Titan C.  
The Nucleus of Trust

Titan C is the Google-designed security chip on ChromeOS devices.* It defends from the core to keep devices secure, protect user identity, and ensure system integrity.

Continuous security

**Designed by Google**
Google designs all Titan C chips, and monitors the manufacturing process to ensure quality. These chips are then shipped to factories to be built into a ChromeOS device.

**Updated by Google**
All firmware updates to these chips are pushed out by Google. When there’s a known compromise, you can rest easy knowing Google will push out a fix to all Chromebooks rapidly as soon as a solution is known.

**Standard on ChromeOS devices**
Titan C chips are built into Chromebooks, available on devices across price points. They are always on and require no configuration to enable.

*All Chromebooks launched since January 2019 come with the Titan security chip except for the Lenovo 100e Chromebook 2nd Gen MTK and the Lenovo 300e Chromebook 2nd Gen MTK, which come with a different security chip.*
System integrity

Protection from malicious tampering of OS & firmware
Titan C assists with the Verified Boot process, which prevents malicious code from modifying ChromeOS.

Protection from enterprise policy non-compliance
Titan C helps ensure that many policies set with ChromeOS, like the ability to prevent users from putting their device into developer mode, are enforced on managed Chromebooks.

User protection

Protection from login attempts on remote hardware
Titan C guards access to user data encryption keys. Even if a hacker had your password and hard drive, they wouldn’t be able to decrypt your data on a different device.

Protection from brute force password attempts
Titan C protects the device from brute force attacks so hackers can’t try millions of combinations of passwords or pin codes to attempt to log into the device.

Protection from application access on compromised devices
Titan C can be leveraged by a third party developer to ensure that the device being used to access the application and it’s data hasn’t been compromised, through a feature called Verified Access.

Protection from Phishing Attacks
Titan C enables two-factor authentication, that would require a power button press in addition to the password to log into the device.

To learn more about security visit our [website](https://www.chromecompany.com).