Seamless smart home connectivity with Matter

matter

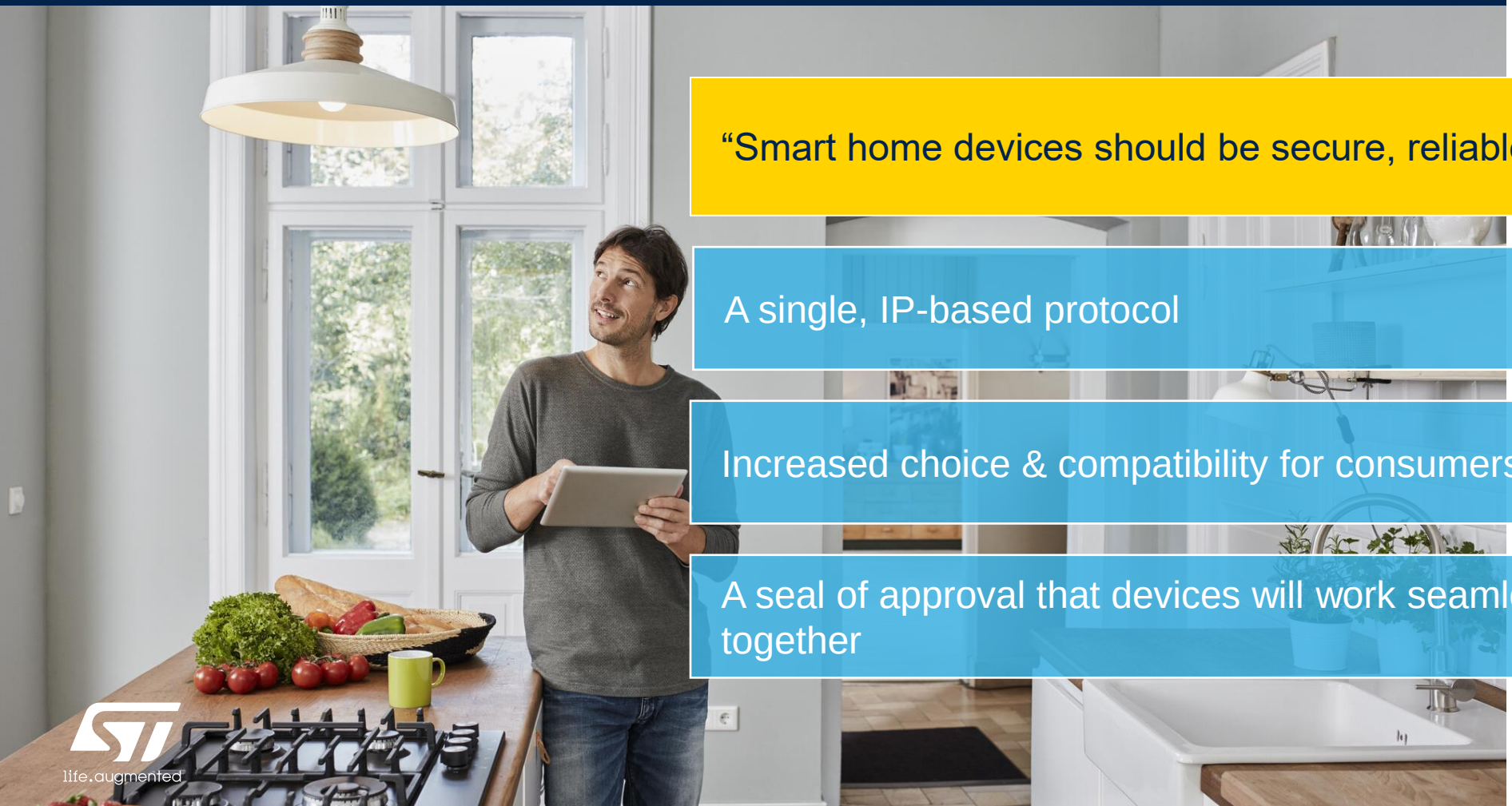
Matter standard

Matter security & commissioning

STM32 Matter delivery

matter standard

Developed for smart home and smart things applications



"Smart home devices should be secure, reliable, and seamless to use."

A single, IP-based protocol

Increased choice & compatibility for consumers

A seal of approval that devices will work seamlessly and securely together

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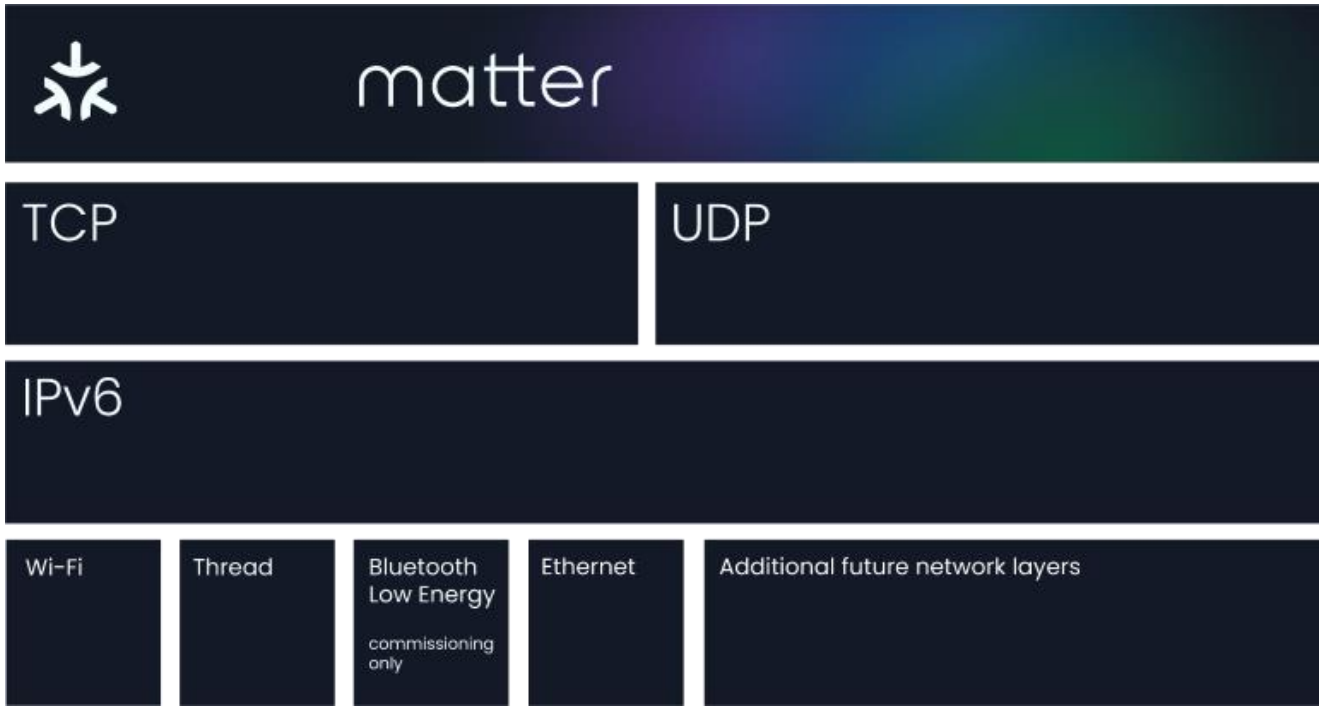
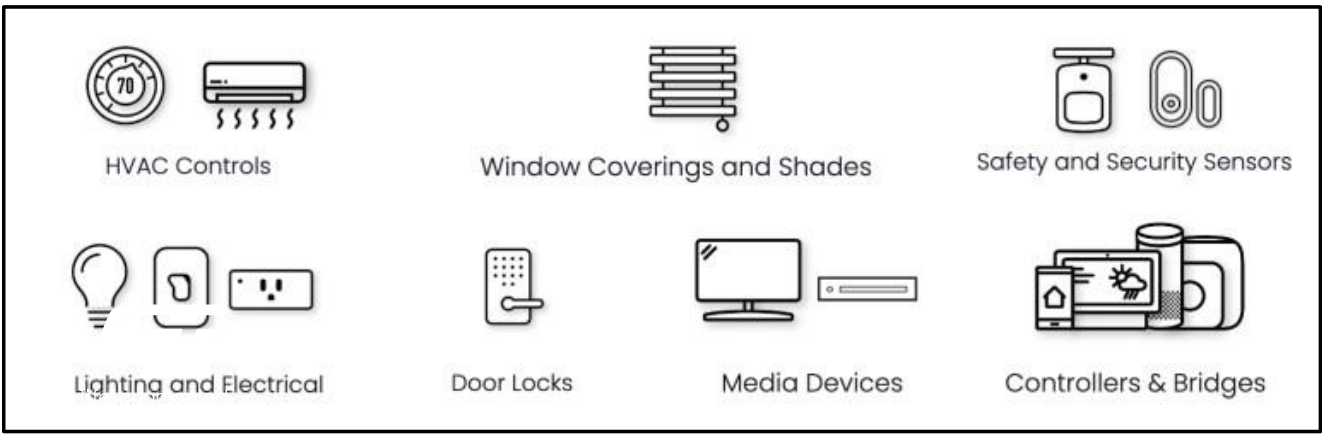
How Matter stacks up





Common application layer
Interoperability, simplified setup & control

IP-based
Convergence layer across all compatible networks

Secure
Comprehensive, Layered, Resilient, Agile
AES-128-CCM encryption with 128-bit AES-CBC

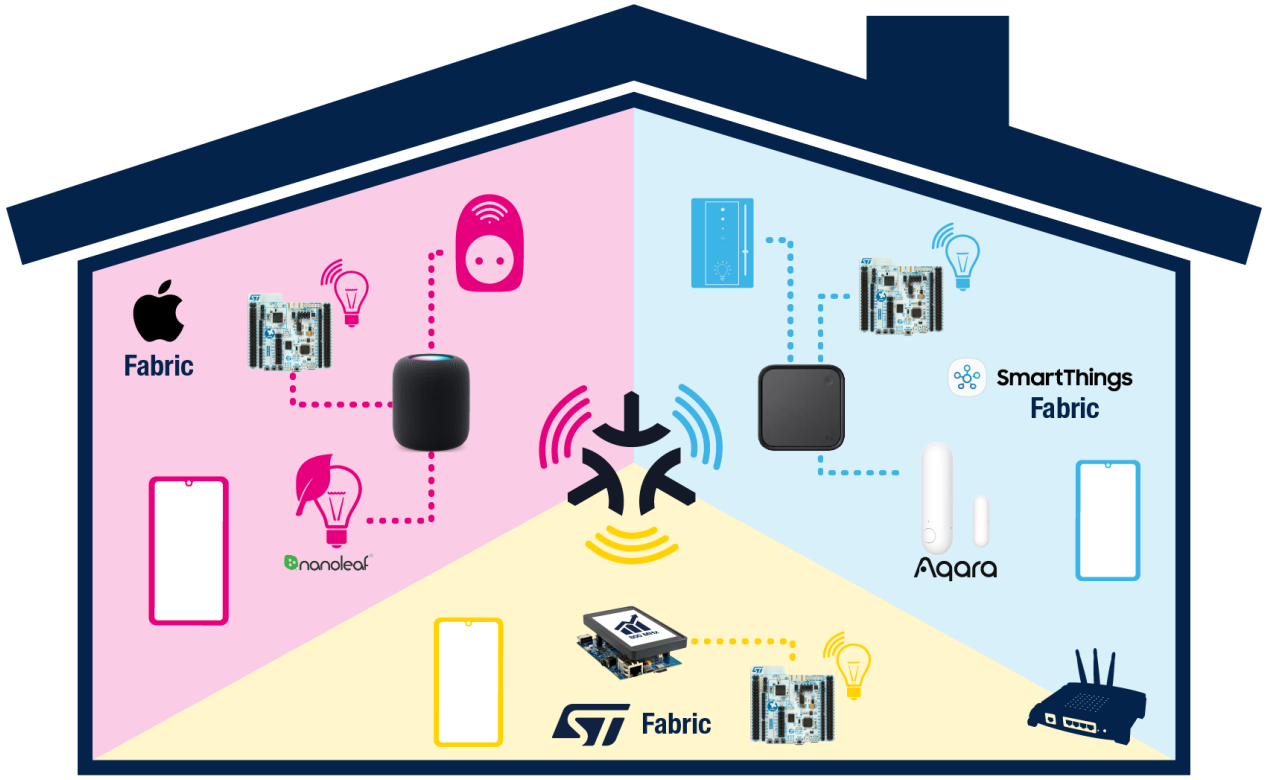
Common protocol across devices
Extendible to cloud

Common data model
Core operational functions, multiple device types

Low overhead
MCU-class computation, <1.5 Mbyte Flash

Multi-admin with Matter

Connect Matter devices to multiple ecosystems locally, securely & simultaneously



Consider multiple smart home gateways called “Fabric”

Commission your MATTER device to a gateway

Either gateway can control the MATTER device seamlessly

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Matter & security

Comprehensive
Layered approach

Strong
Well-tested standard cryptographic algorithms

Easy
Improve ease of use not decrease it

Resilient
Protect, Detect & Recover

Agile
Crypto-flexibility to address new developments and threats

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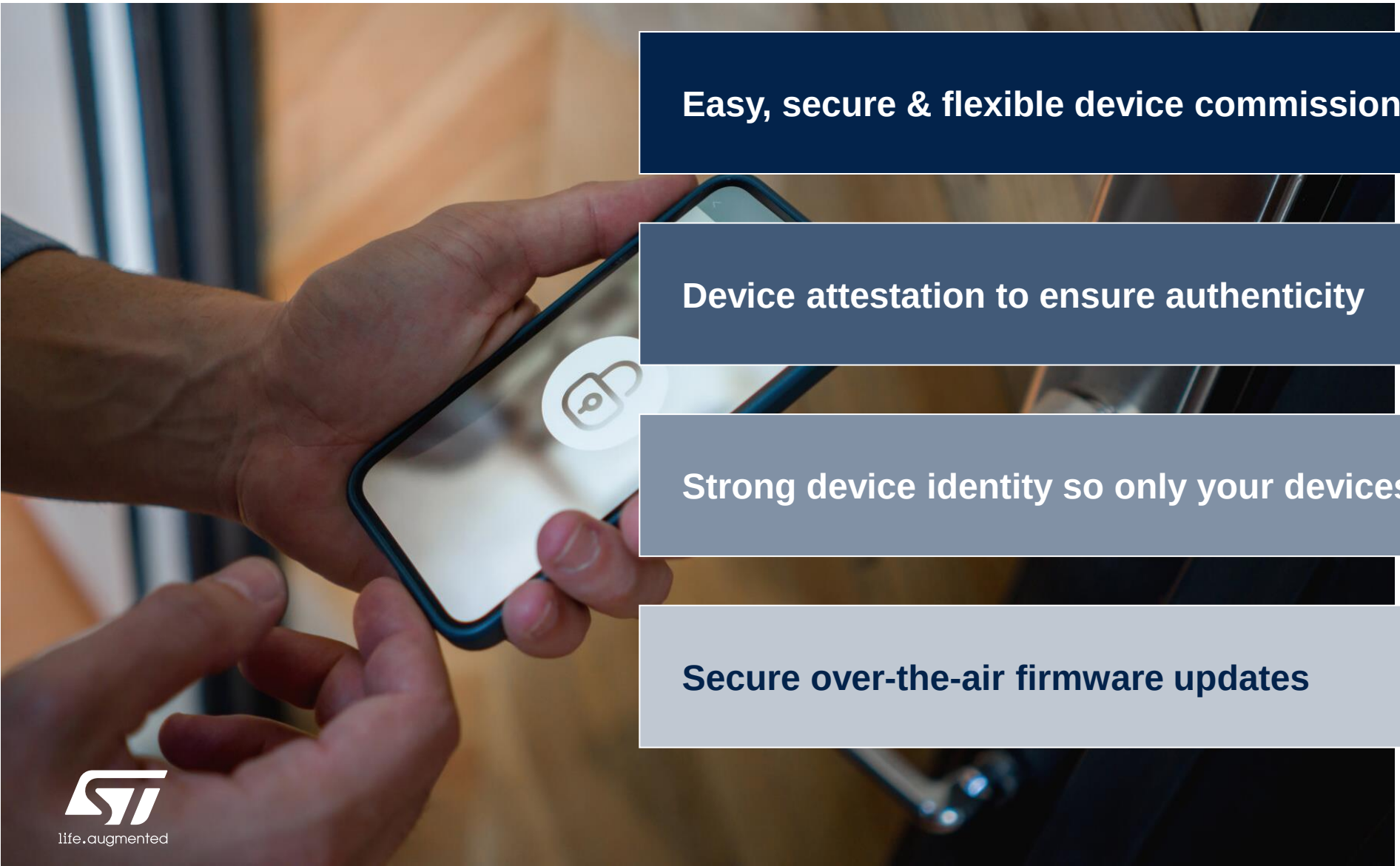
Matter & security



- **Easy, secure & flexible device commissioning**
- **Device attestation to ensure authenticity**
- **Strong device identity so only your devices can join your network**
- **Secure over-the-air firmware updates**

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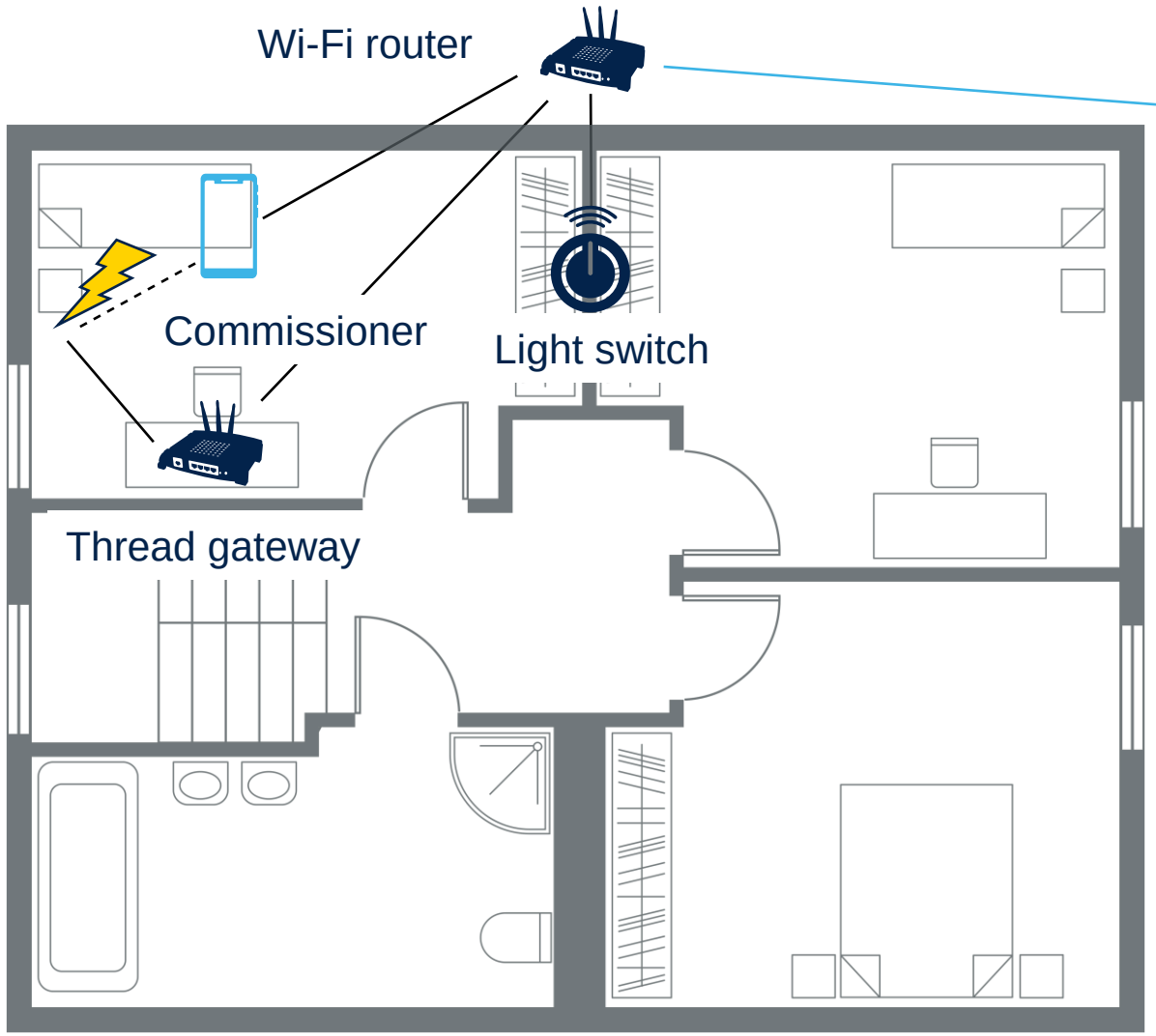
Matter device commissioning



1. Device is manufactured and shipped
2. User brings device to smart home
3. User scans QR code or taps the NFC communication with commissioner
4. User initiates commissioning on device
5. Device is commissioned
6. Device operates smoothly in smart home

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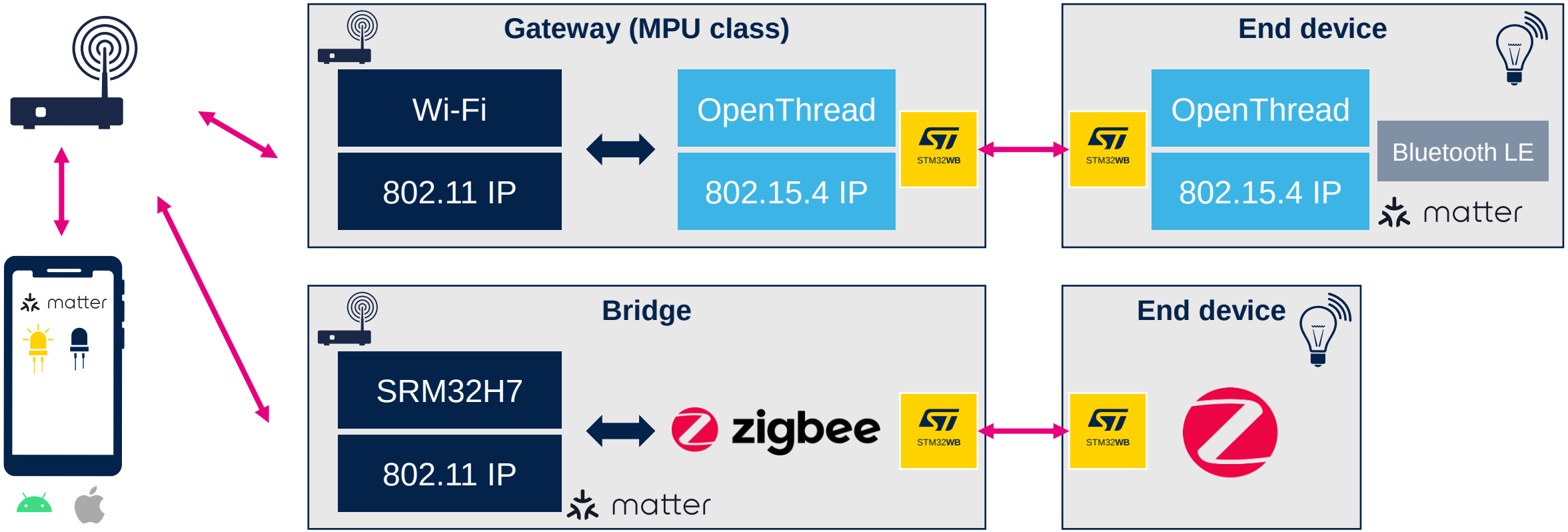
STMicroelectronics Matter delivery today

Get started with STMicroelectronics Matter delivery today!



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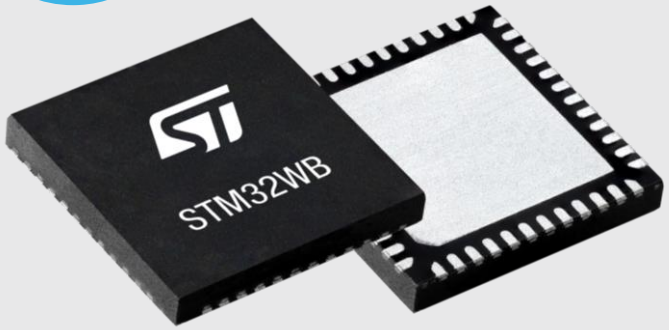
Discover our Matter portfolio

Device type	Connectivity	Wireless MCUs in standalone	Hosted architecture (MCU/MPU + radio)
Matter Gateway (Border Router)	Thread RCP Ethernet/WiFi	STM32WB	**RCP model** STM32H7 + STM32WB STM32MP1 + STM32WB
Matter over Thread end device	Concurrent Dynamic Thread- Bluetooth LE		**NCP model** STM32H7 + STM32WB STM32U5 + STM32WB STM32MP1 + STM32WB
Matter bridge to no-matter tech	Any		**NCP** STM32H7 + STM32WB STM32MP1 + STM32WB STM32H7 + STM32WL STM32MP1 + STM32WL

STM32WB



matter

OPENTHREAD
released by Google

zigbee

Bluetooth®

- **Dual core architecture with Arm® Cortex® M4 & Arm® Cortex® M0+**
- **Open 2.4 GHz radio multi-protocol**
- **IoT protection ready**
- **One-stop shop with STM32Cube ecosystem**

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STM32MP13

Cost effective	Affordable price point and most cost-effective PCB design on the market today
Easy-to-use	Dedicated HW & ecosystem for very fast integration into customer applications
Industrial grade	100% operating time during 10 years combined with -40°C < T_J < 125°C
Security	Highly secured processor with certifications addressing different markets
Power efficient	Best-in-class low power modes
Ready to go	Available in mass production and sampling at your preferred distributor