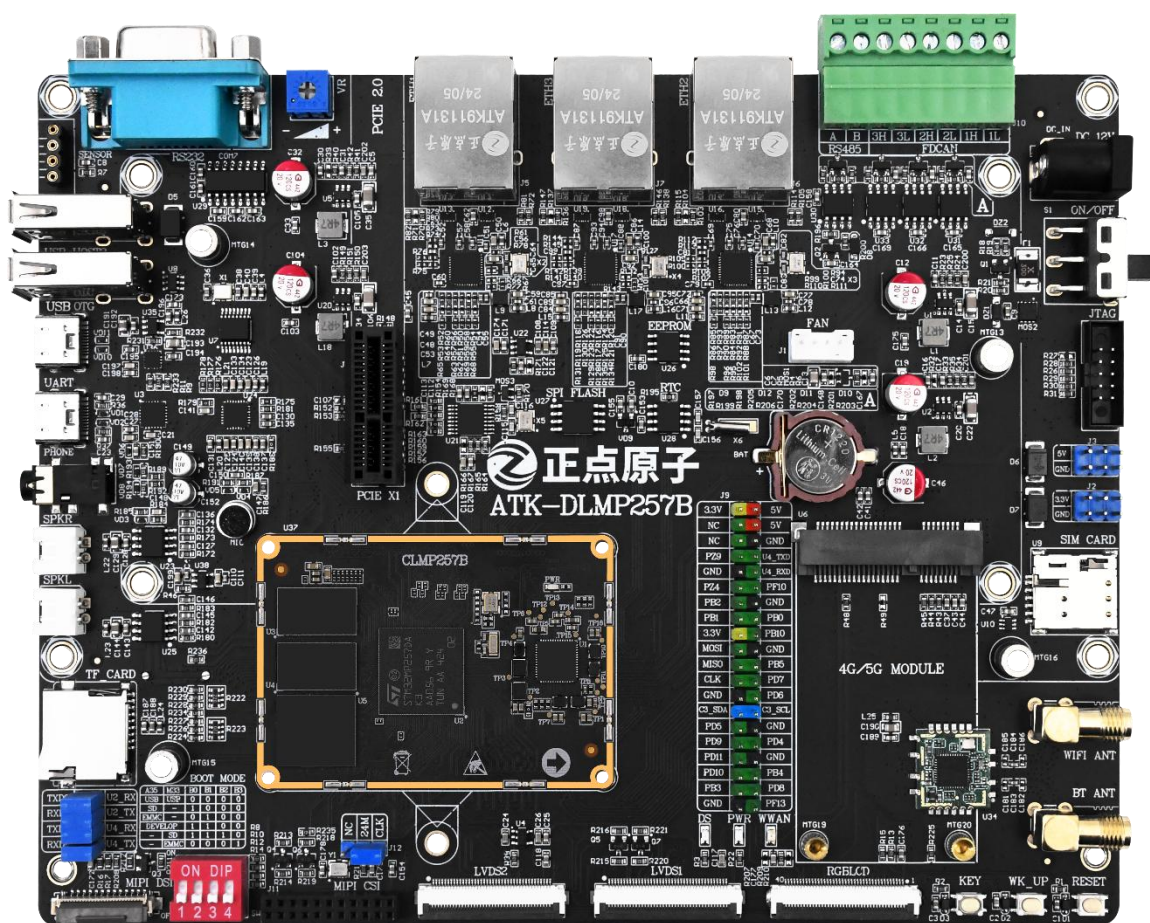


ATK-DLMP257B

Factory QtUI Compilation Manual

V1.0



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V1.0	release officially	ALIENTEK	ALIENTEK	2025.04.01

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Introduction

This document describes the factory QtUI compilation.

Chapter 1. QtUI compilation

This chapter walks you through compiling the factory QtUI source code.

1.1 Getting the QtUI source code

Copy the network disk data A disk - basic data 01, program source code /0X, Qt comprehensive routine source code to the Ubuntu virtual machine path, as shown below. This source code is the original work of ALIENTEK, comply with GPL V3 protocol, dissemination please retain the author information. Use material source network, prohibit commercial use. Note that the source code is very large and not supported. About replacing material files, please read the source code, music video file/save/photograph paths in/opt/UI/SRC/apps/resource /, please make your own replacement.

```
allientek@allientek:~/Test$ ls
systemui.tar.gz
allientek@allientek:~/Test$
```

Unzip the source code

```
tar -xvf systemui.tar.gz
```

```
allientek@allientek:~/Test$ tar -xvf systemui.tar.gz
allientek@allientek:~/Test$ ls
app camera clock cube fileview key LICENSE GPLv3 mediaengine notepad photoview README server ssd_mobilenet_v2 systemui.tar.gz ui weather
build.sh client common dashboard hdplayer ted lockscreenservice music pcba pose_keypoint Repcs settings systemui template ui video
allientek@allientek:~/Test$
```

1.2 Compiling the QtUI source code

Please install the cross-compilation toolchain first, refer to the online disk information A disk 10_user_manual / [ALIENTEK] ATK-DLMP257B Installs the Cross-compilation Toolchain Based on the factory system V1.0.pdf. Install finished before continuing!

Simply run build.sh to compile.

```
./build.sh
```

```
./build.sh cleanall # Clean compilation
```

```
allientek@allientek:~/Test$ ./build.sh
作者: dengzhinao@allientek.com
欢迎您来到systemUI一键编译脚本程序!
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开始编译项目, 生成的可执行文件位于ui文件夹中, 拷贝整个ui文件夹到系统/opt文件夹下,
执行/opt/ui/systemui启动系统桌面

Info: creating stash file /home/allientek/Test/app/.qnae.stash
正在编译 app
aarch64-ostl-linux-g++ -mcpu=cortex-a35+rc -mbranch-protection=standard --sysroot=/opt/st/stn32mp2/5.0.3-snapshot/sysroots/cortexa35-ostl-linux -c -pipe -O2 -pipe -g -feliminate-unused-debug-types --sysroot=/opt/st/stn32mp2/5.0.3-snapshot/sysroots/cortexa35-ostl-linux -O2 -Wall -Wextra -DREENTRANT -DQT_NO_DEBUG -DQT_VIRTUALKEYBOARD_LIB -DQT_QUICK_LIB -DQT_GUI_LIB -DQT_QMLMODELS_LIB -DQT_QML_LIB -DQT_REMOTEOBJECTS_LIB -DQT_NETWORK_LIB -DQT_SERIALPORT_LIB -DQT_CORE_LIB -I. -I../common -I../client -I/opt/st/stn32mp2/5.0.3-snapshot/sysroots/cortexa35-ostl-linux/usr/include/QtVirtualKeyboard -I/opt/st/stn32mp2/5.0.3-snapshot/sysroots/cortexa35-ostl-linux/usr/include/QtQuick -I/opt/st/stn32mp2/5.0.3-snapshot/sysroots/cortexa35-ostl-linux/usr/include/QtGui -I/opt/st/stn32mp2/5.0.3-snapshot/sysroots/cortexa35-ostl-linux/usr/include/QtQmlModels -I/opt/st/stn32mp2/5.0.3-snapshot/sysroots/cortexa35-ostl-linux/usr/include/QtQml -I/opt/st/stn32mp2/5.0.3-snapshot/sysroots/cortexa35-ostl-linux/usr/include/QtRemoteObjects -I/opt/st/stn32mp2/5.0.3-snapshot/sysroots/cortexa35-ostl-linux/usr/include/QtNetwork -I/opt/st/stn32mp2/5.0.3-snapshot/sysroots/cortexa35-ostl-linux/usr/include/QtSerialPort -I/opt/st/stn32mp2/5.0.3-snapshot/sysroots/cortexa35-ostl-linux/usr/include/QtCore -I. -I../Reps -I/opt/st/stn32mp2/5.0.3-snapshot/sysroots/cortexa35-ostl-linux/usr/lib/mkspecs/linux-oe-g++ -o chatmessage.o chatmessage.cpp
```

The project is large, the compilation will take a while, please be patient, the compilation is completed as shown below.

```
from weatherforecast.h:22:
/opt/st/stn32mp2/5.0.3-snapshot/sysroots/cortexa35-ostl-linux/usr/include/QtNetwork/qnetworkconfigurationmanager.h:59:56: note: declared here
59 | class QT_DEPRECATED_BEARER_MANAGEMENT Q_NETWORK_EXPORT QNetworkConfigurationManager : public QObject
    | ~~~~~^~~~~~
In file included from main.cpp:5:
networkposition.h:63:35: warning: 'QNetworkConfigurationManager' is deprecated [-Wdeprecated-declarations]
63 | QNetworkConfigurationManager *m_networkConfigurationManager;
    | ~~~~~^~~~~~
In file included from /opt/st/stn32mp2/5.0.3-snapshot/sysroots/cortexa35-ostl-linux/usr/include/QtNetwork/QNetworkConfigurationManager:1,
from networkposition.h:18:
/opt/st/stn32mp2/5.0.3-snapshot/sysroots/cortexa35-ostl-linux/usr/include/QtNetwork/qnetworkconfigurationmanager.h:59:56: note: declared here
59 | class QT_DEPRECATED_BEARER_MANAGEMENT Q_NETWORK_EXPORT QNetworkConfigurationManager : public QObject
    | ~~~~~^~~~~~
In file included from main.cpp:6:
weatherforecast.h:81:35: warning: 'QNetworkConfigurationManager' is deprecated [-Wdeprecated-declarations]
81 | QNetworkConfigurationManager *m_networkConfigurationManager;
    | ~~~~~^~~~~~
/opt/st/stn32mp2/5.0.3-snapshot/sysroots/cortexa35-ostl-linux/usr/include/QtNetwork/qnetworkconfigurationmanager.h:59:56: note: declared here
59 | class QT_DEPRECATED_BEARER_MANAGEMENT Q_NETWORK_EXPORT QNetworkConfigurationManager : public QObject
    | ~~~~~^~~~~~
aarch64-ostl-linux-g++ -mcpu=cortex-a35+rc -mbranch-protection=standard --sysroot=/opt/st/stn32mp2/5.0.3-snapshot/sysroots/cortexa35-ostl-linux -Wl,-O1 -Wl,--hash-style=gnu -Wl,--as-needed --sysroot=/opt/st/stn32mp2/5.0.3-snapshot/sysroots/cortexa35-ostl-linux -Wl,-O1 -o weather main.o networkposition.o weatherforecast.o systemuicommonapi.o qrc_c_qml.o qrc_weather_res.o qrc_client.o qrc_common.o moc_systemuicommonapi.o moc_networkposition.o moc_weatherforecast.o moc_rep_systemuicommonapi.o qrc_rep2/5.0.3-snapshot/sysroots/cortexa35-ostl-linux/usr/lib/libQt5Quick.so /opt/st/stn32mp2/5.0.3-snapshot/sysroots/cortexa35-ostl-linux/usr/lib/libQt5Qml.so /opt/st/stn32mp2/5.0.3-snapshot/sysroots/cortexa35-ostl-linux/usr/lib/libQt5QmlModels.so /opt/st/stn32mp2/5.0.3-snapshot/sysroots/cortexa35-ostl-linux/usr/lib/libQt5RemoteObjects.so /opt/st/stn32mp2/5.0.3-snapshot/sysroots/cortexa35-ostl-linux/usr/lib/libQt5Network.so /opt/st/stn32mp2/5.0.3-snapshot/sysroots/cortexa35-ostl-linux/usr/lib/libQt5Core.so -lGLv2 -lpthread
aarch64-ostl-linux-strip /home/allientek/Test/weather/weather /home/allientek/Test/weather /home/allientek/Test/weather/./ui/src/apps;
编译完成! 全部项目编译成功!
allientek@allientek:~/Test$
```

Replace the ui folder with the /opt/ui folder under the factory system path of the development board.