ENCRYPTION AT REST

Defensible external storage of user applications? Encryption!

- Keys loaded into OTP (QSPI Area)
- Application encrypted with provisioned key
- HW Engine decrypts application as its executed
- AES-CTR Mode
 - Allows decryption of arbitrary blocks
 - Performance / Execute-In-Place (XIP)

SECURE BOOT

Validates the application against public key stored in OTP

Once activated the following is enforced:

- Cannot be disabled
- Applications must be signed
- Applications must be encrypted
- OTP Key section read disabled
 - Keys can be revoked