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 Development Cycle**

- **Concept**
  - **Active IP Protection**
    - Encrypted software image
    - Unique keys for each device
    - Prevent reverse engineering with image encryptions
  - **Secure Deploy Prototyping (SDP)**
    - Encrypts production packages and provisions authorized devices
    - Primarily for sample prototyping and low-volume production
  - **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

- **Design**
  - **Anti-cloning**
    - Protect the device’s memory against copying
    - Prevent lost revenue
    - Unique device proprieties in programmed information
  - **Anti-rollback**
    - Prevent the installation of outdated code
    - Mitigate dangers of known security flaws
  - **Active IP Protection**
    - Encrypted software image
    - Unique keys for each device
    - Prevent reverse engineering with image encryptions

- **Development & Testing**
  - **Secure Deploy Prototyping (SDP)**
    - Encrypts production packages and provisions authorized devices
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- **Production & Launch**
  - **IP theft**
  - **Tampering of versions**
  - **Counterfeiting**

- **Field Update**
  - **Anti-cloning**
  - **Active IP Protection**
  - **Secure Deploy Prototyping (SDP)**
  - **Secure Deploy Manufacturing (SDM)**

**Security Added**

- **Product Completed Already**
- **Product Designed With Security**
- **Security Added**
- **Manufactured With Security**

**Product details**