

Future-Ready Access Control With the Mercury Embedded Application Environment



The Mercury embedded application environment transforms access control by enabling applications to run directly on Mercury MP Intelligent Controllers. This approach allows organizations to address emerging business needs without replacing hardware, process business logic at the edge for faster performance and integrate seamlessly with controllers, IoT devices, elevators, readers and locks.



Real-Time Edge Processing

Edge computing enhances access control by enabling faster decision-making, increasing resilience and maintaining uninterrupted security. By processing access logic directly on controllers, security responses are immediate, eliminating latency caused by remote server dependencies. Even during network disruptions, edge-based processing ensures continued security operations without interruption. For environments requiring constant protection, such as government facilities and critical infrastructure, edge computing enhances reliability and system integrity.

Enhancing Interoperability

A unified platform simplifies the integration of diverse security technologies, enabling seamless connectivity across systems. App-enabled Mercury MP Controllers support interoperability with access control infrastructure, creating a cohesive security environment. Consistent architecture supports integration with third-party solutions to meet evolving security requirements. This enables the controller to become the connection point for devices such as readers, locks, elevators, HVAC and facility management systems.

Empowering Developers to Innovate

Developers gain the tools to create targeted, scalable solutions that enhance security capabilities while maintaining system stability. Standardized APIs streamline integration and support scalability. A stable, well-structured framework supports new technologies while preserving existing system functionality.

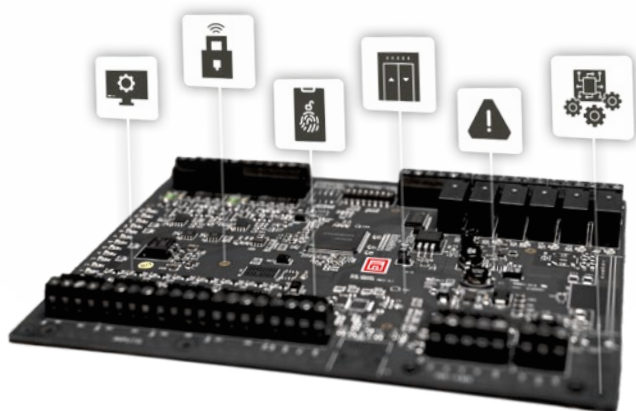
Targeting High-Value Use Cases

The Mercury embedded application environment enables seamless integration for mission-critical security applications. Initial applications include:

- **Server Cabinet Security:** Integrated locking mechanisms to protect server cabinets from unauthorized physical access
- **Government Authentication:** Auxiliary authentication features supporting specific compliance requirements
- **Cyber Hygiene and Service Assurance:** System monitoring to enhance cybersecurity
- **Reader Management:** Remote monitoring and updating of credential readers

Robust Security at Every Level

A multi-layered security framework protects firmware, processes and data from unauthorized access and cyber threats. Secure Boot verifies firmware integrity at startup, preventing unauthorized code execution. ARM TrustZone Protection creates a hardware-enforced secure enclave to isolate critical processes. Encryption prevents data exfiltration even in the event of a physical attack.



Secure, Streamlined App Deployment

A structured, validated development process helps developers innovate while giving end users peace of mind that only secure and tested solutions are available for deployment.

- 1 **Partnership Request:** Prospective partners submit proposals, which Mercury evaluates based on API alignment and strategic objectives.
- 2 **Technology Evaluation:** Mercury collaborates with partners to refine application functionality and establish technical feasibility.
- 3 **Agreement and Development:** Approved partners sign agreements and gain access to SDKs, APIs and development tools to build applications.
- 4 **Testing and Qualification:** Applications undergo rigorous performance and security validation before deployment.

Scalable Solutions for Future Growth

The platform's adaptable design allows organizations to update and expand their physical security systems at their own pace, with less disruption and reduced need for hardware replacement. New features and security updates are deployed digitally, minimizing downtime and reducing costs. The platform is designed for seamless scaling and management across deployments of all sizes, from single sites to multi-site enterprises.

Partnering for Success

Mercury fosters collaboration between technology partners, end users and OEMs to drive innovation and expand market opportunities.

- **Technology Partners:** A single integration provides access to 25+ OEMs, increasing brand recognition and revenue potential
- **End Users:** A robust ecosystem maximizes infrastructure value, offering adaptable, future-ready solutions
- **OEMs:** OEMs benefit from simplified integrations, enhanced PACS capabilities and expanded market reach

Experience the Future of Access Control

Mercury's embedded application environment delivers scalable, secure and future-ready solutions across industries.

Learn how Mercury can elevate your access control strategy. Visit mercury-security.com to get started.



With more than 5 million controllers delivered globally, Mercury has become the controller platform of choice for the industry's leading security software providers.





Mercury Security
11165 Knott Avenue, Suite AB
Cypress, CA 90630
mercury-security.com



part of 

© 2025 HID Global Corporation, part of ASSA ABLOY. All trademarks are owned by HID Global Corporation, ASSA ABLOY and/or their respective owners and may not be used without permission. All rights reserved.