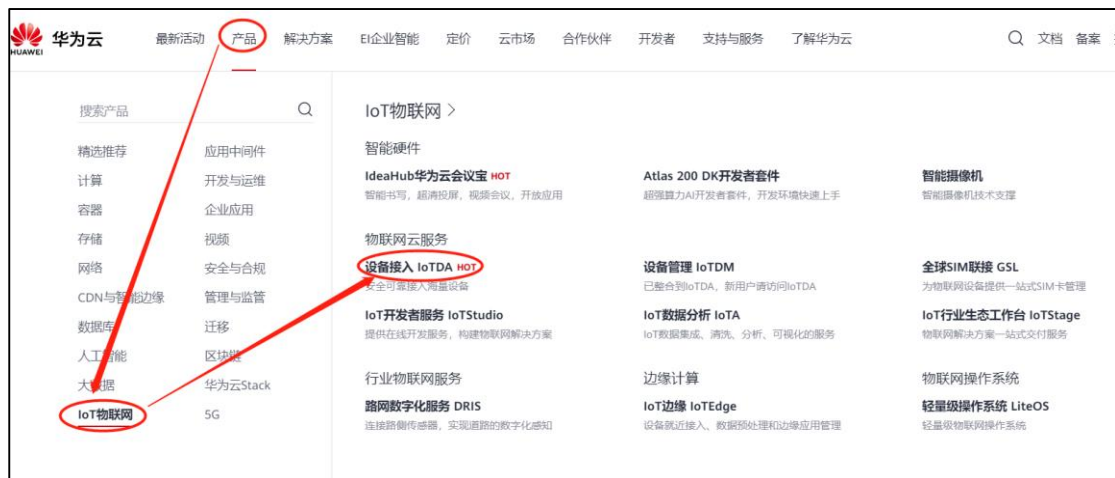


一. 云端准备工作

1. 登录华为云，进入设备接入。

<https://www.huaweicloud.com/product/iotHub.html>



2. 创建产品

平台务必选择“北京四”，点击产品然后创建产品。



创建产品

★ 所属资源空间 如需创建新的资源空间，您可前往当前实例详情创建

★ 产品名称

协议类型

★ 数据格式

★ 厂商名称

所属行业

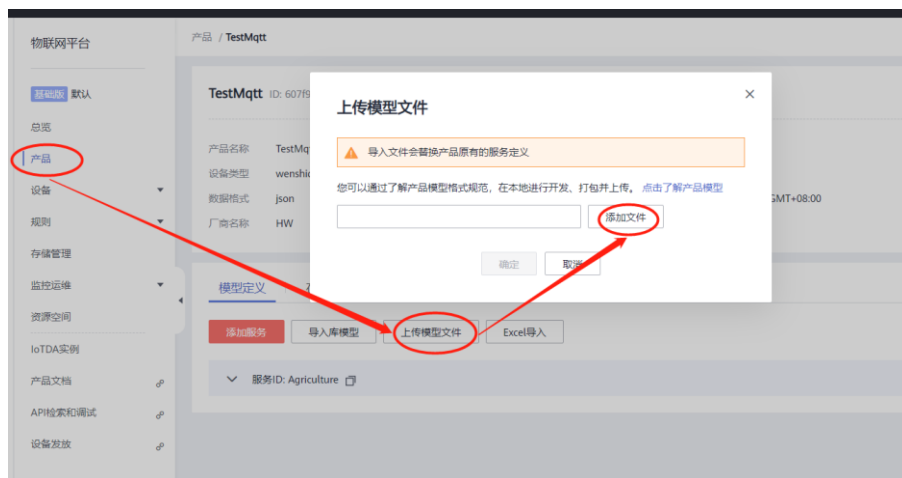
★ 设备类型

高级配置 定制ProductID | 备注信息

确定

取消

3.导入模型 607f9d67ba4b2702c05eb41b 压缩包



4.注册设备

注意：设备 ID 和密钥需要保存，DeviceTree 中需要用到。

新增测试设备

设备类型 ☒ 真实设备 ☐

★ 设备名称

★ 设备标识码

设备注册方式 ☐ 不加密 ☒

密钥

确定 取消

设备创建成功

自动分配以下设备信息，下一步请以此信息激活设备。

设备ID
6080bf90f4b59002c0d9c955_1212313131313

设备密钥
12345678

确定

5.设备信息写入 Device Tree 文件中

注意一定要去注册一个设备，如果多个设备同一个设备信息会导致设备下线的问题。

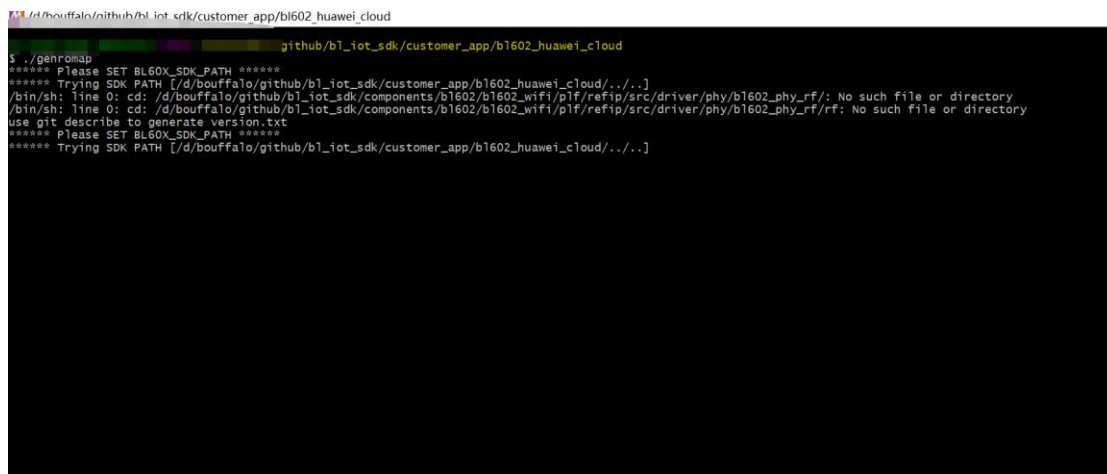
```
huawei {
    #address-cells = <1>;
    #size-cells = <1>;

    ssid = "BouffaloLab";
    psk = "bouffalo";
    devid = "6080bf90f4b59002c0d9c955_b1602";
    devpsw="12345678";
};
```

二 . 固件编译

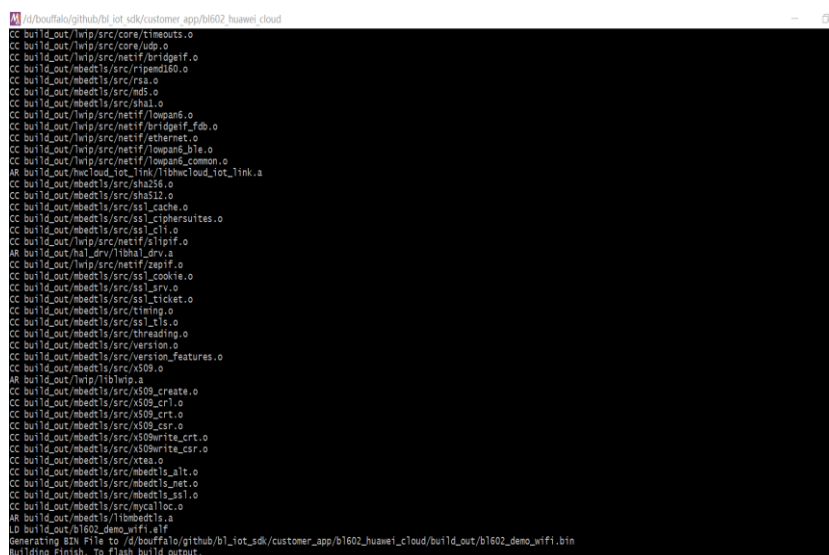
1. 从 github 下载最新代码: <https://github.com/bouffalolab>
2. 参考下载后的 bl_iot_sdk\docs\html\index 文档安装编译环境
3. 安装好环境后编译 customer_app\bl602_huawei_cloud，本程序是基于 MQTT 协议上传通过 GXGAS-GXHT3X 传感器采集到的温湿度到华为云平台的示例程序。
4. 具体编译过程如下图:使用命令

./genromap



```
$ ./genromap
***** Please SET BL60X_SDK_PATH *****
***** Trying SDK_PATH [/d/bouffalo/github/bl_iot_sdk/customer_app/bl602_huawei_cloud/../../]
/bin/sh: line 0: cd: /d/bouffalo/github/bl_iot_sdk/components/bl602/bl602_wifi/plf/refip/src/driver/phy/bl602_phy_rf/: No such file or directory
/bin/sh: line 0: cd: /d/bouffalo/github/bl_iot_sdk/components/bl602/bl602_wifi/plf/refip/src/driver/phy/bl602_phy_rf/rf: No such file or directory
use git describe to generate version.txt
***** Please SET BL60X_SDK_PATH *****
***** Trying SDK_PATH [/d/bouffalo/github/bl_iot_sdk/customer_app/bl602_huawei_cloud/../../]

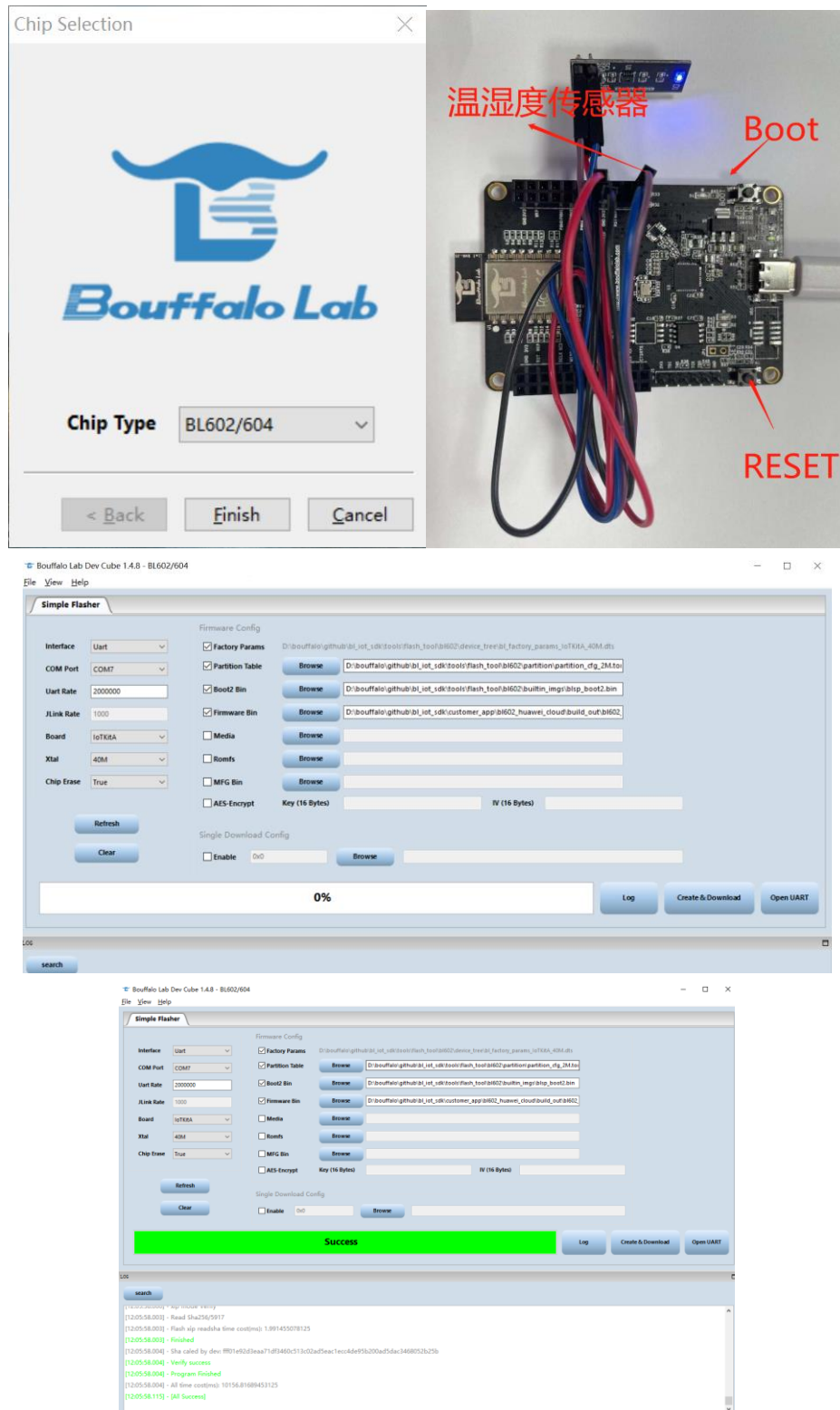
CC build_out/wip/src/core/timeouts.o
CC build_out/wip/src/core/udp.o
CC build_out/wip/src/netif/bridgeif.o
CC build_out/nbdtls/src/ripmd160.o
CC build_out/nbdtls/src/rsa.o
CC build_out/nbdtls/src/md5.o
CC build_out/nbdtls/src/sha1.o
CC build_out/wip/src/netif/lowpan6.o
CC build_out/wip/src/netif/bridgeif_fb.o
CC build_out/wip/src/netif/ethernet.o
CC build_out/wip/src/netif/lowpan6_ble.o
CC build_out/wip/src/netif/lowpan6_common.o
AR build_out/hwcloud_iot_link/libhwcloud_iot_link.a
CC build_out/nbdtls/src/sha256.o
CC build_out/nbdtls/src/sha22.o
CC build_out/nbdtls/src/ssl_cache.o
CC build_out/nbdtls/src/ssl_ciphersuites.o
CC build_out/nbdtls/src/ssl_cli.o
CC build_out/wip/src/netif/ripif.o
AR build_out/hal_drv/libhal_drv.a
CC build_out/wip/src/netif/zapif.o
CC build_out/nbdtls/src/ssl_cookie.o
CC build_out/nbdtls/src/ssl_drv.o
CC build_out/nbdtls/src/ssl_ticket.o
CC build_out/nbdtls/src/timing.o
CC build_out/nbdtls/src/sal.o
CC build_out/nbdtls/src/threading.o
CC build_out/nbdtls/src/version.o
CC build_out/nbdtls/src/version_features.o
CC build_out/nbdtls/src/X509.o
AR build_out/wip/libwip.a
CC build_out/nbdtls/src/X509_create.o
CC build_out/nbdtls/src/X509_crl.o
CC build_out/nbdtls/src/X509_crt.o
CC build_out/nbdtls/src/X509_csr.o
CC build_out/nbdtls/src/X509write_crt.o
CC build_out/nbdtls/src/X509write_csr.o
CC build_out/nbdtls/src/xtea.o
CC build_out/nbdtls/src/nbdtls_alt.o
CC build_out/nbdtls/src/nbdtls_net.o
CC build_out/nbdtls/src/nbdtls_ssl.o
CC build_out/nbdtls/src/mycalloc.o
AR build_out/nbdtls/libnbdtls.a
O build_out/bl602_demo_wifi.o
Generating BIN File to /d/bouffalo/github/bl_iot_sdk/customer_app/bl602_huawei_cloud/build_out/bl602_demo_wifi.bin
Building Finish. To flash build output.
```



```
CC build_out/wip/src/core/timeouts.o
CC build_out/wip/src/core/udp.o
CC build_out/wip/src/netif/bridgeif.o
CC build_out/nbdtls/src/ripmd160.o
CC build_out/nbdtls/src/rsa.o
CC build_out/nbdtls/src/md5.o
CC build_out/nbdtls/src/sha1.o
CC build_out/wip/src/netif/lowpan6.o
CC build_out/wip/src/netif/bridgeif_fb.o
CC build_out/wip/src/netif/ethernet.o
CC build_out/wip/src/netif/lowpan6_ble.o
CC build_out/wip/src/netif/lowpan6_common.o
AR build_out/hwcloud_iot_link/libhwcloud_iot_link.a
CC build_out/nbdtls/src/sha256.o
CC build_out/nbdtls/src/sha22.o
CC build_out/nbdtls/src/ssl_cache.o
CC build_out/nbdtls/src/ssl_ciphersuites.o
CC build_out/nbdtls/src/ssl_cli.o
CC build_out/wip/src/netif/ripif.o
AR build_out/hal_drv/libhal_drv.a
CC build_out/wip/src/netif/zapif.o
CC build_out/nbdtls/src/ssl_cookie.o
CC build_out/nbdtls/src/ssl_drv.o
CC build_out/nbdtls/src/ssl_ticket.o
CC build_out/nbdtls/src/timing.o
CC build_out/nbdtls/src/sal.o
CC build_out/nbdtls/src/threading.o
CC build_out/nbdtls/src/version.o
CC build_out/nbdtls/src/version_features.o
CC build_out/nbdtls/src/X509.o
AR build_out/wip/libwip.a
CC build_out/nbdtls/src/X509_create.o
CC build_out/nbdtls/src/X509_crl.o
CC build_out/nbdtls/src/X509_crt.o
CC build_out/nbdtls/src/X509_csr.o
CC build_out/nbdtls/src/X509write_crt.o
CC build_out/nbdtls/src/X509write_csr.o
CC build_out/nbdtls/src/xtea.o
CC build_out/nbdtls/src/nbdtls_alt.o
CC build_out/nbdtls/src/nbdtls_net.o
CC build_out/nbdtls/src/nbdtls_ssl.o
CC build_out/nbdtls/src/mycalloc.o
AR build_out/nbdtls/libnbdtls.a
O build_out/bl602_demo_wifi.o
Generating BIN File to /d/bouffalo/github/bl_iot_sdk/customer_app/bl602_huawei_cloud/build_out/bl602_demo_wifi.bin
Building Finish. To flash build output.
```

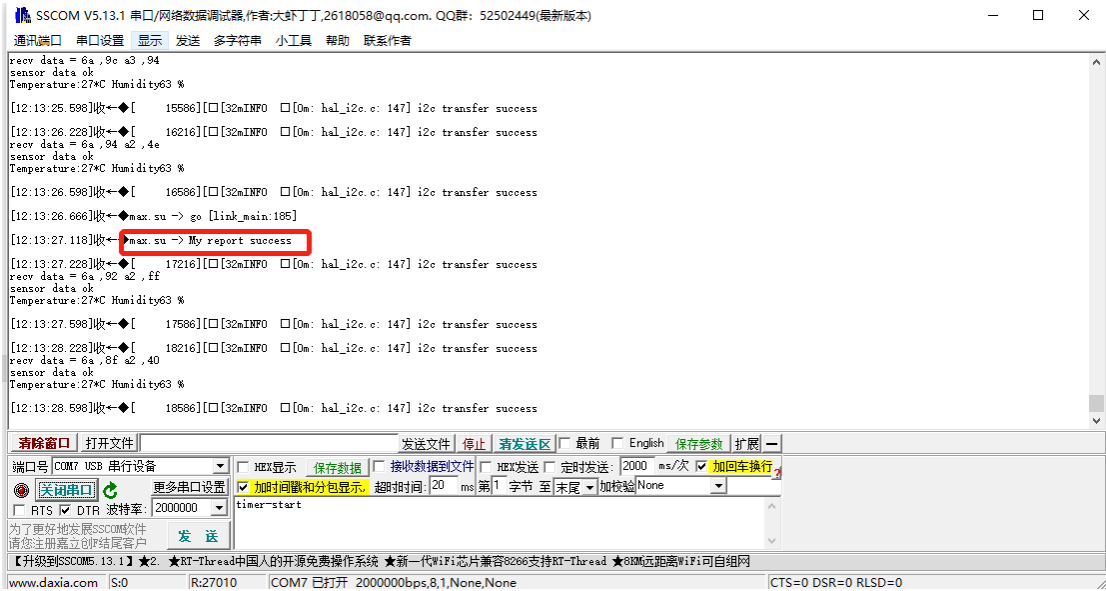
三. 下载固件

打开 bl_iot_sdk\tools\flash_tool 目录下 BLDevCube 选择 BL602,具体使用请看 docs 目录下的文档。开发板按下 Boot 按键后, 再按一下 RESET 复位进入下载模式。



四、程序运行

程序上电后会根据 Device Tree 里面的设置去连接路由器以及连接云端。看到下图中的 Report Success 即为上报成功云端可以看到数据，



bl602 (真实设备) 在线 所属资: 所属产品: bl602_test



消息区

- 数据接收: 2021/04/24 12:14:56 GMT+08:00
{serviceld: Agriculture, data: {"Temperature":28,"Humidity":62}}
- 数据接收: 2021/04/24 12:14:46 GMT+08:00
{serviceld: Agriculture, data: {"Temperature":28,"Humidity":62}}
- 数据接收: 2021/04/24 12:14:36 GMT+08:00
{serviceld: Agriculture, data: {"Temperature":28,"Humidity":62}}
- 数据接收: 2021/04/24 12:14:26 GMT+08:00
{serviceld: Agriculture, data: {"Temperature":28,"Humidity":63}}
- 数据接收: 2021/04/24 12:14:17 GMT+08:00
{serviceld: Agriculture, data: {"Temperature":27,"Humidity":63}}
- 数据接收: 2021/04/24 12:14:06 GMT+08:00
{serviceld: Agriculture, data: {"Temperature":27,"Humidity":63}}
- 数据接收: 2021/04/24 12:13:56 GMT+08:00
{serviceld: Agriculture, data: {"Temperature":27,"Humidity":63}}
- 数据接收: 2021/04/24 12:13:46 GMT+08:00
{serviceld: Agriculture, data: {"Temperature":27,"Humidity":63}}
- 数据接收: 2021/04/24 12:13:36 GMT+08:00
{serviceld: Agriculture, data: {"Temperature":27,"Humidity":63}}
- 数据接收: 2021/04/24 12:13:26 GMT+08:00
{serviceld: Agriculture, data: {"Temperature":27,"Humidity":63}}