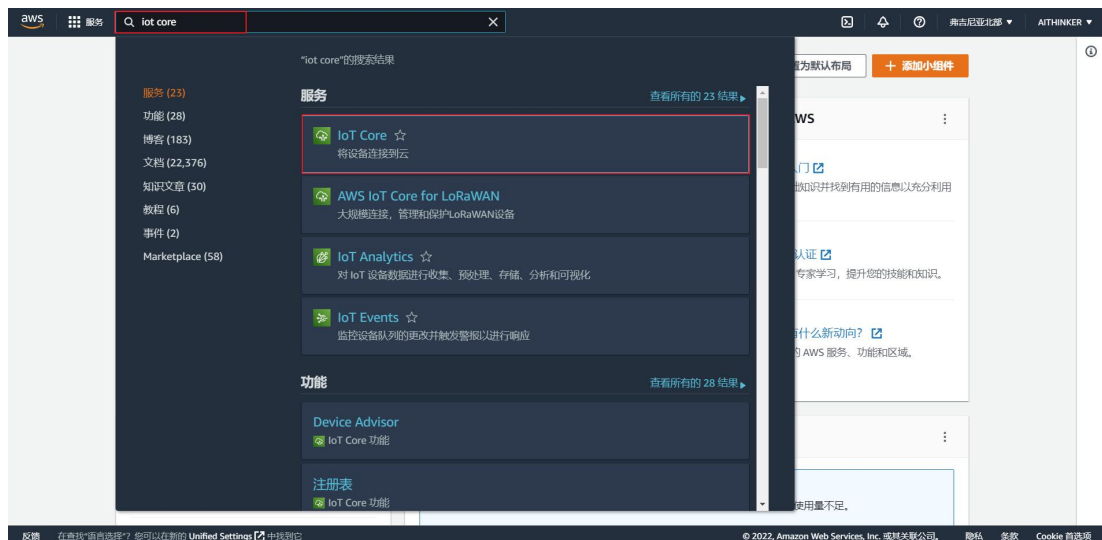
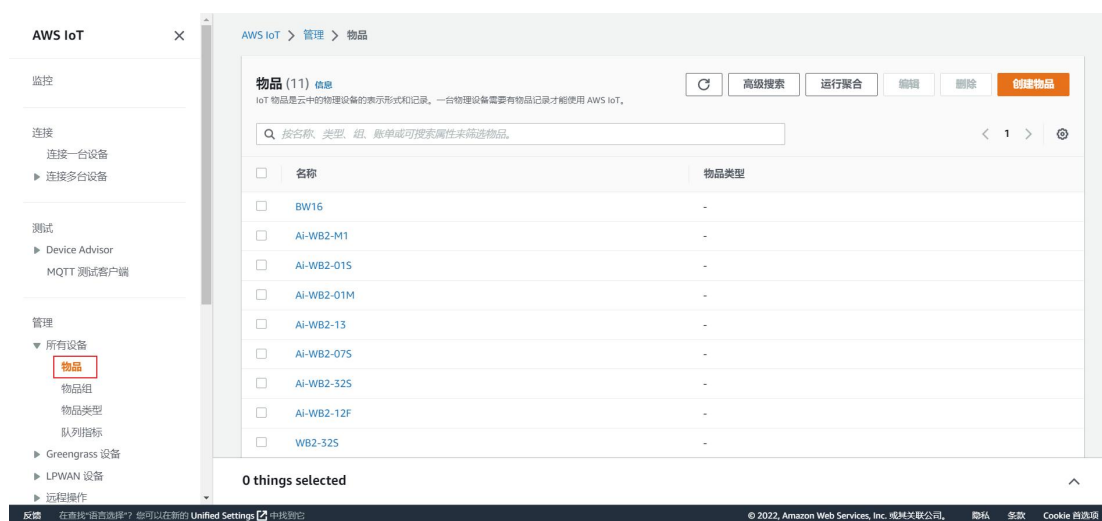


# 一. 云平台创建设备

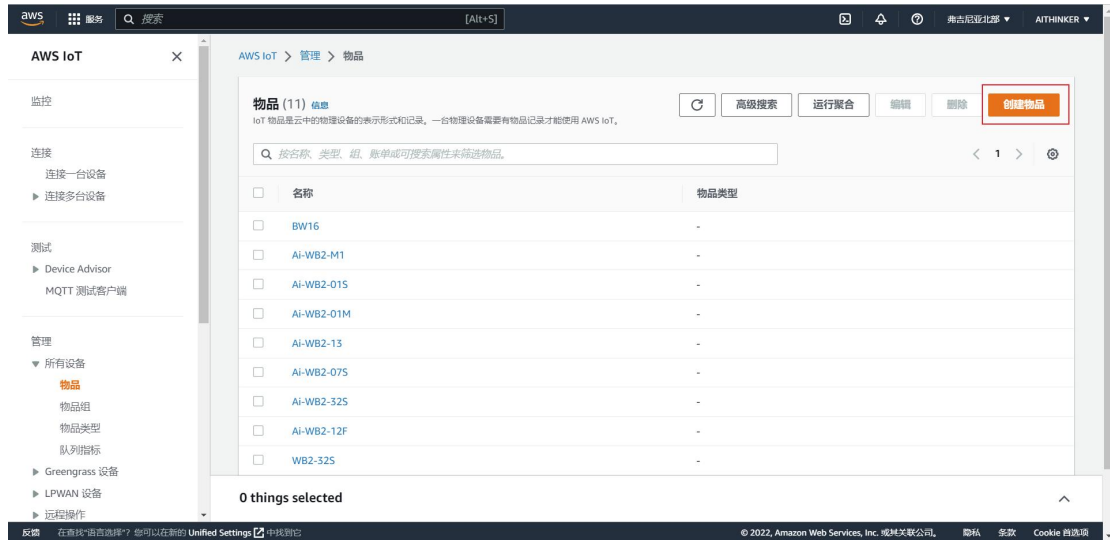
## 1. 进入 iot core 控制台



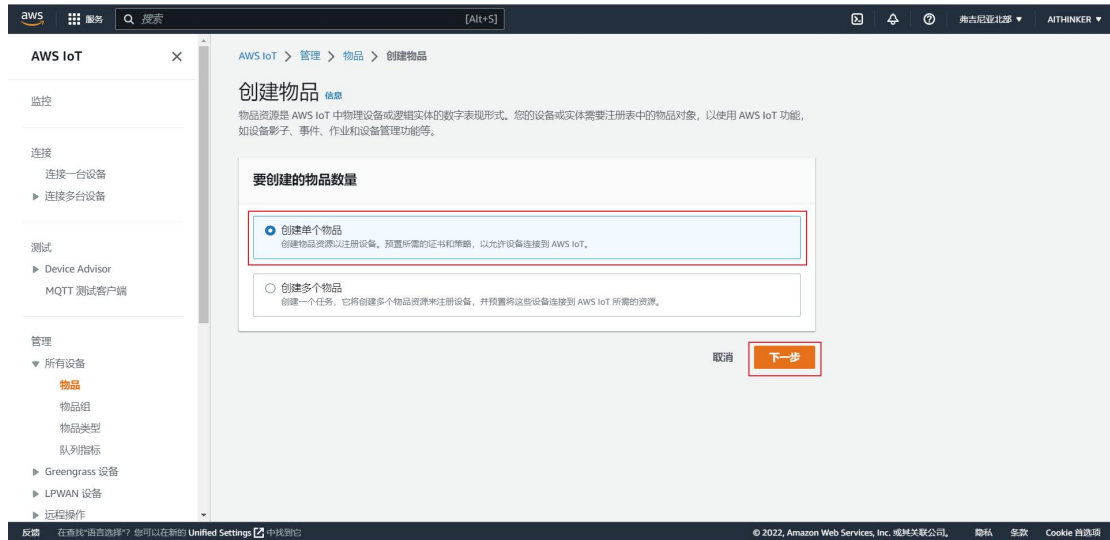
## 2. 点击物品进入创建物品界面



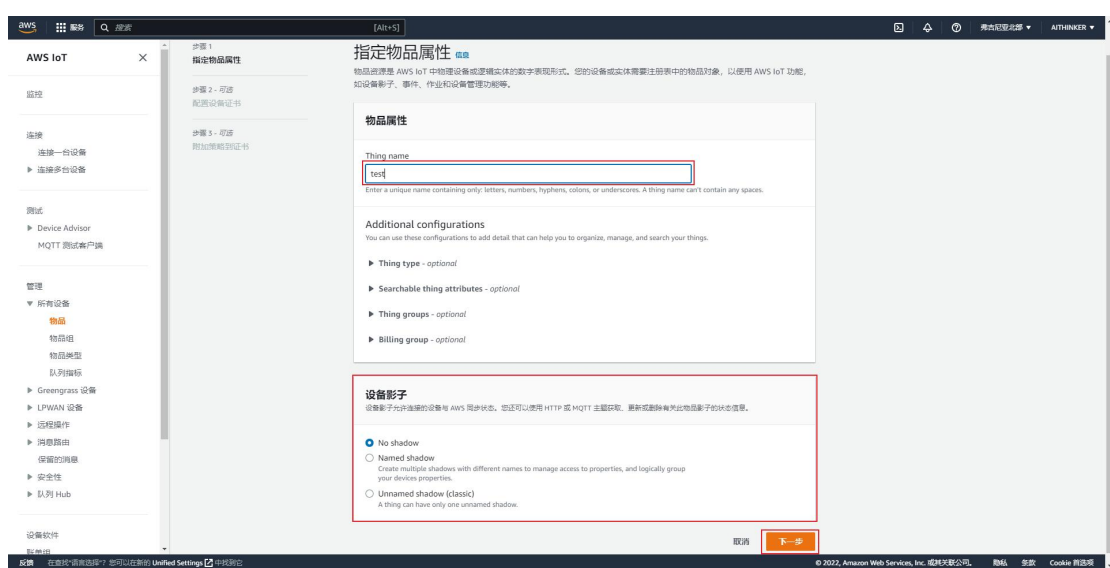
## 3. 点击创建物品



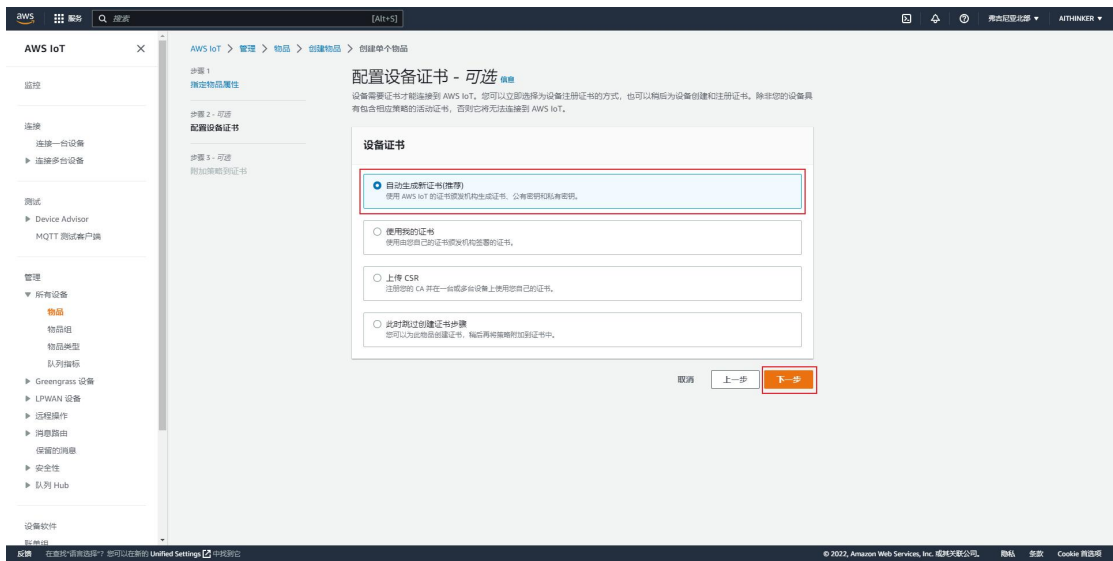
#### 4. 创建单个物品



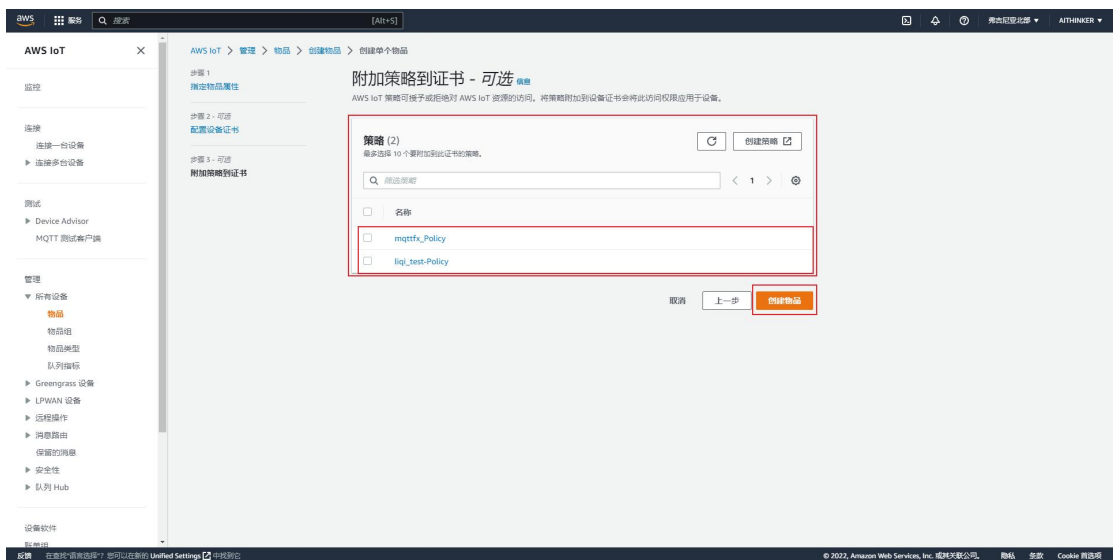
#### 5. 设置物品属性



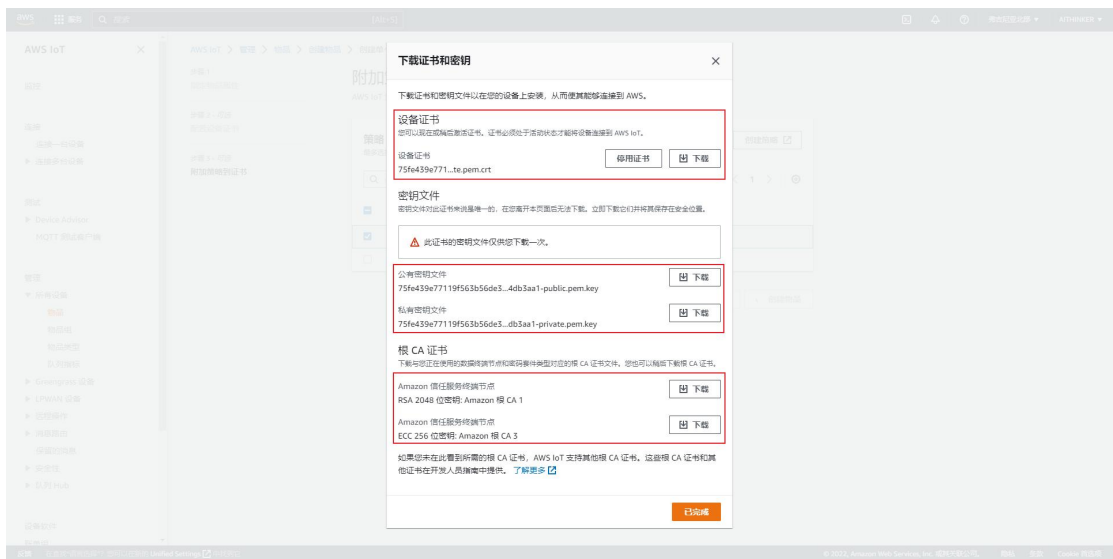
#### 6. 选择自动生成证书



## 7. 选择策略



## 8. 证书下载与保存

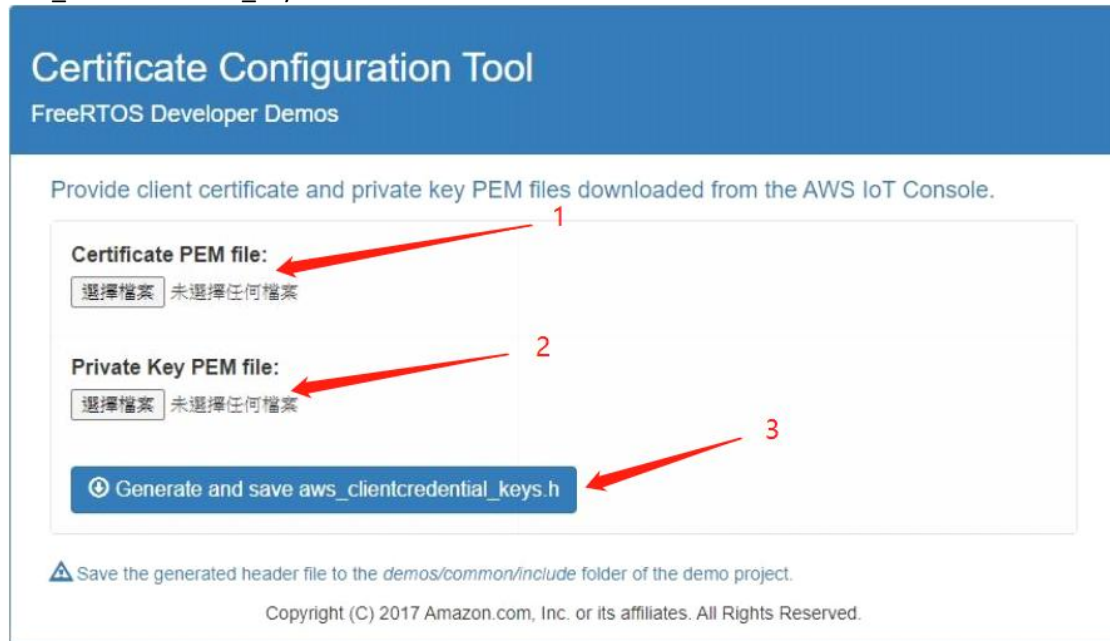


## 二. SDK 参数替换

### 1. SDK 证书修改

#### 1.1 生成证书

使用amazon-freertos/tools/certificate\_configuration/CertificateConfigurator.html生成aws\_clientcredential\_keys.h文件。



#### 1.2 替换 aws\_clientcredential\_keys.h 文件

替换后的证书文件：

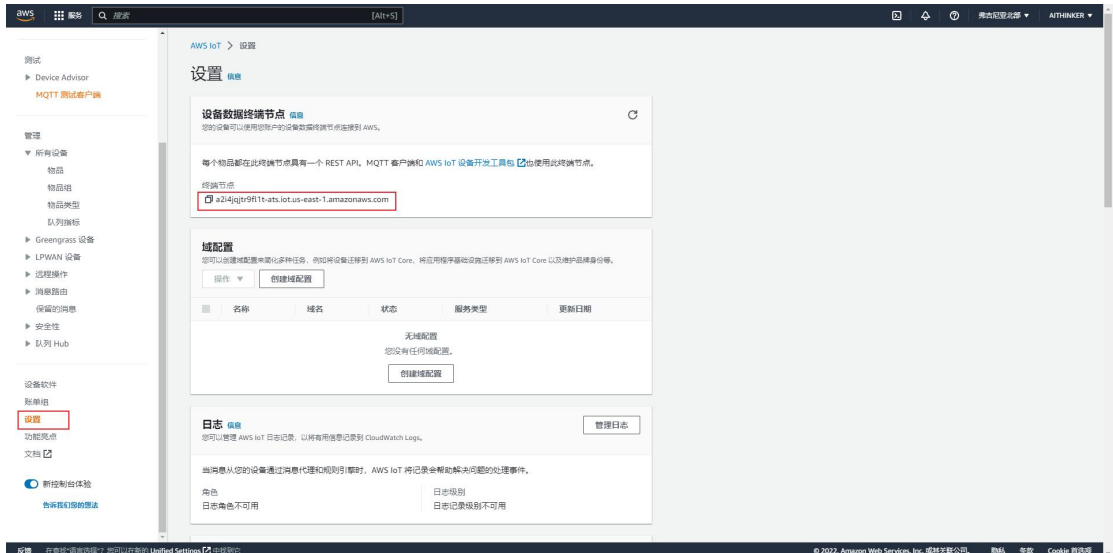
```
#define keyCLIENT_CERTIFICATE_PEM \  
"-----BEGIN CERTIFICATE-----\n\  
"MIIDWTCCAkGgAwIBAgIUFIARUMF1oBacspDpI+/Fwr7HUKswDQYJKoZIhvcNAQEL\n\  
"BQAwwTTLMEkGA1UECwwxQW1hem9uIFd1YiBTZXJ2aWwvY2FzaGluZ3RvbiBDPVV0\n\  
"S5jLiBMPVNLyXR0bGUgU1Q9V2FzaGluZ3RvbiBDPVV0TMB4XDTEyMTAyNDAMZy\n\  
"0VoXDTQ5MTIzMTIzNTk1OVowHjEcmBoGA1UEAwwTQVd0TIElVVCBDZXJ0aWwv\n\  
"ZTCCASiWdQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEBANrvA8URyK/6EDepWmH4\n\  
"0yllfMXnYUyPspw31idyedYaCoV4bpJgXfjG/dsnbV3h+Am3LyBmYmsWh2FYPN\n\  
"FDiHk1NYBAejGp7kreivMRds1cEphYRZAe0pGDfaZNIkA0820zIy00FDt1oFcJ39\n\  
"pDgP5AlbwBt+b22usMHPQIKF6cLPKHwfwjToCjgS06UpX8Uf7592N2eno9cQGTRG\n\  
"HvPgdsVxIUarpZaW1w1zZ93j26V/aVCMXk5uDin8HKMUAjU+e7PJXgBqlnnsJCsY\n\  
"S8nmNneQwKYfj4d0uIMKuXQ0HoSjd6oWlkcPnfvywWBy3DuWmGdHcKrYbjA6mGe9\n\  
"NecCAwEAANgMF4wHwYDVR0jBBgwFoAU3SBxu4dJXwZtzxz7Rz9c5Jtq8KowHQYD\n\  
"VR00BBYEFBDSxZhQkTecm8zKXXPEVpfPYUPMAwGA1UdEwEB/wQCMAAwDgYDVRO\n\  
"AQH/BAQDAgeAMA0GCSqGSIb3DQEBCwUAA4IBAQBgAlUS5/k1Yiz9zh3AYkTGHLMQ\n\  
"ZzYWJI+0mGbhXiQwVoVpzJERkt5zWQ0aw+DGqZgV/0HMh10kU7vJPF1rrC+KX1aC\n\  
"mtNjKccxlVwaAc0xvh4Fq6wVcrBtdi+iIJNA/9X0nvX2w4YbzZUoHJvyjsKQmhhZ\n\  
"nUENXVn+xfhyzygg/bxK5Ag+R7EAfQHqP4YUIBXiW/g1nhlqp0q1HTRMzoXhk9rr\n\  
"d3wTtJtb2vbQZK9hfJrtffjcc4biR40H16dfBRtBjzACw0Gt7W/5baXkmY6Ywmi\n\  
"sYh6129WZsCm6UqlLSyr0z79U0b1N/P2IxrDwHXDdH5R0Pcv0q1K9n3VX0Zn\  
"-----END CERTIFICATE-----"
```



```
#define keyCLIENT_PRIVATE_KEY_PEM \  
"-----BEGIN RSA PRIVATE KEY-----\n\  
"MIIEpAIBAAKCAQEA2u8DxRHir/oQN6laYfjTKWV8xedhTI+ynDDfWJ3J51hoKhXh\n\  
"ukmBd+0Mb92ydtXeH4CbcvIGZiAXaHYVg80U0IeTU1gEB6ManuSt6K8xF2zVwSmF\n\  
"hFkB7SkYN9pk0iQDTzY7MjLQ4U03WgVwnf2k0A/kCVvAG35vba6wwc9AgoXpws8o\n\  
"dZ9aN0gImBLTpSnHxR/vn3Y3Z6ej1yoZNEYe8+B2xXEhRquLlpbVbXNn3ePbpX9p\n\  
"UIXeTm40KfWcoXQCNT57s8LeAGqWeewkKxhLyeY2d5DAph+Ph3S4gwq5dDQehKMP\n\  
"ghaWRw+d+/KZYHLc05aYZ0dwqthuMDqYZ7015wIDAQABAoIBAQC4cRxP7geQma8H\n\  
"9Zi7aREcku9nGuMRyQ3EIDhJQ8VRLV2z9vNqKZT1F7K8m506GDsldwd+8v8JGBf\n\  
"1XWssDcU2ML5N/FNLc/DhQwuN0m4XmxGa2Ccew/wa0qKQ2ck0kondZyxUbY/0Piq\n\  
"0mJp98FdqawHbNCPWRku4jvTlCenXsjeh3CKmDYMY2ZVZc1C2wciEdT09JBE57\n\  
"Bw+Lr+/oYJLMbFTdQb9aPr0g1sfh8PD+F2rP1rbTGsc+5oRq/sc5BdfmT4oavjs3\n\  
"+DA57Yyuve7Mw9tLYQ1HHPsm7I6MK1m9aiRON8drPWgagr9l4PCMCCdLyF4JY0Iy\n\  
"iWiE657BAoGBAPqaE8d5cHWyszP0AktDRN7BZ06Me14p3fqwtp7xN69ozzkxQ3C\n\  
"vt+XmfNWRUjk4nNUIrcZf9N/dD/DJzAFojoBYHtxbUjBLZUa8LqFriwWjuGLX7Q\n\  
"cETYLAWg6TqMXACUL3pe2Twy9tRdoq6AfnrGNwvJJBB5iI+8ZumUYOL5AoGBAN+m\n\  
"Tkg0mXKs9sQcyQmUDb0E2BjCyw0TDHylW5E0I7jDkAeABI54+GF91mbUyI5S3ENU\n\  
"lLumG9l04xgd9B97SQGRhezIyCvTiT3g8QaPVf0TnTog8dKA3P88afKcZkAjum6\n\  
"Dfn2tBsIb7g0GTILmIt2VZyDNb9BP6R/KS4cNDffaAoGBAN3rW+ClLgVknU91aJP\n\  
"shFhSbRGC2nTwZ0dbHh2alyLqsZd+fK5prXyVo66sxhe0HrQ4v0qQ5xTneppM2a/\n\  
"Vm3vkjU+uPxYtbj45n0GrLq2L0lkVxgEl78ff8It0tva0A77KyA+pjN7jEF7ufi2\n\  
"KUsoBM8XDCzasyg20xxWHYzhAoGAW5cI4fuQneT1neoIGkYUztjoChN6aXT7Evv\n\  
"xvRawLVC7xCoXIrDgnxvuUPSTHn4HnIBH0Z3iE/S0Yhdq93g3vsISB9J22W+89e\n\  
"Bbi3k2v1bLPHNNTvLFu6a8/fFBu12GwIgoCkG5oF3pNvgBjjcuHAR7t4TF3VSXGG\n\  
"FMsaG3MCgYBFV9v5eSsiDkgug9VESHU7wky51ad82ohlPIJWmHRRxKdx4ZyzBJy\n\  
"ztDW52sBxNuCcY85RmSX5LXYwIZznq0tG8I4eb09IgbIbXpZIG031aF2ak1U9jA4\n\  
"KCNrIMP96rX5Vs4WwDPZt7e/ddq7MQ0i+tPmlcy/acoD20nj/ALY5g==\n\  
"-----END RSA PRIVATE KEY-----"
```

## 2. 替换 MQTT 节点和名称

### 2.1 设置终端节点



### 2.2 更换节点和设备名称

```
#define clientcredentialMQTT_BROKER_ENDPOINT "tbnn221tbgfpu.deviceadvisor.iot.us-east-1.amazonaws.com"

/*
 * @brief Host name.
 *
 * @todo Set this to the unique name of your IoT Thing.
 * Please note that for convenience of demonstration only we
 * are using a #define here. In production scenarios the thing
 * name can be something unique to the device that can be read
 * by software, such as a production serial number, rather
 * than a hard coded constant.
 */
#define clientcredentialIOT_THING_NAME "BW16"
```

### 3. 替换 SSID 和 PASSWORD

```
#define clientcredentialWIFI_SSID "TEST1"

/*
 * @brief Password needed to join Wi-Fi network.
 * @todo If you are using WPA, set this to your network password.
 */
#define clientcredentialWIFI_PASSWORD "123456789"
```

## 三. SDK 编译烧录

### 1. 编译 SDK

通过./make\_all.sh 进行编译，输出 all build success!为编译成功

```
/home/hjz/temp/RealtekAmebadSDK/RTLAmebadSDK/project/realtek_amebaD_va0_example/GCC-RELEASE/project_hp/asdk/gnu_utility/pad.sh /home/hjz/temp/RealtekAmebadSDK/RTLAmebadSDK/project/realtek_amebaD_va0_example/GCC-RELEASE/project_hp/asdk/image/km4_image2_all.bin
/home/hjz/temp/RealtekAmebadSDK/RTLAmebadSDK/project/realtek_amebaD_va0_example/GCC-RELEASE/project_hp/asdk/gnu_utility/image_tool/imagetool.sh /home/hjz/temp/RealtekAmebadSDK/RTLAmebadSDK/project/realtek_amebaD_va0_example/GCC-RELEASE/project_hp/asdk/image/km4_image2_all.bin /home/hjz/temp/RealtekAmebadSDK/RTLAmebadSDK/project/realtek_amebaD_va0_example/GCC-RELEASE/project_hp/asdk/../../project_lp/asdk/image NONE
size = 856064
checksum 51250ce
===== Image manipulating end =====
make[1]: 离开目录"/home/hjz/temp/RealtekAmebadSDK/RTLAmebadSDK/project/realtek_amebaD_va0_example/GCC-RELEASE/project_hp/asdk"
all build success!
```

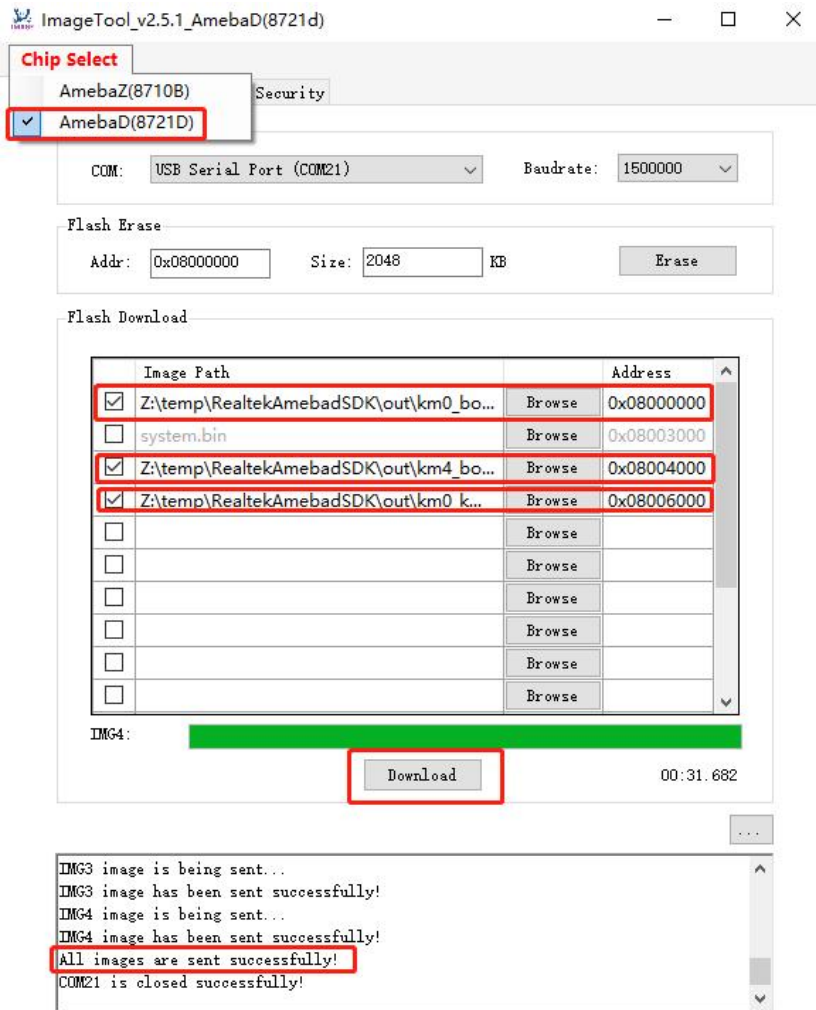
### 2. 烧录固件

#### 2.1 进入烧录模式

把 boot 引脚拉低，然后对模组进行复位，从而进入烧录模式。

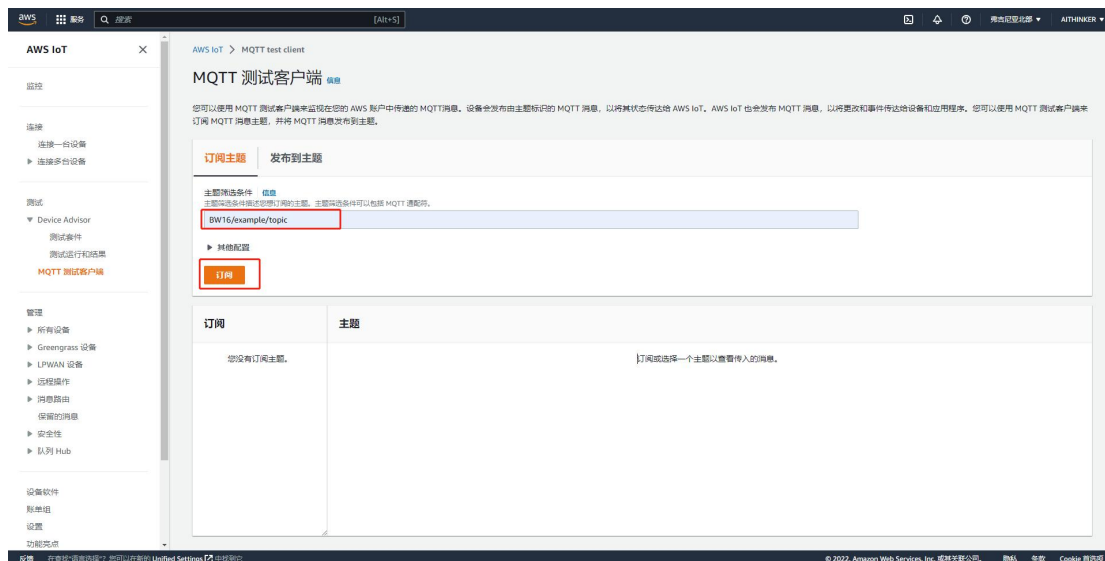
#### 2.2 烧录

选择芯片型号，选择相关固件，点击 Download，输出 All image are send successfully 则为烧录成功。



## 四. 云端连接测试

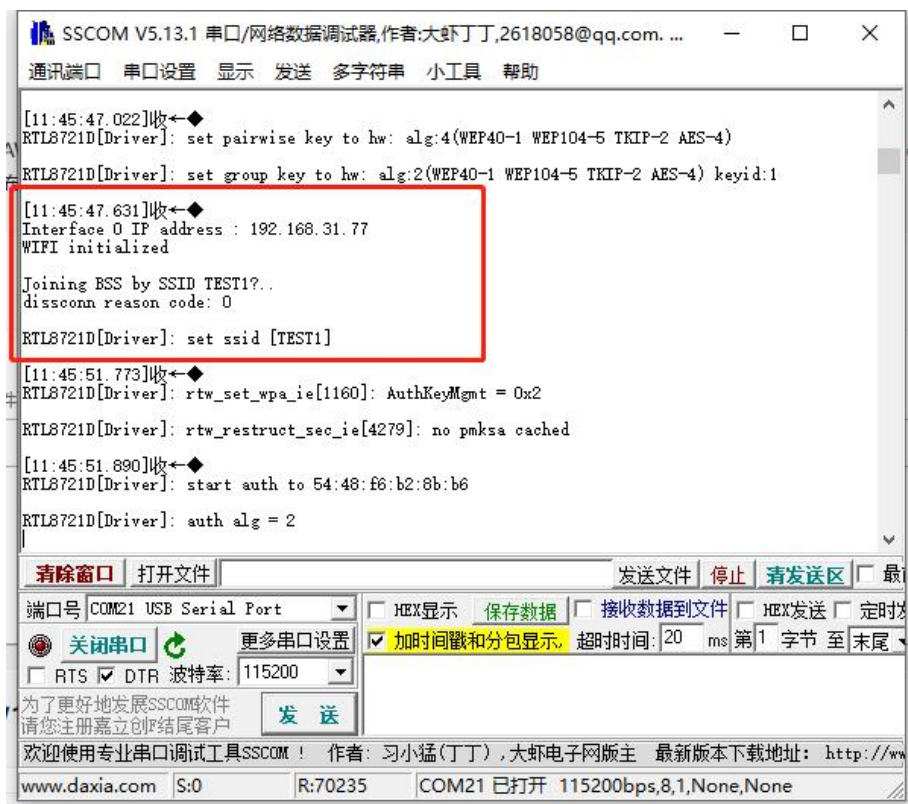
### 1. 在 AWS IOT 控制台订阅 BW16/example/ topic 主题



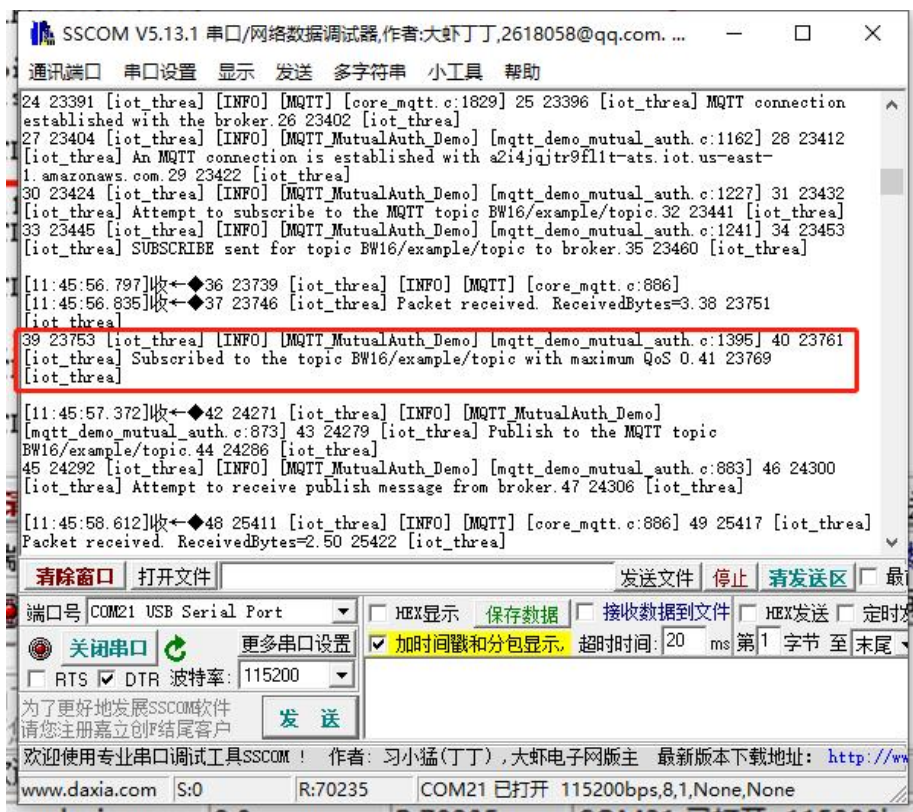


## 2. 复位设备，查看 log 输出

### 2.1 连接 WiFi

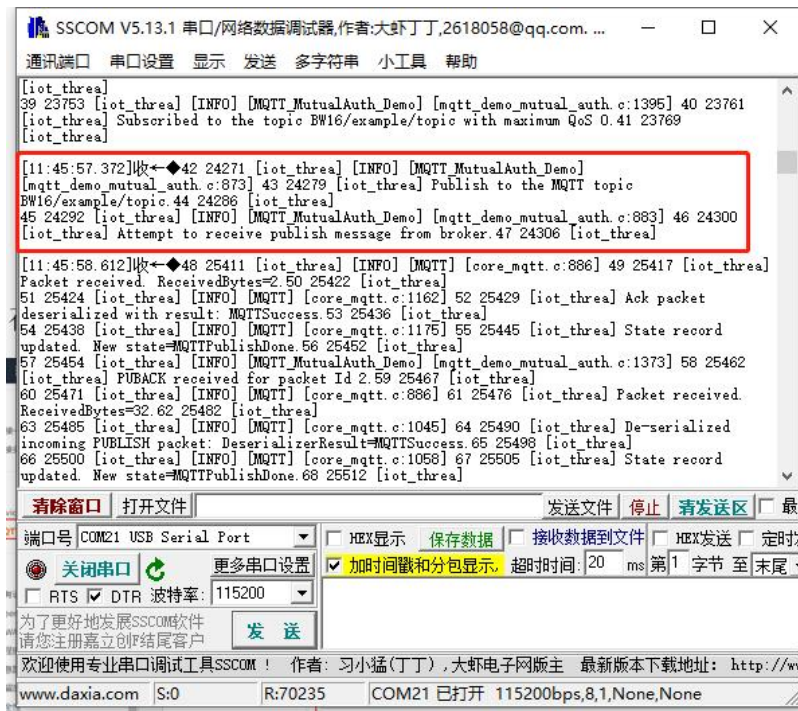


### 2.2 订阅主题





## 2.3 发布主题消息



## 3. 在 AWS IOT 控制台查看订阅的数据

