

# IAR's Approach to Tackling Embedded Security Vulnerabilities and Product Security

Late-Stage Security

## IAR Embedded Secure IP

Best for adding security after product has been completed and need add encryption and protection against counterfeit production of your product.

Advanced Security

## IAR Embedded Trust

Best when thinking of building end-to-end security into your product design and development from the beginning of your product development cycle.

Highlight Features

### Device Agnostic

Port current framework to new MCU

### Reuse Code

Port code and quickly complete your application for the new MCU

### Secure Manufacturing

Use HSM and encryption mechanisms to securely provision authorized production of your products

Product Completed Already

Security Added

Product Designed With Security

Manufactured With Security

Product Development Cycle

Concept

Unauthorized software

- Authenticity**
- Secure boot
  - Ensure authentic firmware
  - Ensure product integrity

- Anti-cloning**
- Protect the device's memory against copying
  - Prevent lost revenue
  - Unique device proprieties in programmed information

Memory Attack Device Access

Design

- Active IP Protection**
- Encrypted software image
  - Unique keys for each device
  - Prevent reverse engineering with image encryptions

- Anti-rollback**
- Prevent the installation of outdated code
  - Mitigate dangers of known security flaws

Development & Testing

- Secure Deploy Prototyping (SDP)**
- Encrypts production packages and provisions authorized devices
  - Primarily for sample prototyping and low-volume production

Counterfeiting

- Anti-cloning**
- Protect the device's memory against copying
  - Prevent lost revenue
  - Unique device proprieties in programmed information
- Active IP Protection**
- Encrypted software image
  - Unique keys for each device
  - Prevent reverse engineering with image encryptions

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IP theft

Production & Launch

- Secure Deploy Manufacturing (SDM)**
- Safely transfers encrypted production packages to programming houses
  - Generates unique device certificates and keys to protect devices from counterfeiting at production
  - Typically for high-volume production

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Tampering of versions

Field Update

Product details

