INTELLIGENT MEMORY

UNLIMITED INGENUITY



SECURE

Multiple Protection Layers

PROTECTED

Sophisticated Access Control

CONFIGURABLE

Customer Customizable

IMTrusted

Introducing the next evolution in Data Storage Security – IMTrusted. IMTrusted protects your data at the source, the actual storage device. You decide how it is accessed, changed and even destroyed. From booting up trusted software, while protecting your IP, to protecting access or change of the data on the device, IMTrusted has you covered.

IMTrusted offers a toolkit of features that can be enabled, disabled or configured by the product designer, the integrator or even the end-user if needed. This gives our customers and their end-users the flexibility they need for their market segment and individual use cases.

What is IMTrusted?

IMTrusted is designed for most business needs and can be easily set up and managed. Each feature can be individually selected or deselected and has many configuration options. Tools are available to design/configure and mass produce IMTrusted devices.





Where would I use IMTrusted?

Internet of Things (IoT) Module

IoT modules need to work with maximum uptime and reliability.

- · Ensures safe and reliable upgrades
- Generated data access protection
- Enable extra features for extra revenue
- Operating software cannot be changed/corrupted





Drone, Trail Camera

Designing a data gathering device is challenging.

- Critical software can be protected
- Gathered data stored in a write-only format
- Gathered data cannot be read unless authorized
- Critical data can be destroyed to ensure confidentiality

Intellectual Property

Are you designing a product that has multiple features and you want to make the entry price cost competitive?

- · Allow your customers to enable features they need
- Determined number of uses
- Set license duration





Archival Data

Long term storage of critical data can require special handling.

- Ensure, once stored, the data cannot be changed
- Control access to only authorized personnel
- Data can be encrypted for security



IMTrusted FEATURES

FIRMWARE SECURITY (Boot and Upgrade Integrity)

The firmware used by the drive is checked to ensure it has not been tampered with. There are optional features to prevent and control future firmware upgrades.

SECURE OPERATING SYSTEM BOOT

An area on the device can be designated as the operating system area. Booting can be prevented until the device ensures this area has not been tampered with. Updating the OS area can also be controlled.

WRITE PROTECT

This feature allows the design of a system/device that has a secure, unwritable storage medium. Writing to the device can be controlled/restricted in a variety of ways.

ENCRYPTION (on non SSDs)

SSDs implement the Opal encryption standard. Other technologies (SD cards, eMMC, USB, etc.) can now have access to the same AES-256 encryption used in SSDs.

WRITE ONLY (Read Disable)

Some applications want to prevent reading (or tampering) with previously written data. Examples include data logging, body camera, security camera, etc. Reading can be controlled/restricted in a variety of ways.

AUTHENTICATION MANAGER

Access to the device and control of features can be controlled by a set of passwords. Password management includes the ability to revoke some/all permissions and administrative access.

LICENSE MANAGER

The License Manager allows the developer/customer to check/prevent the operation of their software in unauthorized systems. Features range from known-device verification to node locking (if the node has an unalterable ID).

EVENT LOGGING

A round-robin event log can be kept. Events that are stored in the event log can be pre-selected or, if allowed, selected at runtime. The event log can be read out and/or cleared at any time.



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IMTrusted

IMTrusted technology is being built into a range of product form factors and capacities.

Contact IM at security@intelligentmemory.com so we can help you find an IMTrusted solution that fits your project's needs.

Customer Configurability

IMTrusted technology is customizable by our customers. Don't need a feature? Turn it off. Don't like the default settings? Change them.

Add your own users, capabilities, privileges, licenses, time limits and partitioning to match your unique requirements.



IMTrusted Availability

| Interfaces | Family | Available | Under Development | Upon Request |
|------------|--------|---------------------------------------|-------------------|--------------|
| SD & µSD | Silver | · · · · / | V | |
| | Ruby | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | | |
| eMMC 5.1 | Silver | | ✓ | |
| | Ruby | | | \checkmark |
| SATA III | Silver | | | \checkmark |
| | Ruby | | | \checkmark |
| USB / eUSB | Silver | | | ✓ |

| Operating System | Available | Under Development | Upon Request |
|------------------|-----------|-------------------|--------------|
| Windows | ✓ | | |
| X86 Linux | | √ | |
| ARM Linux | | √ | |
| Android | | | \checkmark |
| QNX | | | \checkmark |



