

Certicom Asset Management System KeyInject® Module for HDCP

AUTOMATES KEY LOGISTICS, MITIGATES FINANCIAL RISK, AND DELIVERS PROVEN ROI

The world's leading chip manufacturers already rely on Certicom AMS KeyInject® technology to automate key logistics, mitigate liability, improve tracking, and reduce costs relating to offshore chip manufacturing and silicon testing.

More than any other form of serialized data, keys are difficult to track. Especially given the \$8 million liability for HDCP licensees, companies are re-evaluating whether an in-house key management system provides sufficient protection. Not only does building a reasonably secure tracking system consume valuable NRE and operations capacity, most still include manual processes like FTP sites and email that make costly mistakes more likely than a fully automated solution that is tightly integrated with existing systems.

A proven solution for manufacturers implementing HDMI and DisplayPort standards, Certicom AMS KeyInject for HDCP integrates quickly and easily into your outsourced manufacturing process, securely delivers HDCP keys to ATE for injection during test, and provides ROI within the first year of operation.

SECURE MANUFACTURING

Using state of the art cryptography, security protocols and tamper reactive hardware-based security, KeyInject keeps your keys protected right up until they are injected into a product.

HDCP INVENTORY LOGISTICS

Simply import Digital CP DVDs into the KeyInject Controller and forget about them. KeyInject distributes keys to remote factories based on factory throughput and protects them until they are injected on the line. The KeyInject notification system automatically alerts operations staff about potential issues before they become problems.

EASE OF INTEGRATION

From XML reporting for ERP systems to C-Source code APIs for Chip Testers, KeyInject quickly and easily integrates into existing manufacturing processes and systems.

REDUNDANCY AND 24X7 SUPPORT

Understanding the criticality of high availability, KeyInject systems are always shipped in redundant pairs and KeyInject includes 24x7 support agreements that are tailored to the needs of global manufacturing operations teams.

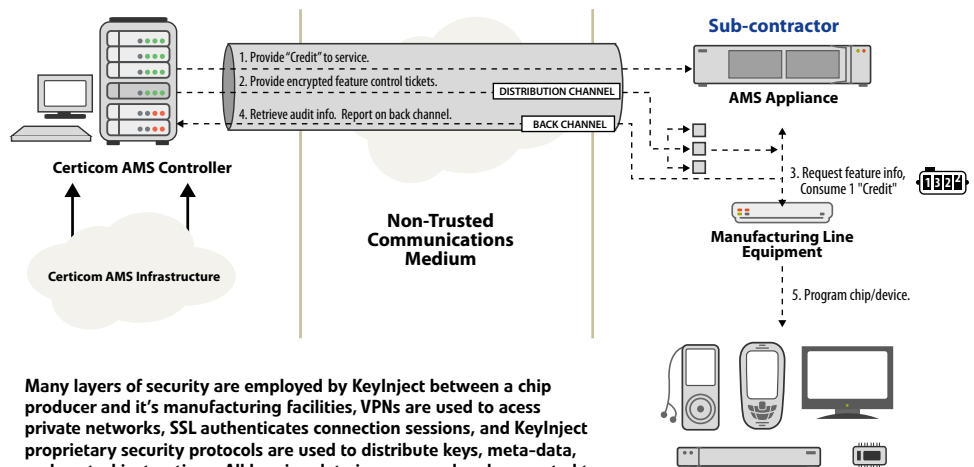
HDCP Licensee Concerns Resolved by KeyInject

- \$8 Million Liability, per Product, if Mishandle Keys
- Tracking of HDCP Rx and Tx Key Inventory
- Contract Manufacturers Double Programming Keys
- Stolen or Lost Keys at Outsourced Assembly and Test
- Keying Issues That Can Stop Production Line

Certicom AMS KeyInject Includes:

- COTS Infrastructure Components
- Chip Tester Middleware Licenses
- 24x7x365 Operations Support
- Integration Services

Supported ATEs include Verigy, Advantest and others.



Many layers of security are employed by KeyInject between a chip producer and its manufacturing facilities, VPNs are used to access private networks, SSL authenticates connection sessions, and KeyInject proprietary security protocols are used to distribute keys, meta-data, and control instructions. All logging data is sequenced and encrypted to ensure that remote logs can not be tampered with or deleted without being detected.

Certicom AMS KeyInject® Module for HDCP Features

Multiple Product SKU Features

- Package both HDCP TX and HDCP RX keys for the same chip
- Track multiple HDCP keys associated with the same SKU
- Transmit custom meta data in-band with key data to protect proprietary and secret chip configuration data

Support for key types other than HDCP

- Natively supports most other CA and DRM keys
- Custom key type support for proprietary keys using XML definitions
- Control which key types are allowed to be sent to which remote factories

24x7x365 Operations Support Options

- ATE and test script integration services available
- Business system integration services available
- 24x7x365 support options

Security Features

- All keys, configuration, and logs are protected by FIPS-140 rated hardware security
- Implemented with government approved cryptography using ECC, AES-128 and SHA-256 based Suite-B cipher suites
- Multiple layers of best-in-class security that meet industry standards
- Security protocols that are unique to Certicom AMS KeyInject

Optional Advanced Security

- Protect HDCP keys right to silicon using Certicom's Asset Control Core (ACC)

Certicom AMS KeyInject Includes These Components



AMS KeyInject Controller

- **Located at headquarters or trusted location**
- One instance used to control several KeyInject Servers
- Rack-mounted server
- Managed and operated by Operations team or IT
- XML interfaces for integration into existing ERP infrastructure.



AMS KeyInject Appliance

- **Located at test house, 3rd party manufacturer, assembly, any keying location**
- One instance serves many KeyInject Agents
- Redundant, security hardened, rack-mounted servers with FIPS-140 rated security modules.



KeyInject Software Agent

- **Embedded in ATE or custom test equipment**
- ANSI C code pre-ported to all common ATE operating systems
- Integrates with test methods

24x7 Support Plans provide a critical severity response hot line using expert, in-house, technical support staff that work closely with escalation engineers fielded around the globe.

Your keys are never exposed. Certicom AMS KeyInject integrates with any company's proprietary on-chip encryption scheme. And you can also encrypt HDCP keys all the way to silicon for additional security when you combine Certicom AMS KeyInject with Certicom Asset Control Core.

About Certicom

Certicom manages and protects the value of your content, applications and devices with security offerings based on Elliptic Curve Cryptography (ECC). Some of world's leading chip manufacturers rely on Certicom Asset Management System to reduce costs, deliver strong brand protection and provide new revenue enhancement capabilities.