



OPTIGA™ Trust M MTR

The easiest way to add Matter and security to your smart home devices

OPTIGA™ Trust M MTR is Infineon’s OPTIGA™ Trust M discrete security solution combined with a Matter provisioning service. The product is Matter-certified and works with any MCU or SoC, making it easy to add secured Matter compatibility to existing IoT designs.

OPTIGA™ Trust M MTR allows OEMs to download and inject the Device Attestation Certificate (DAC) at a later stage right up until the start of production without exposing the private key. This means Product IDs do not have to be decided on up front when the reel is being ordered/manufactured. This gives OEMs greater flexibility to decide product variants after ordering the security chips.

OPTIGA™ Trust M MTR is Common Criteria (CC) EAL6+ (high) certified to achieve the reliable tamper-resistant protection supported by the Matter standard. The Matter DACs will be issued by our partner Kudelski IoT. Kudelski IoT has been approved by the Connectivity Standards Alliance (CSA) as a Product Attestation Authority (PAA).

Matter – the IoT compatibility standard for smart home devices

Matter is a unifying protocol developed by the Connectivity Standards Alliance (CSA) to connect smart home devices securely and reliably to each other and to different smart home ecosystems.

Security and privacy are the foundations for Matter. It is designed to keep devices and information protected and private without compromising on ease of use.

It provides guidance to device manufacturers, allowing them to select the appropriate platform security for their devices and corresponding use cases. Matter embeds data privacy principles into all interactions between devices and software agents that handle personal information.

Ultimately, it provides a trusted foundation for connected “things” by supporting simplicity, interoperability, reliability, and security.

Application	Focus area
Home and building automation	Access control, lighting/electrical systems, blinds/shades, HVAC controls
Smart homes	Access points/bridges, Matter controllers, TVs, access control, lighting/electrical systems, blinds/shades, smart speakers, surveillance cameras, climate control

Key features

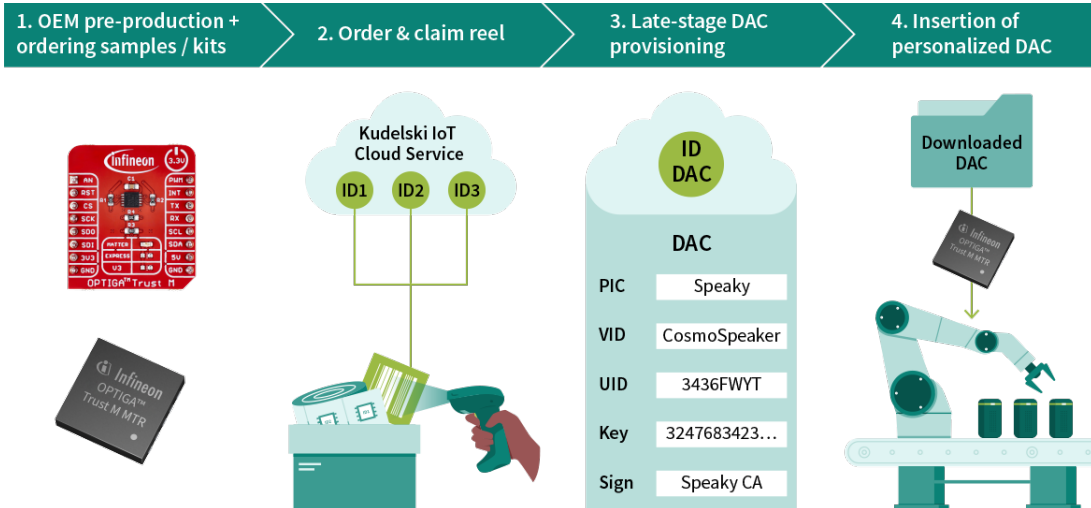
- CSA-certified Matter certificates and services
- Common Criteria EAL6+ (high) certified hardware and crypto library
- Pre-provisioned with certificates and keys at Infineon’s CC-certified facilities
- Enables TLS protocol to perform key agreement and signature/verify operations based on pre-provisioned credentials
- Cryptographic toolbox:
 - ECC (including ECDH/ECDSA) with NIST and Brain-pool curves up to 521 bits
 - RSA up to 2K key size
 - AES 256, HMAC, key derivation and hashing support
- Provides a DRNG and TRNG compliant with FIPS 800 90A and BSI PTG.2
- AIS 31 TRNG
- Built-in crypto accelerator

Key benefits

- Easy to add Matter compatibility to an existing design
- Works with any MCU/MPU
- Allows retention of existing designs
- Personalized DAC and PAI for download
- Flexibility to update DACs right up until the start of production
- Robust security
- NDA-free product documentation

PRODUCT BRIEF

Building Matter devices with OPTIGA™ Trust M MTR – easy and secured



Ordering information

Type	Package	Temp. range [°C]	Key features
OPTIGA™ Trust M MTR (SLS32AIA010MM)	USON-10	-25 ... +85	CC EAL6+ (high), Matter-certified, crypto toolbox
OPTIGA™ Trust M MTR Shield	Board (mikroBUS)	–	Easy-to-use, platform compatibility
OPTIGA™ Trust Adapter	Adapter board	–	Arduino UNO to mikroBUS converter
PSoC™ 62S2 Wi-Fi BT Pioneer Kit (CY8CKIT-062S2-43012)	Evaluation kit	–	Wi-Fi + BLE, dual-core Arm® Cortex® M4+M0, ideal for Matter applications

For evaluation purposes, please use PSoC™ 62S2 Wi-Fi BT Pioneer Kit, OPTIGA™ Trust Adapter and OPTIGA™ Trust M MTR Shield.

OPTIGA™ Trust M MTR is the latest configuration of the OPTIGA™ Trust M, supporting late-stage Matter provisioning. OPTIGA™ Trust M is a security solution with tamper-resistant hardware certified to Common Criteria EAL6+ (high). The Secure Element can be used with any MCU/MPU or application processor to perform various security-related tasks autonomously and thus enhance the security of existing IoT designs. OPTIGA™ Trust M is also available with the OPTIGA™ Trust M Express cloud provisioning service.

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