# 智能唤醒移植说明

此移植文档基于S4750的代码,智能唤醒主要对framework和Settings模块做了修改,通过TINNO\_SMART\_AWAKE\_SUPPORT这个宏来控制上层代码的开关.

#### 智能唤醒代码所在位置

Git路径:

repo init -u [git@192.168.33.9:mt6592/platform/manifest.git -b sw -m S4750AE\_4.4\_V1.1.xml](mailto:git@192.168.33.9:mt6592/platform/manifest.git%20-b%20sw%20-m%20S4750AE_4.4_V1.1.xml)

仓库路径:

mediatek/config/s4750ae

mediatek/build

frameworks/base

frameworks/native

mediatek/packages/apps/oobe

vendor/tinno/packages/settings

vendor/tinno/packages/Launcher\_Tinno

#### 修改的文件有

**mediatek/config/s4750ae下**

ProjectConfig.mk

**mediatek/build下**

tools/javaoption.pm

**frameworks/base下**

api/current.txt

core/java/android/view/KeyEvent.java

core/res/res/values/attrs.xml

data/keyboards/Generic.kl

policy/src/com/android/internal/policy/impl/PhoneWindowManager.java

core/java/android/provider/Settings.java

packages/Keyguard/src/com/android/keyguard/KeyguardHostView.java

**frameworks/native下**

include/android/keycodes.h

libs/input/Input.cpp

补充：frameworks\native\include\input\KeycodeLabels.h

**mediatek/packages/apps/oobe下**

src/com/mediatek/oobe/basic/MainActivity.java

src/com/mediatek/oobe/qsg/QuickStartGuideMain.java

res/values/strings.xml

res/values-zh-rCN/strings.xml

assets/demo\_lock.mp4 (新增资源)

assets/demo\_message.mp4 (新增资源)

assets/demo\_music.mp4 (新增资源)

assets/demo\_phone.mp4 (新增资源)

**vendor/tinno/packages/settings下**

AndroidManifest.xml

res/values/strings.xml

res/values-zh-rCN/strings.xml

res/xml/settings\_headers.xml

res/xml/smart\_awake\_tutorial.xml (新增代码)

src/com/android/settings/Settings.java

src/com/android/settings/SmartAwakeReceiver.java (新增代码)

src/com/android/settings/SmartAwakeSettingsFragment.java (新增代码)

res/drawable-xhdpi/ic\_settings\_smart\_awake.png (新增资源)

res/drawable-xhdpi/animation\_smart\_awake\_dialpad\_1.png (新增资源)

res/drawable-xhdpi/animation\_smart\_awake\_dialpad\_2.png (新增资源)

res/drawable-xhdpi/animation\_smart\_awake\_dialpad\_3.png (新增资源)

res/drawable-xhdpi/animation\_smart\_awake\_message\_1.png (新增资源)

res/drawable-xhdpi/animation\_smart\_awake\_message\_2.png (新增资源)

res/drawable-xhdpi/animation\_smart\_awake\_message\_3.png (新增资源)

res/drawable-xhdpi/animation\_smart\_awake\_music\_1.png (新增资源)

res/drawable-xhdpi/animation\_smart\_awake\_music\_2.png (新增资源)

res/drawable-xhdpi/animation\_smart\_awake\_music\_3.png (新增资源)

res/drawable-xhdpi/animation\_smart\_awake\_lock\_1.png (新增资源)

res/drawable-xhdpi/animation\_smart\_awake\_lock\_2.png (新增资源)

res/drawable-xhdpi/animation\_smart\_awake\_lock\_3.png (新增资源)

res/drawable/animation\_smart\_awake\_dialpad.xml (新增资源)

res/drawable/animation\_smart\_awake\_message.xml (新增资源)

res/drawable/animation\_smart\_awake\_music.xml (新增资源)

res/drawable/animation\_smart\_awake\_lock.xml (新增资源)

**vendor/tinno/packages/Launcher\_Tinno下**

src/com/android/launcher2/AllAppsList.java

#### 数据库相关修改

主要是frameworks/base/ core/java/android/provider/Settings.java这个文件,增加两个Global设置项:ENABLE\_SMART\_AWAKE\_ENABLED和ENABLE\_SMART\_AWAKE\_ACTIONS.

ENABLE\_SMART\_AWAKE\_ENABLED用来保存功能开关值,0是关闭,1是开启.

ENABLE\_SMART\_AWAKE\_ACTIONS用来保存TP支持的手势.

#### 补充

* **与驱动层沟通主要协议**

驱动层与上层通信的节点文件为/proc/tgeseture\_config,底层通过key事件传递给上层0xc,cms这样的字串,0xc表示用户画了一个拨号的手势,手势定义如下:

|  |  |
| --- | --- |
| 小写c | 拨号盘 |
| 小写m | 音乐播放器 |
| 小写s | 信息 |
| 小写u | 双击点亮 |
| -1 | TP不支持手势 |

cms表示目前支持的手势类型,具体的协议需要跟负责系统的工程师仔细协商.

* **大致执行流程**

OOBE模块:第一次开机的时候会读取tgeseture\_config节点内容,判断底层支持哪些手势,并隐藏不支持的演示动画,将支持的手势写到ENABLE\_SMART\_AWAKE\_ACTIONS设置项中,之后用户每次开机从主菜单启动OOBE就会直接读取ENABLE\_SMART\_AWAKE\_ACTIONS设置项.

Settings模块:主要类是SmartAwakeSettingsFragment和SmartAwakeReceiver,在SmartAwakeReceiver中会有开机流程的处理,首先读取TP支不支持手势,如果不支持就在Settings中隐藏智能唤醒菜单,否则继续读取支持哪些手势,并根据支持的手势来隐藏或显示菜单的演示动画.最后一步是将智能唤醒功能的开关值写到tgeseture\_config节点文件中,用于系统层去做底层的开关.

Framework层:PhoneWindowManager.java中的interceptKeyBeforeQueueing函数收到key之后会对keyCode进行判断,如果是KeyEvent.KEYCODE\_KEYTP的话,就说明是智能唤醒的一个手势,那么读取节点tgeseture\_config的内容,先发广播给KeyguardHostView解锁屏幕,然后将内容以广播android.intent.action.SMART\_AWAKE发出去由Settings的SmartAwakeReceiver接收, SmartAwakeReceiver收到后会解析字串来启动对应的App.