TECHNOLOGY BRIEF
2nd generation Intel® Core™ processor family
Intel® Anti-Theft Technology

Strengthen Data Security with Intel® Anti-Theft Technology

Encryption protects data against viewing by intruders and thieves, but sometimes companies need a deeper level of protection. Intel® Anti-Theft Technology (Intel® AT) provides smart, hardware-based data protection and triggers a lockdown state—automatically or by remote instruction—to disable a laptop on command.

Think of data encryption as a key to the front door of your home. If the key is kept secure, thieves are kept out. But, if you leave the key under the mat, the private contents of the home are available to any thief who knows where the key is hidden. Having Intel AT embedded in the hardware of a laptop is like having a vigilant security guard watching the front door and frequently checking with a central command to guard against intruder entry. If suspicious activity is detected or a thief finds the key, an additional lock can be activated to reinforce the existing security.

Embedded in the silicon of laptops powered by the 2nd generation Intel® Core™ processor family, Intel AT protects assets and data in these ways:

- **Lockdown.** Provides a way to lock down lost or stolen laptops, locally or remotely, rendering the laptop and hard drive data useless unless a reactivation code is provided.
- **Tamper detection and protection.** Detects component tampering, such as hard disk removal, and logon failures, automatically disabling the laptop to prevent access.

Exposing the passphrase to an encrypted laptop is like letting a thief see you hide your key under the front mat.

Intel Anti-Theft Technology is like an alert security guard responding to intruder attempts by reinforcing security measures. Even with the key, an intruder encounters additional lockdown protection to discourage entry.

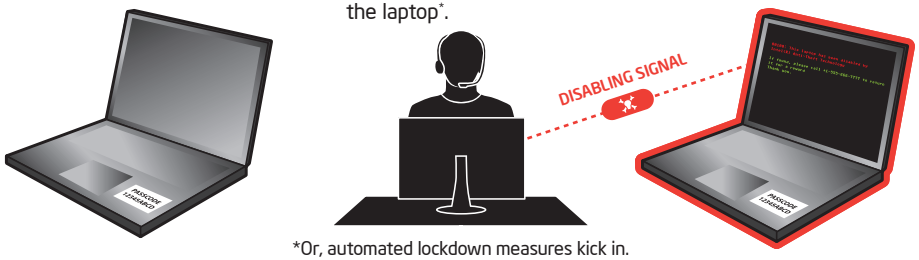
- **Hardware-based authentication override.** Augments the authentication process with an encrypted data string (called a "blob") that resides in a restricted access region in the laptop's hardware. The blob is stored on the Intel® chipset, binding the data to a specific laptop. When a user logs on to that laptop, a validation operation confirms the blob state is valid before the user can access the encrypted hard drive. If the laptop is reported lost or stolen, the IT administrator sends a poison pill that hides the blob from the protected storage region, revoking authentication even if the right encryption passphrase is entered. Once the laptop is disabled in this manner, it remains unusable until it is reactivated.
- **Unite encrypted data with laptop.** An Intel AT locked laptop can also lock down access to the encrypted data in a non-destructive way. It keeps the data intact but locks down access to the encrypted data by hiding the blob. This blob binds the data to the laptop preventing a clever thief from accessing the data using a different laptop even if the thief has the encryption keys.

These features work in combination with other security software and services to provide strong, multi-level data protection.

DISABLING A LAPTOP FOR ADDITIONAL SECURITY

Even if the encryption passphrase is accessed, the data is protected by this second level of lockdown security.

1. **Stolen or Compromised Laptop with Intel® AT**
2. **Central IT service** is alerted to the problem by a phone call and they remotely disable the laptop*.
3. **Disabled Laptop** Only a screen with the owner's contact info will appear.

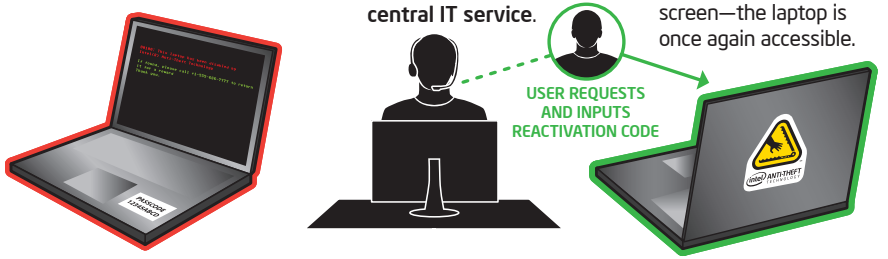


*Or, automated lockdown measures kick in.

RE-ACTIVATING A RETURNED LAPTOP

Once a laptop has been disabled, the authorized user can reactivate it.

1. **RETURNED Disabled Laptop with Intel® AT**
2. Laptop owner or IT staff member requests reactivation from the **central IT service**.
3. Once the reactivation code is provided, it is entered at the boot screen—the laptop is once again accessible.



Intel Anti-Theft Protection Advantages

Intel AT provides a strong, hardware-based approach to protecting laptops and the data stored on them, ensuring that if one layer of security is circumvented, there is another layer of protection available. Among the advantages of Intel AT:

- **Backs up full-disk encryption with local and remote disabling.** If the passphrase to an encrypted laptop is available, an unauthorized person can enter it to access encrypted data on the disk drive. Intel AT backs up full-disk encryption by providing a means to shut down the laptop. Local timers, invalid passphrases, missed server connections, and other measures can cause lockdown.
- **Gives IT administrators greater control over assets.** By being able to disable any registered laptop equipped with Intel AT, IT administrators can control corporate assets in the field. Laptops can be locked to prevent access by disgruntled employees, dismissed teleworkers, or internal thieves.
- **Discourages theft by reducing the value of a stolen laptop.** A disabled laptop displays the rightful owner's contact info when booted. The laptop can't be used unless IT reactivates it with a code. The yellow AT sticker lets everyone know the laptop has little value if stolen.
- **Reduces the cost of data breaches.** Inside theft of laptops poses a serious data breach risk to corporations. One effective way to protect the data is to maintain maximum control over the asset. The poison pill delivery confirmation can prevent further access to sensitive data. Since the user personally reports exposure following the laptop's loss or theft, corporations also gain an extra layer of accountability.

A Powerful and Effective Solution

Full-disk encryption is widely recognized by security professionals as one of the best solutions for protecting private or sensitive data on a computer. A locked door is good protection, but it's better to have an additional layer of protection with a central command providing additional security. The hardware-based protection built into laptops equipped with Intel AT complements and extends full-disk encryption, offering a multi-layered approach to data security and asset protection that can defeat the efforts of even determined thieves and unauthorized persons.

Get powerful, built-in theft protection with Intel® Anti-Theft Technology. Learn more at: **anti-theft.intel.com**