Secure content anywhere.

Protecting content outside of traditional CA and DRM.

Verimatrix Embedded Content Protection – HDCP/DTCP

PRODUCT BRIEF
A SECURE SOFTWARE SOLUTION WHEN CONTENT MOVES OFF THE PRIMARY SCREEN

Verimatrix Embedded Content Protection addresses the security gaps that occur outside of traditional use cases. This unique software solution is easy to integrate and maintain and is more cost-effective than traditional hardware solutions.

Reduce Costs & Avoid Dependence on Hardware
Harness the power of flexible software stacks that will fit seamlessly into your existing device and require no design changes to your silicon chip. This helps you avoid dependency on hardware and reduces the cost of material for future devices.

Meet Security Standards for Premium Content
Premium content owners require a secure connection all the way to a compliant display. Failure to encrypt the “handshake” from the player to each display can be a compliance violation. Verimatrix offers fully flexible High-bandwidth Digital Content Protection (HDCP) and HDCP2 stacks to meet content owner requirements — even for 8K premium content.

Customize Security for Your Environment
The toolkit includes customized software libraries for integrated or installable applications and customized source code for compiling directly into embedded systems. Verimatrix Embedded Content Protection can adapt to any kind of hardware, with or without Trusted Execution Environment (TEE).

Auto & Aviation
Protect the entire content chain for in-car/in-seat entertainment displays in both auto and aviation applications.

Consumer Electronics Connections
Secures connections between Consumer Electronics (CE) devices that cannot be protected by traditional CA and DRM solutions.

Event & Conferencing Technology
Ensure that content delivery is secure between screens, encoders, and video splitters for event and conferencing applications.

IoT Deployments
Protect signals in the local network between any devices and services. Receive, distribute, and secure content in IoT applications.

Surveillance Applications
Keep A/V signals transmitted by cameras and microphones secure on local networks and ensure that only authorized users can view.

Content Transfer on Internal Data Buses
Protect content between hardware instances inside a device to meet high-level studio requirements for early release window and 4K/8K content.
A RECOGNIZED SECURITY INNOVATOR BEYOND CA SYSTEMS & DRM

Premium content needs to be protected throughout the entire delivery chain, including download, streaming, storage and playback. Protection typically impacts playback devices such as set-top boxes, TV sets, personal computers, gaming consoles or mobile devices, such as smartphones and tablets.

Content protection and authentication mechanisms applied for these use cases are designed for either one-way or two-way communications. The Verimatrix VCAS™ solution provides state-of-the art security and protection for all of these applications. However, not all playback devices are continuously connected to a license server or reachable through a one-way network for content authorization and entitlement. This is where Verimatrix Embedded Content Protection shines.

The industry has defined two point-to-point protection standards for guaranteed device interoperability: HDCP and DTCP. Verimatrix participated in the standardization of DTCP security and Embedded DRM is especially sought after for DTCP software integrations.

High-Bandwidth Digital Content Protection (HDCP)

HDCP is a content protection standard used by all playback devices that forward premium content to external displays or TV sets. This includes, but is not limited to Blu-ray players, set-top-boxes or PCs, whereas the majority of implementations are over HDMI connections. HDCP can also be implemented on other interfaces since it abstracts the transport layer: Miracast over Wi-Fi is one such example.

Verimatrix offers fully flexible HDCP and HDCP2 stacks that address these use cases and meet the content owner requirements even for 8K premium content. Dependent on bandwidth needed, Verimatrix can even provide fully software-based HDCP solutions that are easily implemented, avoid dependency on hardware (while being backward compatible with devices in the field) and reduce the bill of material for future devices.

Digital Transmission Content Protection (DTCP)

DTCP has been developed primarily for content protection on the compressed level. It allows for secure content storage and transfer through multiple physical interfaces, or on the internal data bus within a device between different content-processing components. DTCP also supports the handover of usage rules information from an upstream DRM/CA system, enabling a fully embedded secure video path from DRM/CA to standardized DTCP-based content protection for local storage or transfer. It also supports a fully secure handover to HDCP encryption for content playback.

There are currently two different DTCP security levels available:

- DTCP supports content protection for typical high-definition content owner requirements
- DTCP2 comes with advanced security profiles and is accepted by content owners for 4K and 8K content
Verimatrix Embedded Content Protection Technologies

**VERIMATRIX SOFTWARE STACKS**

- **DTCP/2**
  - HD / 4K / 8K content output protection

- **HDCP/2**
  - HD / 4K / 8K content output protection

**MULTIPLE INTERFACE SUPPORT**
Protect content on interfaces like HDMI, DisplayPort, Miracast, IP, USB and MOST in consumer electronics devices or for professional applications in the automotive, aviation, event or IoT industries.

**HARDWARE SECURITY**
Verified security for 4K / 8K content by utilizing hardware security (TEE)

**REVOCATION**
Secure key revocation in case of breaches

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**About Verimatrix**

Verimatrix (Euronext Paris: VMX) helps power the modern connected world with security made for people. We protect digital content, applications, and devices with intuitive, people-centered and frictionless security. Leading brands turn to Verimatrix to secure everything from premium movies and live streaming sports, to sensitive financial and healthcare data, to mission-critical mobile applications. We enable the trusted connections our customers depend on to deliver compelling content and experiences to millions of consumers around the world. Verimatrix helps partners get to market faster, scale easily, protect valuable revenue streams, and win new business. To learn more, visit www.verimatrix.com.