GB SSDs are the first solid state drives to incorporate hardware-based encryption, which has made headlines in recent weeks with publication of the industry's Opal storage specification published by the Trusted Computing Group (TCG). Benefits of hardware encryption over today's software-only encryption approaches include faster performance, better security and an "always on" feature. Because encryption keys and access credentials are generated and stored within the drive hardware, they never leave its confines and are never held in the operating system or by application software. This hardware FDE approach is considered more secure and less complex to manage.

"Samsung is breaking new ground in performance and security with its solid state FDE drives," said Steven Sprague, Wave's president and CEO. "Whether it's with cars or computers, many people will always demand the very best in performance and Samsung is delivering on that promise. With self-encrypting drives, users have the peace of mind that whatever's on the drive-credit card numbers, medical records, sensitive personal data or intellectual property is always protected."

Each Samsung self-encrypting SSD, when ordered in a new computer, now comes bundled with Wave's EMBASSY® Trusted Drive Manager for complete life cycle management of the drive including pre-boot authentication to the drive and enrolling drive administrators and users. Trusted Drive Manager also enables the backup of drive credentials.

Available separately, Wave's EMBASSY® Remote Administration Server allows an IT administrator to remotely turn on each solid state drive in seconds and provides detailed event logs for compliance to prove that the security settings were in place when a loss or theft occurs. Plus, Wave's single management server solution can provide streamlined administration and policy management capable of supporting all commercially available TPMs and FDE drives (as well as Opal-compliant drives now in development), along with SafeNet's ProtectDriveTM software FDE. Because encryption is turned on "out of the box," there is generally no learning curve for the end user or IT support staff.