

一、适用范围

本 sdk 适用于 realtek 8710b。

由于 SDK 使用 GCC 编译，因此需要搭配芯片厂家提供的 GCC 开发包进行使用。

二、配置与修改

基于芯片厂家提供的 SDK 需要进行以下修改

MBEDTLS 配置

路径：component\common\network\ssl\mbedtls-2.4.0\include\mbedtls\config_rsa.h 中

使能以下宏定义

```
#define MBEDTLS_SSL_ALPN
```

修改 SSL 的 buffer

```
#define MBEDTLS_SSL_MAX_CONTENT_LEN (4096+1024)
```

RTOS 堆栈修改

如果使用雅观海外云业务，需要增大堆栈空间

FreeRTOSConfig.h 中

```
#define configTOTAL_HEAP_SIZE ((size_t)(130 * 1024))
```

platform_opts.h 修改

platform_opts.h 中选择 mbedtls，并且屏蔽原厂的 simple config

```
#define CONFIG_USE_POLARSSL      0

#define CONFIG_USE_MBEDTLS      1

#define CONFIG_INCLUDE_SIMPLE_CONFIG      0
```

修改 makefile

屏蔽#network polarssl polarssl 部分

```
#network mbedtls 2.4.0

SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/aes.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/aesni.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/asn1parse.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/arc4.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/base64.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/bignum.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/blowfish.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/camellia.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/ccm.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/certs.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/cipher.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/cipher_wrap.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/ctr_drbg.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/debug.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/entropy.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/entropy_poll.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/error.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/gcm.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/havege.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/md.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/md_wrap.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/md2.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/md4.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/md5.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/memory_buffer_alloc.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/net_sockets.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/oid.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/padlock.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/pem.c
```

```

SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/pk.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/pk_wrap.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/pkcs11.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/pkcs12.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/pkcs5.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/pkparse.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/platform.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/ripemd160.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/rsa.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/sha1.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/sha256.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/sha512.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/ssl_cache.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/ssl_ciphersuites.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/ssl_cli.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/ssl_srv.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/ssl_tls.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/threading.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/timing.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/version.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/version_features.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/x509.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/x509_create.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/x509_crl.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/x509_crt.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/x509_csr.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/x509write_crt.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/x509write_csr.c
SRC_C += ../../component/common/network/ssl/mbedtls-2.4.0/library/xtea.c

```

增加以下库路径:

LIBFLAGS =

all:

```
LIBFLAGS += -L../../component/soc/realtek/8711b/misc/bsp/lib/common/GCC/ -l_platform -
l_wlan -l_wps -l_p2p -l_rtld
```

```
LIBFLAGS += -L../akeeta/ -l_akeeta -lm -lc -lnosys -lgcc
```

```
mp: LIBFLAGS += -L../../component/soc/realtek/8711b/misc/bsp/lib/common/GCC/ -l_platform
-l_wlan_mp -l_wps -l_p2p -l_rtld
```

```
LIBFLAGS += -L../akeeta/ -l_akeeta -lm -lc -lnosys -lgcc
```

三 、 注意事项

雅观的 SDK 由于会保存路由器的配置信息以及证书信息，会使用芯片的 flash。

以 8710bx 为例：

SDK 会使用 0x080F5000 地址开始的 64K 作为 SDK 内部使用。