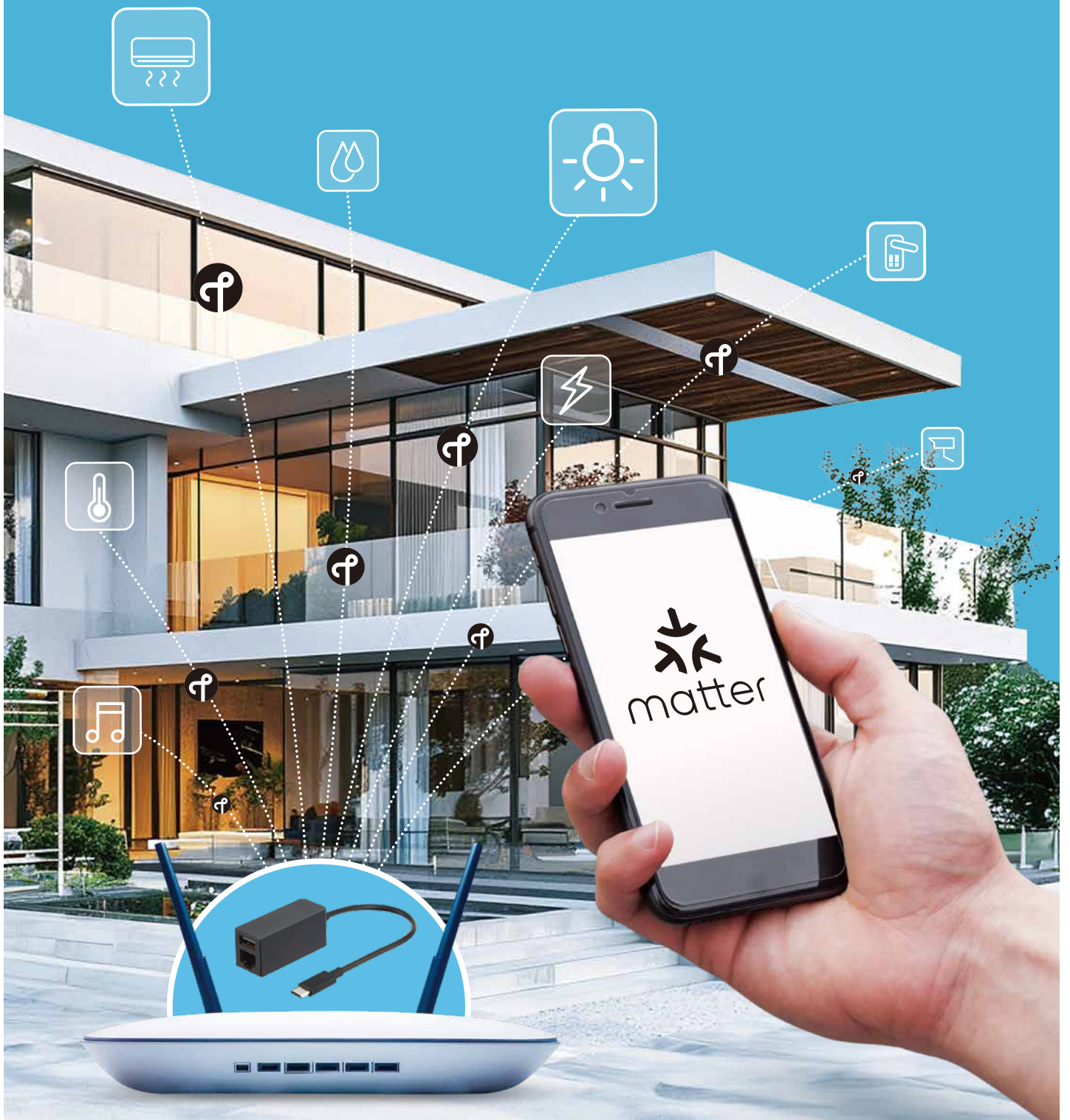
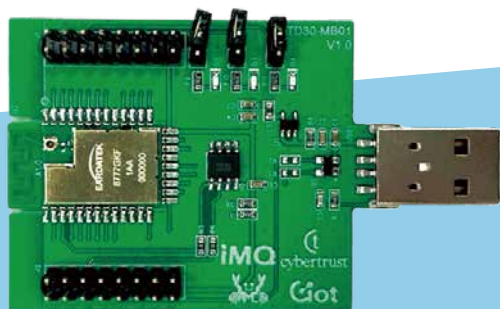
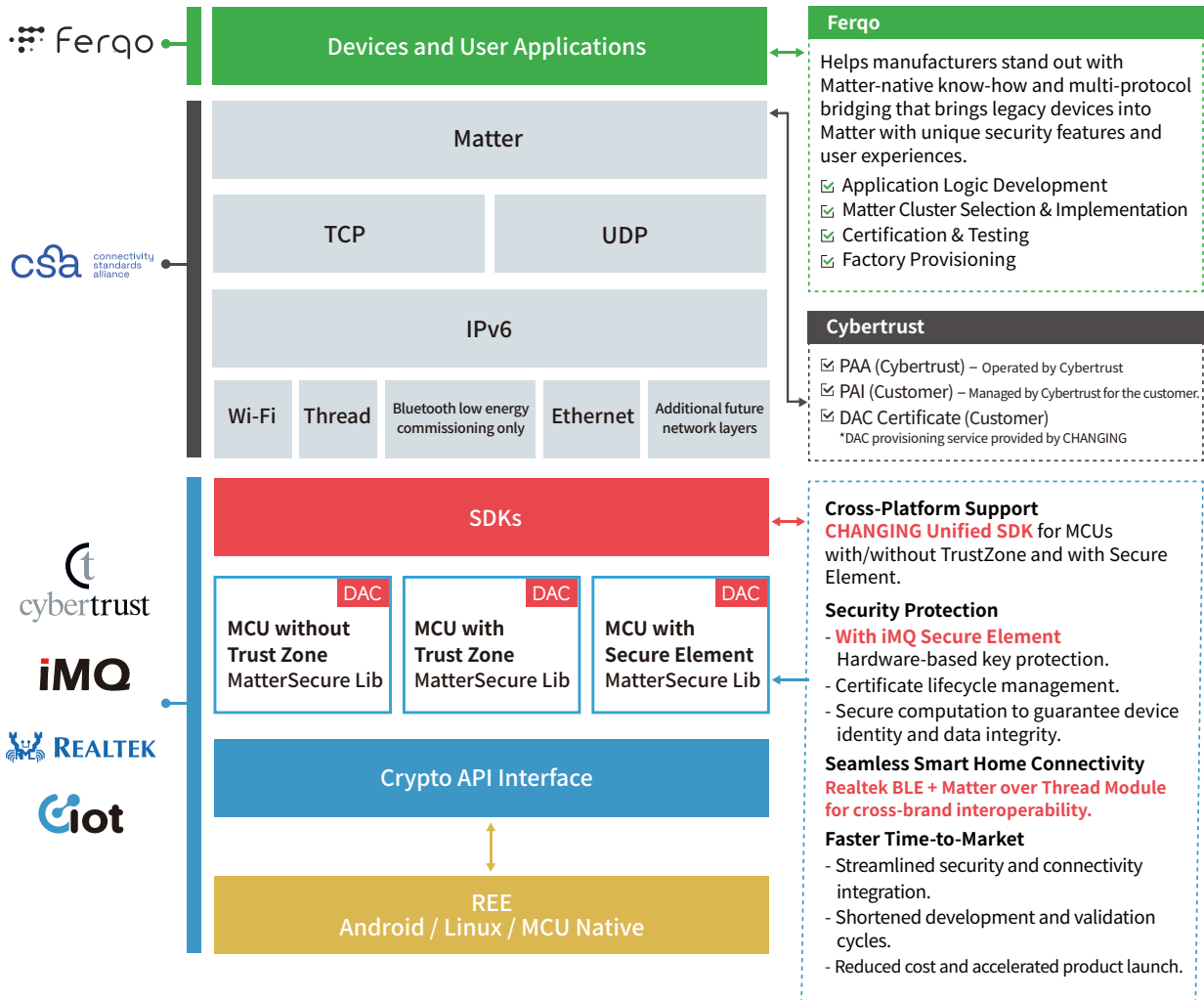
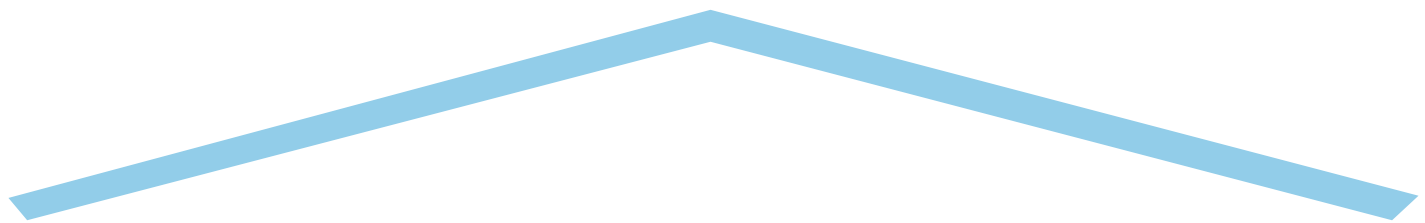




# Matter × AI Global Market Ready





**Security, Connectivity, DACs and SDKs All Built into One Module.**

# All-in-One Matter Module + AI / Cloud Services Smart Integration. Fast Validation. Quick Launch

The "All-in-One Matter Module + AI Cloud Services" is built for device manufacturers, unifying Secure Element protection, DAC management, Matter over Thread + BLE, and a Unified SDK on one platform. With AI and cloud integration, it learns user behavior to optimize energy use, cutting development time and costs while speeding market entry and boosting competitiveness.



## Cybertrust Certification and Security Platform

### Global Standard CA Operations, Enabling Digital Trust

#### Electronic Certification Expertise

Japan's longest-operating CA, WebTrust-audited SSL/TLS certificates.

#### Open Source & OS Knowledge

Deep Linux/OSS expertise, contributing to the global community.

#### Secure Embedded Platforms

Embedded OS aligned with global security standards.



## iMQ Security Protection

### Secure Element for Enhanced Key and Data Protection

#### Toshiba-Certified MCU Core

Built on Toshiba's licensed microcontroller technology, delivering high performance with low power consumption, trusted by global system manufacturers.

#### Hardware-Level Security

Equipped with Secure Element for key isolation, ensuring protection against tampering, leakage, and unauthorized access.

#### Advanced Cryptographic Engine

SQ71 Secure ASIC supports AES-128/256, SHA-256, and TRNG with environmental attack resistance; SQ77 Secure MCU combines encryption and microcontroller functions for battery-powered IoT devices.

#### Global Security Compliance

NIST CAVP-certified and FIPS 140-3-compliant, ensuring internationally recognized security and market credibility.



## Ciot Cross-Platform Compatibility

### Unified SDK and CLM Streamline Integration and Deployment

#### Unified Development Environment

Unified SDK enables consistent MCU security integration, reducing complexity.

#### Automated Certificate Provisioning

CLM automates DAC creation and provisioning, speeding certification.

#### Optimized Mass Deployment

Enhances efficiency in large-scale production, ensuring faster launch and compliance.



## Ferqo Intelligent Living Solution

### AI-powered Automation for Intuitive Smart Living

#### Matter & Multi-Protocol

Supports Matter, Zigbee, Z-Wave, BLE, IR, and Wi-Fi for seamless cross-brand interoperability.

#### Enterprise Security

Built on Google Cloud with encryption, SDKs, and Secure Element for end-to-end protection.

#### AI Scenario Optimization

Natural language engine learns and adapts for intuitive intelligent control.



## Realtek Smart Home Connectivity

### Reliable Cross-brand Connection with BLE and Thread.

#### High-Performance Hardware

Cortex-M CPU (125 MHz) with 384 KB SRAM, supporting CAN, Ethernet, and USB 2.0 HS, integrated with a crypto engine for speed and security.

#### Matter Certified & Multi-Protocol

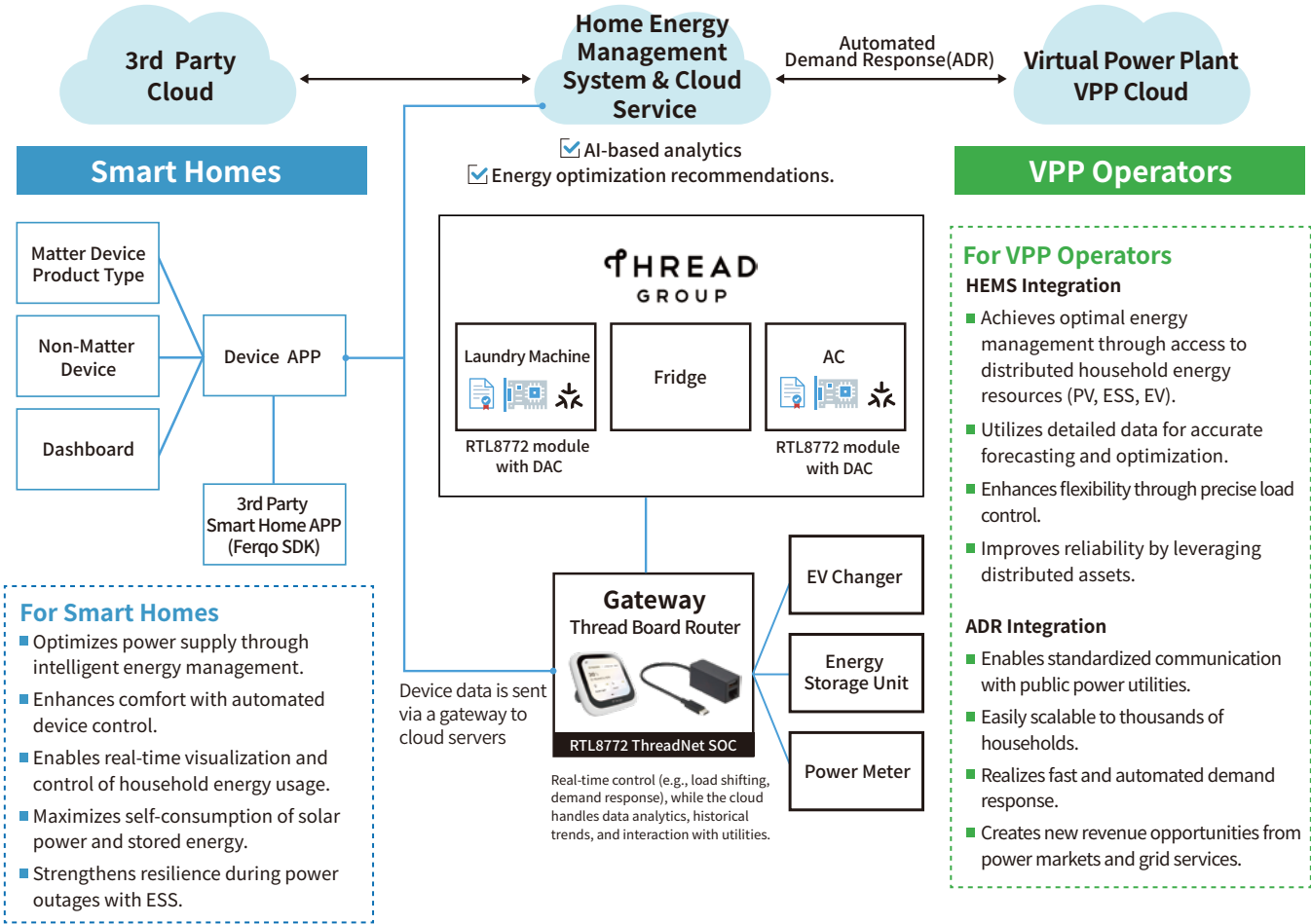
CSA Matter over Thread certified; supports BLE and IEEE 802.15.4 for Zigbee and Thread compatibility.

#### Hardware Security Isolation

Built-in TrustZone, certified to PSA Level 3, safeguards data and code from unauthorized access or modification.

#### Modular IC Design

Simplifies development, lowers costs, and accelerates time-to-market.



**Built-in OTBR Functionality, Integrated with The LWIP Protocol and mDNS, & Supports Built-in Ethernet Modules.**



# Smart Energy Integration

## Smart Homes. Connected Grids. Sustainable Energy

The solution supports HEMS and VPP operators, enhancing demand response and energy efficiency toward sustainability. Powered by the Realtek RTL8772 ThreadNet SoC, the gateway router connects home appliances and power systems for real-time control and optimized energy scheduling. Combined with Ferqo's AI analytics, it enables intelligent energy optimization and expands the smart home energy ecosystem.

