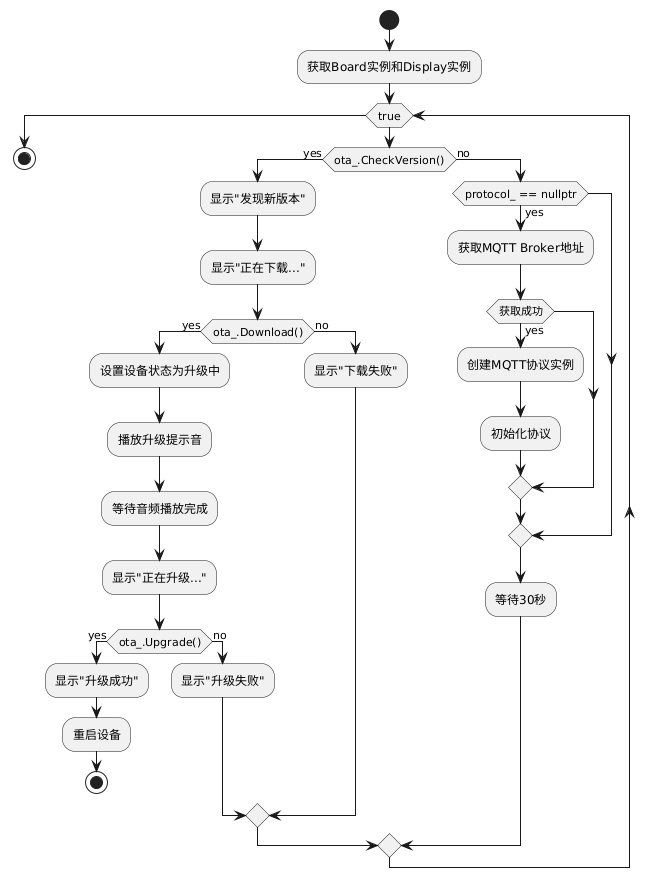
1. main.cc

初始化nvs存储，调起主循环application.start()

1. application.cc

同时创建主循环application.MainLoop(高优先)和版本检查CheckNewVersion两个任务

1. CheckNewVersion流程图



服务器地址：

OTA: https://api.tenclass.net/xiaozhi/ota/

QTT: post-cn-apg3xckag01.mqtt.aliyuncs.com（服务器返回）

第一步：请求OTA地址

I (5169) Ota: HeaderFirst: Device-Id

I (5169) Ota: HeaderSecond: d8:3b:da:4e:00:9c

I (5189) Ota: Check version URL: https://api.tenclass.net/xiaozhi/ota/

I (5199) Ota: Post data:

发送的数据为：board.GetJson()

{

"flash\_size": 16777216,

"minimum\_free\_heap\_size": 8315048,

"mac\_address": "d8:3b:da:4e:00:9c",

"chip\_model\_name": "esp32s3",

"chip\_info": {

"model": 9,

"cores": 2,

"revision": 2,

"features": 18

},

"application": {

"name": "xiaozhi",

"version": "1.0.1",

"compile\_time": "Jan 24 2025T21:25:56Z",

"idf\_version": "v5.4",

"elf\_sha256": "fb88e76b30a5116581304bffcec5e39d902970dcfc14201e3c9cdc9a62ece4c3"

},

"partition\_table": [

{

"label": "nvs",

"type": 1,

"subtype": 2,

"address": 36864,

"size": 16384

},

{

"label": "otadata",

"type": 1,

"subtype": 0,

"address": 53248,

"size": 8192

},

{

"label": "phy\_init",

"type": 1,

"subtype": 1,

"address": 61440,

"size": 4096

},

{

"label": "model",

"type": 1,

"subtype": 130,

"address": 65536,

"size": 983040

},

{

"label": "ota\_0",

"type": 0,

"subtype": 16,

"address": 1048576,

"size": 6291456

},

{

"label": "ota\_1",

"type": 0,

"subtype": 17,

"address": 7340032,

"size": 6291456

}

],

"ota": {

"label": "ota\_0"

},

"board": {

"type": "lichuang-dev",

"ssid": "chenyuyang",

"rssi": -66,

"channel": 2,

"ip": "192.168.31.226",

"mac": "d8:3b:da:4e:00:9c"

}

}

I (5289) EspHttp: Opening HTTP connection to https://api.tenclass.net/xiaozhi/ota/

I (5309) AFE\_VC: mode: 1, (Nov 5 2024 16:02:49)

I (5309) wifi:<ba-add>idx:1 (ifx:0, a4:39:b3:09:ef:a8), tid:0, ssn:0, winSize:64

I (5319) AudioProcessor: Audio communication task started, feed size: 160 fetch size: 512

I (5319) MODEL\_LOADER: The storage free size is 20672 KB

I (5329) MODEL\_LOADER: The partition size is 960 KB

I (5329) MODEL\_LOADER: Successfully load srmodels

I (5339) WakeWordDetect: Model 0: wn9\_nihaoxiaozhi\_tts

I (5339) AFE\_SR: afe interface for speech recognition

I (5349) AFE\_SR: AFE version: SR\_V220727

I (5349) AFE\_SR: Initial auido front-end, total channel: 2, mic num: 1, ref num: 1

I (5359) AFE\_SR: aec\_init: 1, se\_init: 1, vad\_init: 1

I (5369) AFE\_SR: wakenet\_init: 1

MC Quantized wakenet9: wakenet9l\_tts1h8\_你好小智\_3\_0.631\_0.635, tigger:v3, mode:0, p:0, (Nov 5 2024 16:02:49)

I (5529) esp-x509-crt-bundle: Certificate validated

I (5549) AFE\_SR: wake num: 1, mode: 1, (Nov 5 2024 16:02:49)

I (5549) WakeWordDetect: Audio detection task started, feed size: 512 fetch size: 512

I (5549) MQTT: Connecting to endpoint post-cn-apg3xckag01.mqtt.aliyuncs.com

I (5799) esp-x509-crt-bundle: Certificate validated

I (6099) Ota: Response:

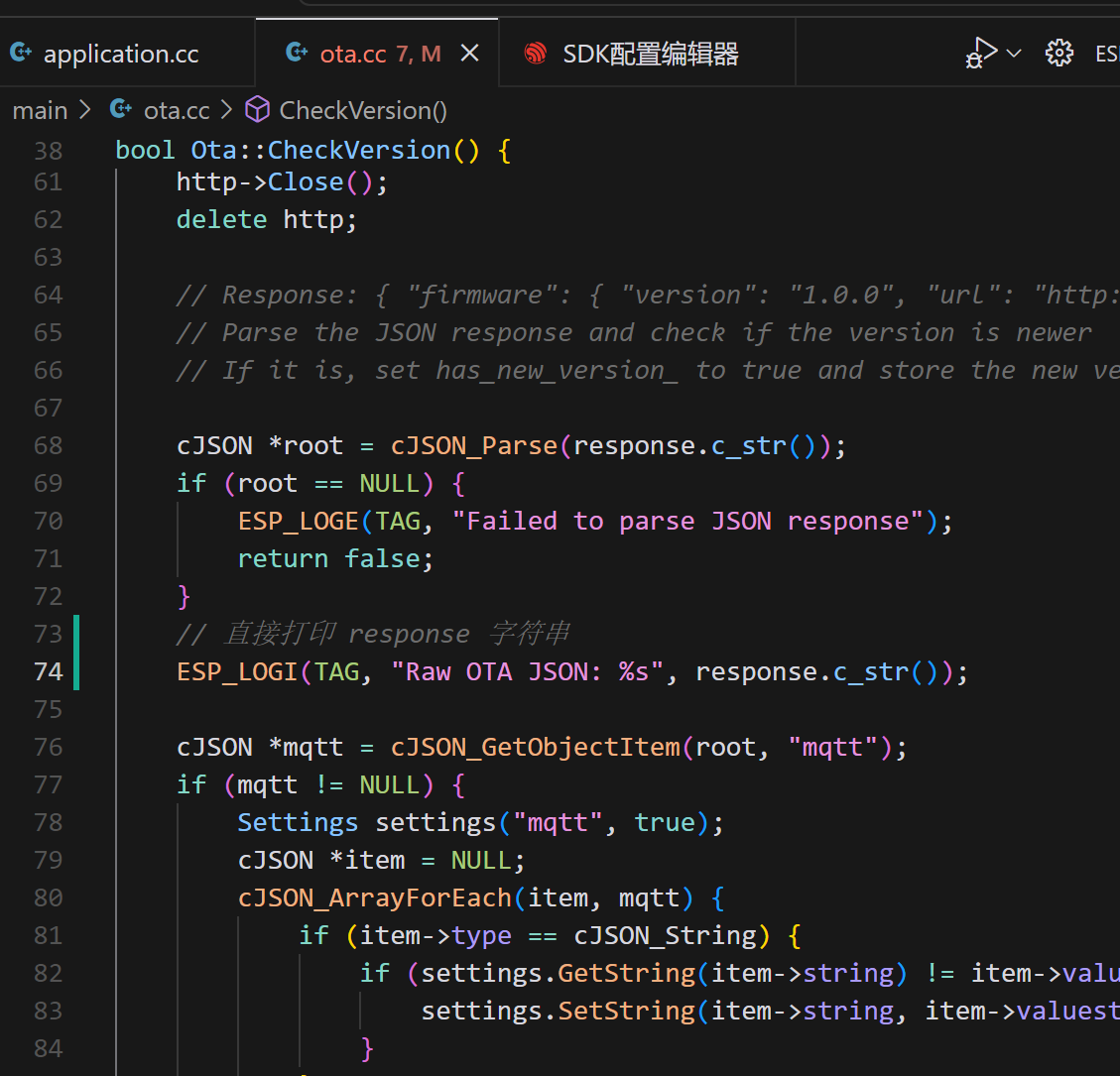
{"mqtt":{"endpoint":"post-cn-apg3xckag01.mqtt.aliyuncs.com","client\_id":"GID\_test@@@d8\_3b\_da\_4e\_00\_9c","username":"Signature|LTAI5tF8J3CrdWmRiuTjxHbF|post-cn-apg3xckag01","password":"BSRV6VwHfYNkxAAEmhXLbf7pHZ4=","publish\_topic":"device-server","subscribe\_topic":"devices/d8\_3b\_da\_4e\_00\_9c"},"firmware":{"version":"1.0.1","url":""}}

I (6119) Ota: Current is the latest version

I (6119) Ota: Running partition: ota\_0

I (6179) MQTT: Connected to endpoint

QTT服务器的地址是OTA检查时返回的



# 如何自建服务器？

## OTA服务器

接受post请求，返回MQTT服务器（二）信息以及硬件版本信息

## MQTT服务器