



Location & Tracking

Protecting Ports and Carriers on Land, Air, and Sea

MerlinCryption Embedded Encryption Platforms protect communications and asset tracking for commercial, government, and private fleets with dynamic encryption and authentication, designed for shrewd responsiveness in diverse situations where certainty is paramount.

Tracking is the first line of fleet and cargo defense, as it decreases theft and leverages recovery; however, unsecured tracking directs criminals to the very shipment under guard. Carriers need encryption to conceal location, identify containers, and to secure alerts, routing changes, and reports, as well as protect remote units, operators, and intellectual property.

MerlinCryption simplifies the complexity of protecting cargo flow and fleets against tampering, compromise, fraud, theft, and man-in-the-middle attack. Patent-pending Embedded Encryption Platforms encrypt GPS, wireless, satellite, and radio. Encrypted payloads can be transmitted by any communications protocol, on any network, and are portable to any device and endpoint.

MerlinCryption's patented random data generator outputs keys and passwords that are 'generated-destroyed-recreated' on demand, making key/password transfer between end points unnecessary. There is no key storage...no certificates required. PKI is eliminated.

Advanced Algorithm: *Stay Ahead of the Curve*

The MerlinCryption cryptosystem is fortified with Anti-Statistical Block Encryption (ASBE), which utilizes variable key length. Each key scales in size between 2008 bits and 2 GB. The encryption engine utilizes internally-generated and enforceable variable passwords, which scale up to 64 KB.

The ASBE algorithm is not subject to statistical analysis or attacks by Cryptanalysis, supporting secure critical infrastructures, maritime, port authorities, national borders, import/export, and real-time commerce. Every encrypted transmission between base control, vehicle, aircraft, vessel, satellite, and device is different, as the algorithm produces different cyphertext with varying length, even when repeating the same plaintext, key, and password input.

ASBE speed is twice as fast as AES, yet protects with minimal CPU overhead. The algorithm is ECCN 5D992c approved for export without a license, OFAC compliant, and provides clients with compliance with HIPAA, HITECH, and other regulatory guidelines.

ADVANCED TECHNOLOGY

SOFTWARE & HARDWARE SOLUTIONS

- Embedded Encryption Platform SDK
- Low Overhead Embedded Encryption Platform SDK
- Four-Factor Encrypted Authentication
- Random Data Generator for Keys & Passwords
- Encrypted Storage Media: USB, SSD,

MARKET APPLICATIONS

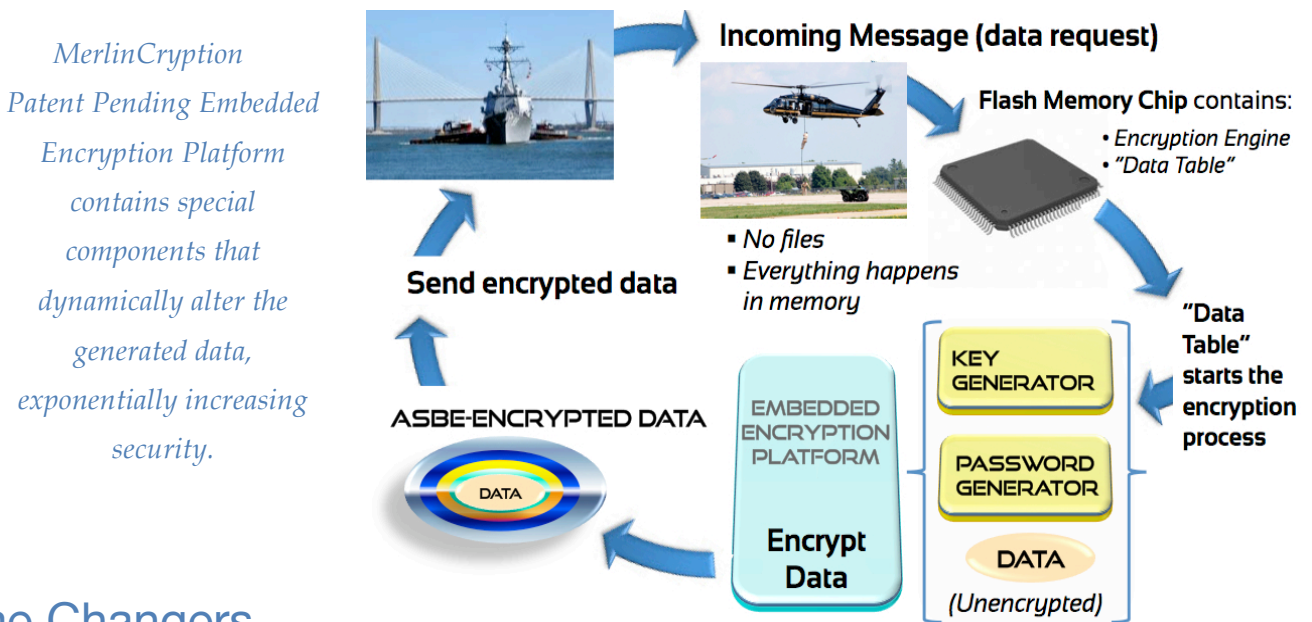
- **Verticals:** Military • Healthcare • Financial • Law
- **Horizontals:** Cloud • VoIP • eCommerce
- **Infrastructure:** Storage • Virtualization • Communications • Network Management
- **Embedded Connectivity & Device:** IoT • M2M
- **Media Storage:** USB • SSD • Other

TECHNOLOGY SPECS & STATS

- Encryption speed more than twice as fast as AES
- Highly efficient minimal overhead code:
 - Platform = 200K
 - Low Overhead Platform = 55K
 - Encryption Engine as small as 22K
- Portable to any CPU
- Encrypted Payloads transmitted by any communications protocol and on any network
- 1 Patent, 1 Patent Pending, multiple patents in process
- Eliminates PKI, Cert Authorities, Key Depository
- Written C & C++ for Linux, Windows, DOS, & custom
- Approved for export NLR & OFAC compliant
- Provides compliance with HIPAA, HITECH, & other regulatory guidelines

Outmaneuver Attack: Dynamic 4-Factor Authentication

MerlinCryption's dynamic, variable, changeable, encrypted authentication empowers port authorities, carriers, and shippers to take control of security. Authentication is typically based on something you know, something you have, and/or something you are. MerlinCryption secures authentication to the next level by incorporating additional methods based on dynamic "temporary" factors. This unexpected category includes non-linear and environmental factors, which aptly detect risk of compromise. The indomitable power behind this solution is not only in the *number* of factors available, but also in the ability to customize each client with factors that are unique to their business environment.



Game Changers

- ASBE is more than twice as fast as AES
- Encryption engine as small as 22KB, embedded encrypted platform 200KB, and low overhead platform is 55KB,
- Encrypted Payloads are transmitted by *any* communications protocol and on *any* network
- The encryption software is portable to any CPU
- Two Embedded Encryption Platform SDKs streamline easy implementation
- Written in C and C++ for linux, windows, and can be compiled for other operating systems

THE SMART-WORLD'S SMART-ENCRYPTION®

MerlinCryption develops infrastructure encryption security for embedded, Cloud, VoIP, ecommerce, M2M, IoT, and USB hardware. Breakthrough technology secures dynamic end-to-end encryption for Smart-Grid, SCADA, industrial systems, control, healthcare, financial, and military..

Unprecedented Embedded Encryption Platforms protect data as it is created, viewed, edited, shared, stored, and moved securely across communications channels and in the Cloud.



PO Box 160284 | Austin, TX 78716

512-348-SAFE

www.MerlinCryption.com

MerlinCryption Is Changing The Way The World Protects Data