

Mixed-platform Matter Smart Home Demo

Description

Matter Smart Home Demo is IPv6-based communication protocol for smart home applications. It is developed and operated by the Connectivity Standards Alliance (CSA). This Matter Smart Home Demo is based on CSA specification for using NXP RW612 or NXP i.MX93 + Murata 2EL module as Matter Open Thread Border Router (OTBR) to create a Matter Smart home network. In addition, Silicon Labs – EFR32MG24, SiWG917 and NXP – MCXW71 can act as Matter End Device to join in Matter OTBR for Matter Smart Home application. Multiple Fabric features in Matter network can allow Matter End Devices to join in multiple Matter controller (OTBR) to extend the usage flexibility.



Features:

- NXP RW612 is a low power tri-radio wireless SoC ideal for basic Matter Smart Home OTBR application.
- NXP MCXW71 is a low power multiprotocol wireless SoC ideal for Matter End device application.
- Silicon Labs EFR32MG24 is a low power multiprotocol wireless SoC ideal for Matter End device application.
- Silicon Labs SiWG917 is a low power WiFi 6 plus BT 5.4 SoC ideal for Matter End Device application.
- NXP i.MX93 is a dual Cortex-A55 MPU ideal for advance Matter Smart Home OTBR with extended features.
- Murata LBES5PL2EL module integrated NXP IW612 inside for various Matter OTBR or end device applications.

Core Chips:

- NXP: i.MX93 family, RW612, MCXW71
- Silicon Labs: EFR32MG24, SiWG917 SoC
- Murata: LBES5PL2EL module

Applications:

- Windows and Doors Detector
- Occupancy sensor
- Thermostat
- Environment monitor
- Lighting
- Smart camera

Block Diagram:

