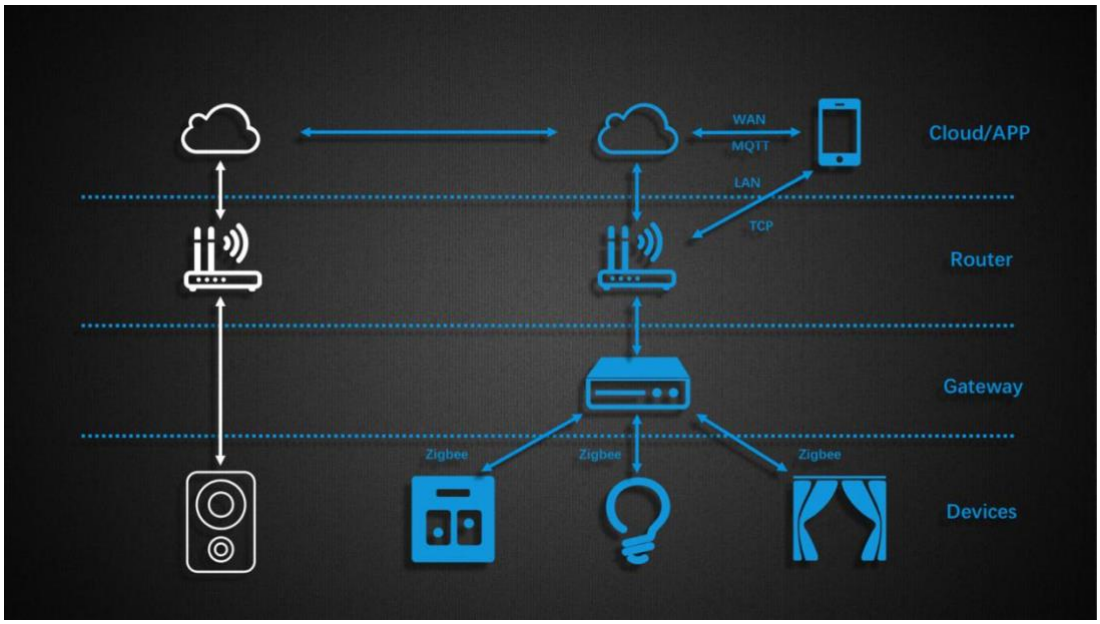
Introduction

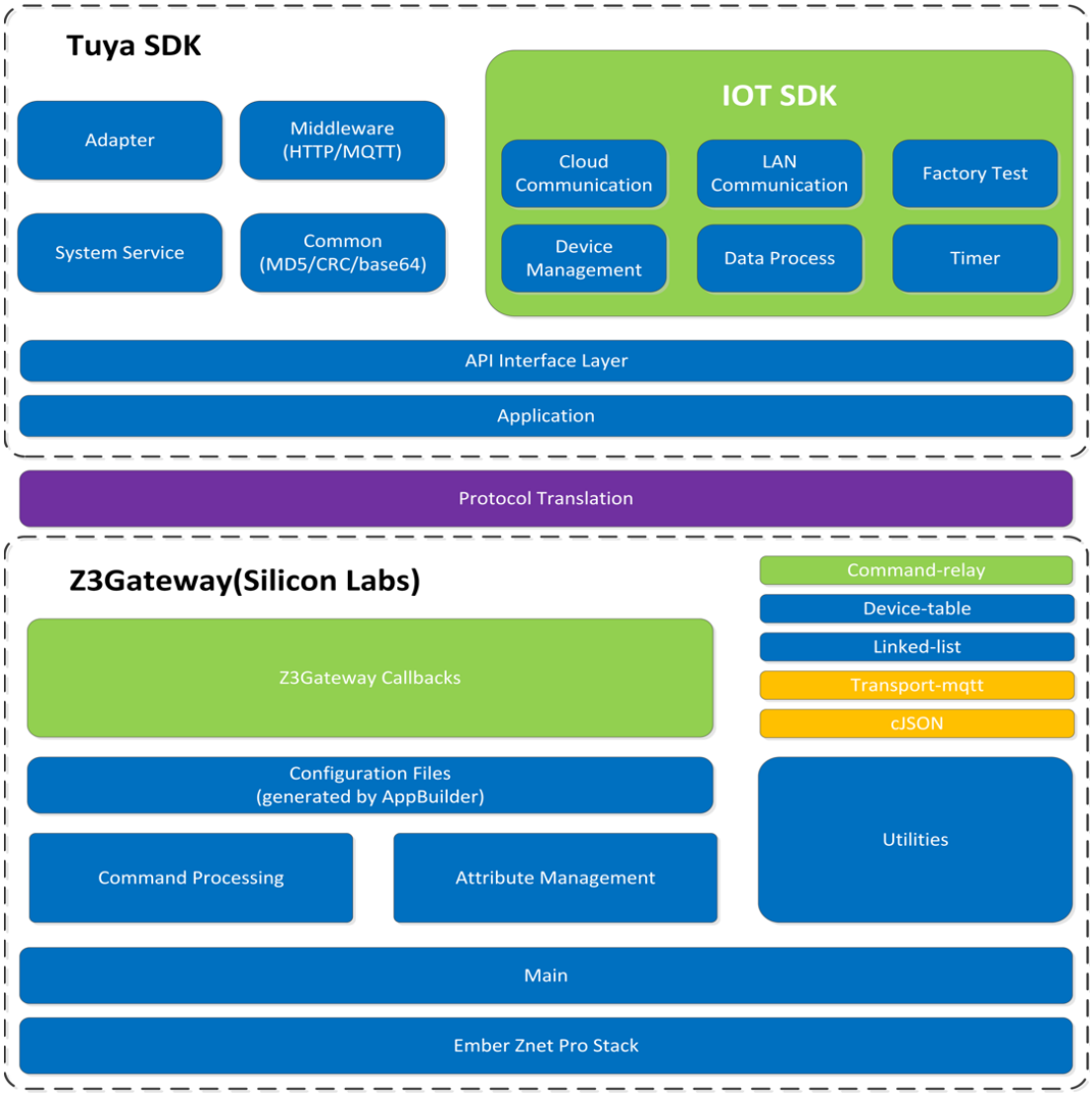
1.1 Introduction

ZXGWZ-04 is a wireless Zigbee gateway, is the central device of Zigbee network. Zigbee device is added to network through Zigbee gateway so as to communicate with other Zigbee devices. Zigbee gateway is connected to router through 2.4G WiFi for communication with Cloud and mobile, it is ok to check and control Zigbee devices on App.

1.2 Application Diagram



1.3 System Diagram



2, Product Specifications

2.1 Zigbee

Items	Parameter
Chip	EFR32MG13P732F512GM48
Standard	IEEE 802.15.4PHY/MAC Zigbee
Frequency	2.400-2.483GHz
Max output	19dBm
Dynamic output	>35dB
Transmission distance without any obstacles	>150m
Frequency error	±15ppm
Theoretical transfer rate	250kbps
Receiving sensitivity	Typical-102dBm，PER<10%
Total number of channel	16
Channel number	11~26
Network topology	support star/tree/mesh network
Antenna	PCB on-board antenna by default
Firmware update	Support OTA

2.2 Host System

Items	Parameter

Chip	RTL8711AM
Main frequency	166MHz
Chip Structure	Arm M3
Operating system	RTOS
Flash	4Mbit
DDR	2Mbit
USB	1 USB Host/Device，1 USB PHY
UART	1 Debug，1 Data
GPIO	10
Timer	2 hardware timer，1 watchdog
Indicator	1 power indicator，1 network indicator
Button	1 reset button

2.3 Electrical Specification

Items	Parameter
Adapter	110V ~ 240V AC，5V/1A DC
Working voltage	4.5V ~ 5.5V
Working temperature	-10-55℃
Working humidity	10%-90%RH（non-condensing）
Storage temperature	-20-60℃

Storage humidity	5%-90%RH （non-condensing）

2.4 Physical Specifications

Items	Parameter
Size	65mm x 65mm x14.5mm
Weight	30g

3, Product Functions

3.1 Zigbee Gateway

Support Zigbee 3.0 protocol, can add Zigbee sub-devices.

3.2 Reset Button and Indicator

Working status:

1. Red indicator blinks and blue indicator is on while pairing network;
2. After pairing is finished, red indicator is on and blue indicator is off.
3. Blue indicator blinks while connecting sub device.

3.3 Matching Network

1. press reset button for ≤3 seconds, will access to pairing network mode, it is valid within 1 hour, blue indicator will blink with stop.
2. while pairing network mode, press reset button for ≤5 seconds, will exit pairing network mode, blue indicator will be off.

3.4 Engineering model:

when gateway is working normally, press reset button continuously ≥10 times witin 10 seconds, then access to engineering model.

3.5 Restore Factory setting

Press reset button for more than 5 seconds until red indicator turns to blink.

3.6 Firmware Update

Support long distance automatic update or update manually.

3.7 APP

Support Tuya APP or OEM APP.