HomeBridge

Home Automation Gateway Platform for OEMs

Overview

HomeBridge® is a smart home automation IoT gateway solution for OEMs that offers a cost-effective and secure way of connecting Internet of Things devices to industry-leading cloud platforms with SDK-based connectivity. HomeBridge® can efficiently manage 40+ smart edge devices with standard features for industry applications. HomeBridge® is available as a white-label smart home solution for OEMs and IoT end-device manufacturers to easily alter according to their market needs. With ACL Digtal's IoT gateway, device manufacturers can complete their entire solution by utilizing a ready-to-production platform with other strategic advantages such as OEM customization, faster time to market, and a lower cost of ownership to build IoT solutions.

Feature Highlights

- Zigbee®, Wi-Fi - 802.11 B/G/N, IEEE 802.15.1

- IoTify, AWS IoT, Evrythng, Ayla Networks cloud support

- Connects to 40+ end devices with Zigbee and IEEE 802.15.1

- Multiple gateway device management

- iOS and Android mobile applications

- FCC/CE/RoHS certification

- Compact wall plug mount and tabletop mount

- White-label solution for OEMs

- Hardware-level encryption support

- Pre-integrated devices: Water valve, Dimmable plug, Bulb, Door, Motion, Water Leak, Temperature, and Humidity Sensors
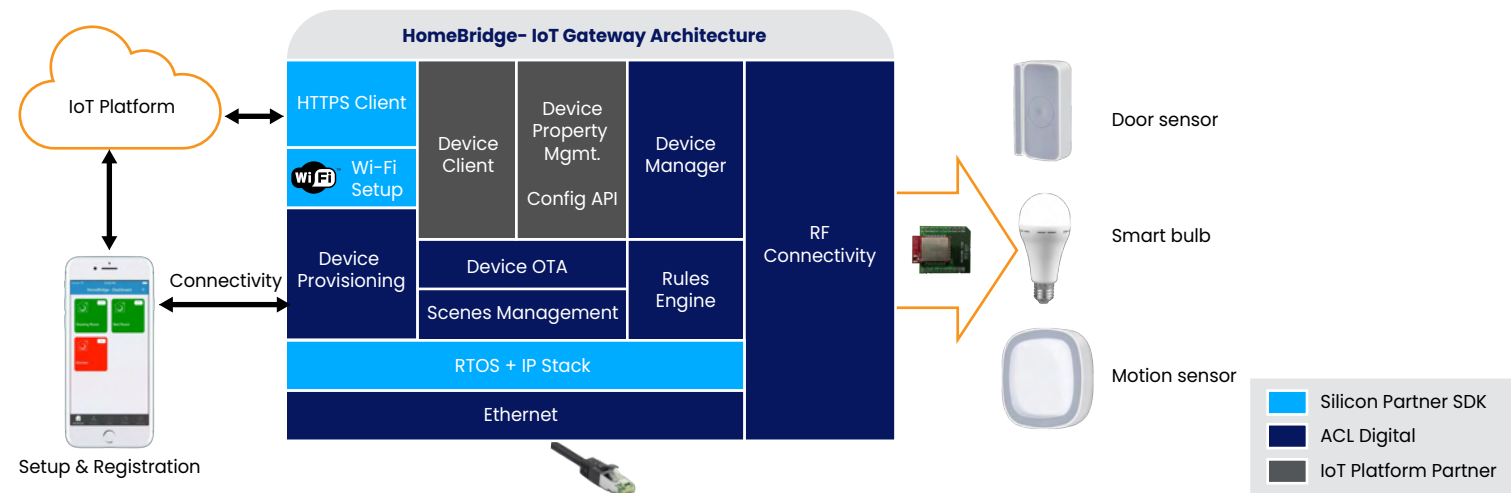
Home Automation

Healthcare Solutions

Asset Tracking

Smart Lighting

Solution Architecture

HomeBridge- IoT Gateway Architecture

Diagram elements: IoT Platform, Setup & Registration (phone), Connectivity, HTTPS Client, Wi-Fi Setup, Device Provisioning, Device Client, Device Property Mgmt., Config API, Device OTA, Scenes Management, Device Manager, Rules Engine, RF Connectivity, RTOS + IP Stack, Ethernet, Door sensor, Smart bulb, Motion sensor.

Legend:
- Silicon Partner SDK
- ACL Digital
- IoT Platform Partner

Technical Specifications

		HomeBridge-100	HomeBridge-200
CPU	**Processor:**	ARM Cortex-M4F CPU	ESP 32 Xtensa LX6 CPU
	OS Support:	FreeRTOS	
Electric	**DC Power:**	Input Voltage: 85/260VAC Current - Maximum: 20 mA	Input Voltage: 85/265VAC Current - Maximum: 20 mA or 5VDC, 350 mA
Protocols	**MQTT:**	Lightweight, publish-subscribe based messaging protocol designed for M2M, works on top of TCP-IP	
Memory	**SRAM:**	512KB	
	QSPI Flash:(External)	4MB (expandable up to 16MB)	
Connectivity	**Zigbee®:**	1x interface, NXP's JN5179 module working on 2.4GHz IEEE802.15.4 compliant	
	Ethernet:	1x interface 10/100Mbps Ethernet	
	Wi-Fi:	Marvell CU300 module working on 2.4GHz and IEEE802.11b/g/n compliant.	Espressif ESP 32 module working on 2.4GHz and IEEE802.11b/g/n compliant.
	IEEE 802.15.1:	Nordic's nrf52832 module working on 2.4GHz radio frequency, IEEE 802.15.1 Networking	
General	**Dimensions:**	L x W x H – 55 mm x 55 mm x 55 mm	
	Weight:	80 gm	
	Temperature:	0 °C to +70 °C	-20°C to +60 °C
	Mounting Options:	Wall Plug Mount	Wall Plug Mount and Tabletop Mount
Certification	**Pre-certified:**	CE, FCC, RoHS	

Note: Registered Trademark/Logo of IEEE 802.15.1 and Zigbee are properties of their individual owner