






Tech Insight: Fingerprint Reader

EasyGuard™ Go Mobile With Confidence

Toshiba EasyGuard™ technology is a series of hardware and software enhancements to business-class notebooks that greatly improve mobile computing. By providing users with increased data security, system protection, simple connectivity and ease of use, EasyGuard™ technology is continued evidence of Toshiba's vast experience in mobile computing and our ongoing commitment to providing users with a better, more reliable notebook experience.

Toshiba EasyGuard technology comprises a number of features some of which may or may not be available on a particular Toshiba notebook depending on the model selected. See www.easyguard.toshiba.com for detailed information.

Toshiba EasyGuard™ Four core elements for more confident computing

-  **Protect & Fix**
Fortifies vital information and vulnerable components against the stress and hazards mobile computers are exposed to every day.
-  **Secure**
Helps defend your data and your notebook against loss, theft or viral attack.
-  **Connect**
Helps you locate and establish a wired or wireless connection effortlessly and quickly.
-  **Optimize**
Allows you to customize the notebook's system performance so you can be more productive.

What is the Fingerprint Reader?

Because mobile business users take their sensitive data everywhere, Toshiba has added fingerprint reader technology to the growing arsenal of data protection on certain notebook PCs. Adding an integrated biometric layer of security to mobile computing devices, fingerprint reader technology provides an easy method for password management.

By associating passwords with fingerprints, mobile computing devices such as the Portégé® R200 and the libretto® U100 can identify users with a simple scan of their fingerprints, automatically logging known users onto the computer anytime, anywhere.

How it works

A Biometric Security Solution

Biometrics, the technique of identifying a person based on physical characteristics, has been practiced since the time of ancient Egypt.

Perhaps the ancient Egyptians also knew that every person has a unique fingerprint — no two are exactly alike. Four thousand years later, we know that fingerprint biometrics have revolutionized mobile computing security. You always have your fingerprint with you and no other person has one just like yours.

When you place your finger on the sensor, a signal is emitted from the semi-conductor chip beneath the sensor plate. This signal seeks the ridges and valleys in the conductive layer of skin below the surface.

The measurements generated from the ridges and valleys result in a unique fingerprint image.



➤ Fingerprint reader is conveniently located for quick access on the Portégé® R200.

Security is More Than Skin Deep

There are two types of fingerprint sensors: surface and sub-surface. The technology used by Toshiba is able to sense the live skins cells beneath the surface, capturing the best possible fingerprint image. Scars, dirt or particles on the fingerprint surface usually do not affect the scan, resulting in an accurate scan for increased security.



➤ Finger cross-section showing the layer beneath the surface that is captured to create the fingerprint image.

▶ Sub-surface sensors

- Capture the live layer of skin beneath the surface of the finger
- Unaffected by the condition at the surface
- Automatically adjust focus to dynamically capture the best fingerprint image

▶ Surface sensors

- Capture the image of the finger surface only
- Affected by condition of the surface of the finger
- Cannot auto-adjust focus to gain a better image

Easy Setup to Verify Your Fingerprint

Toshiba harnessed OmniPass™ software technology from Softex Incorporated to administer the initial fingerprint identification and ongoing password storage. Initial identification is a simple matter of swiping your print up to three times. After linking your fingerprint to your user account, swipe your fingerprint at any prompt to log on. You are automatically logged on to your own account, even when several accounts are set up on the computer.



OmniPass™ can also use your fingerprint to replace typing your logon information to access websites or secured applications. The Vault Management utility stores the information, allowing you to swipe a print for instant logon.

File encryption is also a swipe away. Simply select the folder or particular file to encrypt, then right-click and select OmniPass™ Encrypt Files. Encrypted files cannot be shared via email or saved to external media. These files can be shared only among users registered on the same computer.



➤ The OmniPass™ software utility offers easy management of accounts, passwords and encrypted files.

Summary of features and benefits

Increased security for mobile computing

- Lowers the security risk of passwords by enabling the use of a person's unique fingerprint for identification

Easy logon for known users

- A simple swipe of the finger logs known users onto the computer

Fast encryption to protect data

- Selected files or folders can be encrypted with a finger swipe and decrypted only by other users known to the system

Managed password database for quick Web and application access

- Finger swipe logs users on to websites or secure applications, with no need to enter passwords or username after initial authentication