

1、Introduction

1.1、Description

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Develop resources

[SMDTOS-API](#) code: Contains JAR package, Word form documentation, development DemoAPK and Apk source code.

1.2、Version change record

- Released API version

Version		Description	Date	Writer
V1.0	Creation		2021-12-07	Xu Linrui
V2.0.4	Update		2021-12-10	Xu Linrui
V2.2.0	Update the JAR package		2021-12-20	Xu Linrui
V2.3.1	Add NPU version acquisition Compatible with old API interface		2022-01-18	Xu Linrui

	ApiDemo optimization		
V2.5.0	Add custom desktop shortcut icon interface	2022-03-04	Xu Linrui
V2.7.0	Add the interface to obtain the timed switching status Add interface for automatic installation of application-related functions Add WiFi connection interface Add network Daemon-related interfaces Eliminate the default WiFi connection interface on boot	2022-05-24	Xu Linrui
V2.8.0	Add interface for setting boot logo Add a power-on animation interface	2022-06-02	Xu Linrui
V2.9.0	Add interface for setting and obtaining screen display parameters	2022-06-14	Xu Linrui
V2.11.0	Compatible with API interface of gate machine (Wiegand /relay/tricolor light/fan) Add device temperature interface	2022-07-29	Xu Linrui
V2.12.0	Add whether to allow external storage device cloning, upgrading, automatic installation of application interfaces Repair the JNI interface compatible with part of the old gate API Add constants class	2022-08-08	Xu Linrui
V2.14.1	Add interface to get WebView version Add SIM card information acquisition interface (IMEI/ICCID/IMSI) Add MCU hard reboot interface Add timed switch-on/off error code class Eliminate set device model/manufacturer/software version interface	2022-09-20	Xu Linrui
V2.16.3	Add network priority interface Add multi-network coexistence interface Add backlight switch interface Repair speaker volume gain and audio input interface Add audio input type interface Eliminate the interface of setting and getting device microphone switch status Eliminate the dual screen combination interface	2022-11-11	Xu Linrui

1.3、API Usage Methods

Get object instance method

Function name: `public static SmdtManagerNew getInstance(Context context)`

Description: Get a single instance of the SmdtManagerNew object

Parameter:

Parameter name	Type	Description
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context	Context	Context
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Return parameters Description

Parameter name	Type	Description
returned value	SmdtManagerNew	Returns a single instance of the SmdtManagerNew object

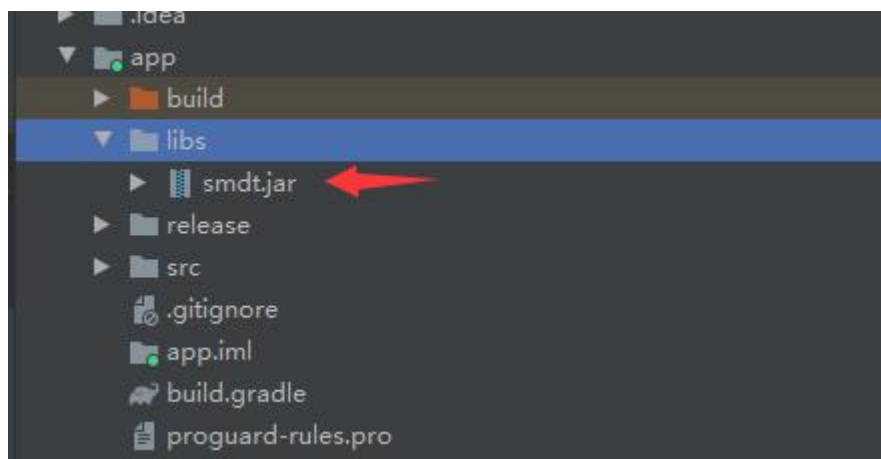
ExampleExample

```
SmdtManagerNew smdt = SmdtManagerNew.getInstance(this);
System.out.println(smdt.info_getApiVersion());
Output result : V1.0.0-release
```

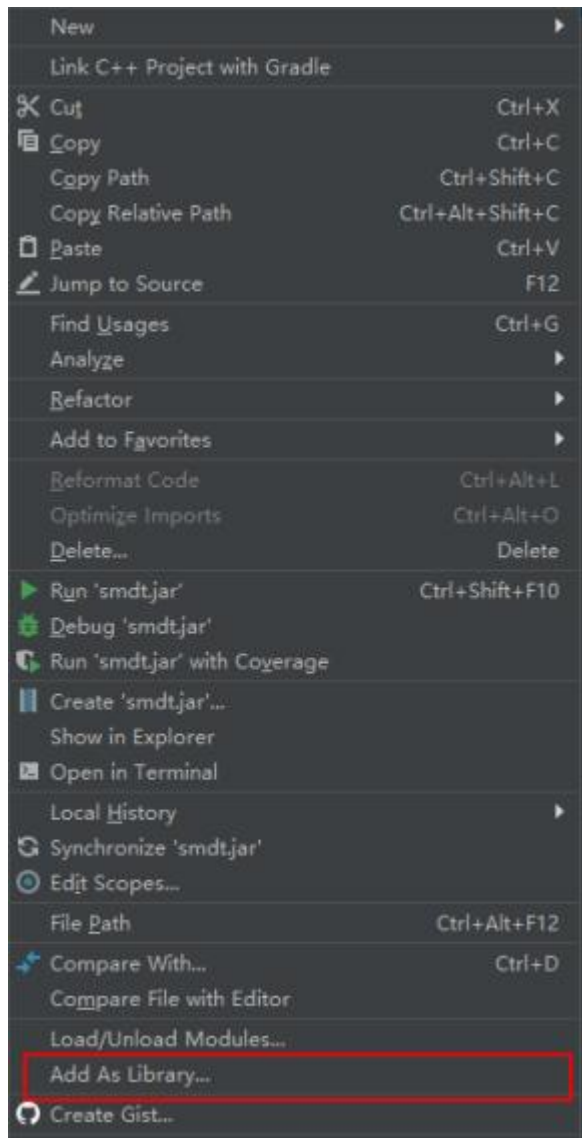
Importing JAR packages

Android Studio

- 1.Copy smdt.jar to the project directory \app\libs\;



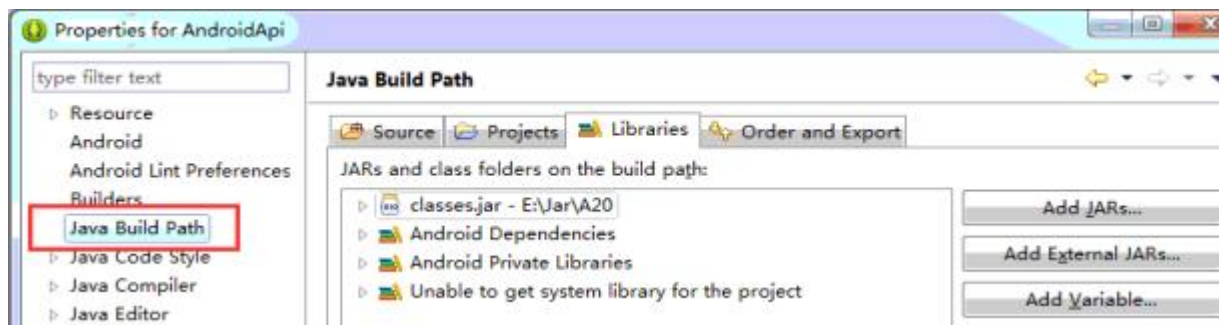
- 2.Right-click on the jar file in the libs folder and select add as Library;



3. Then just call the method after the instance object in the code.

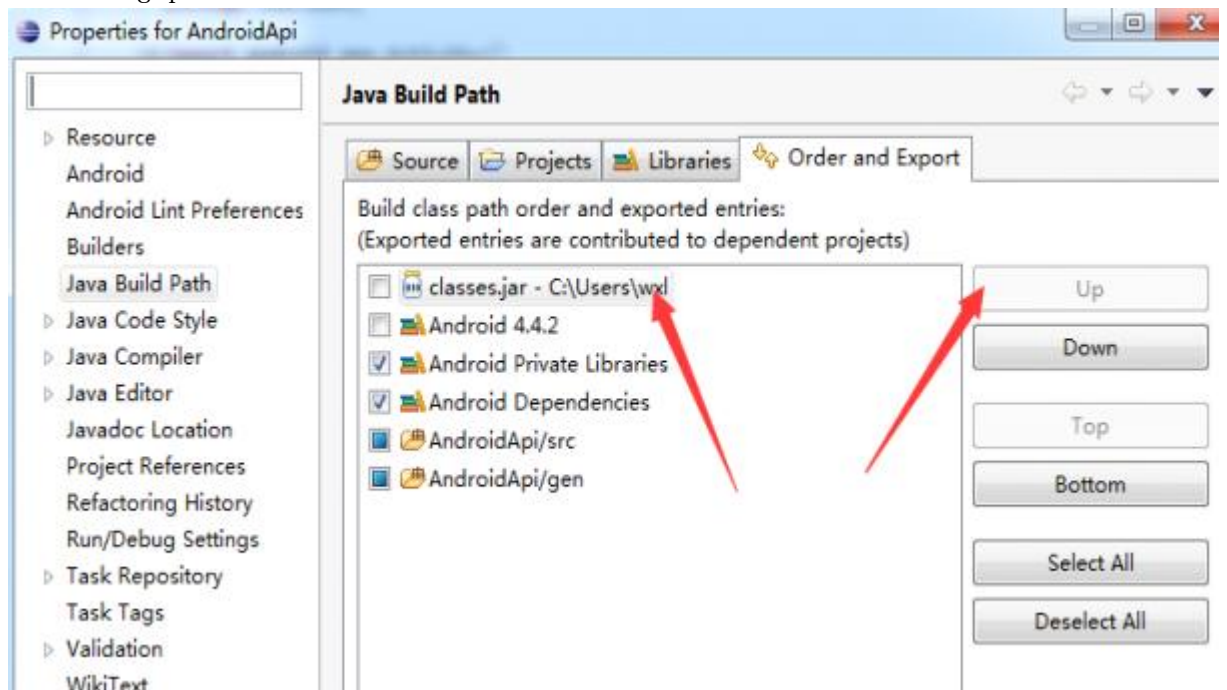
Eclipse

1. Open eclipse, select the project, click the right mouse button, and select properties
2. Check "Java Build Path" in the pop-up dialog box



3. Click on the "Add External Jars" button in Libraries. In the pop-up dialog box, select the JAR package

4. In the "Order and Export" option, select the Jar library you just imported, click the "UP" button in the upper right corner, and keep raising the position of this library to the top. As following picture shows



1.4、API Naming Rules

The API consists of three parts: the beginning of the name + the verb + the name, and the name should be compatible with the API function.

the beginning of the name	Meaning
info	Equipment information category
disp	Display Management Category
net	Network control category
sys	System control category
dev	Hardware control category

custom	Customized category
verb	Meaning
get	Obtain
set	Settings
write	Write in
read	Read
open	open
close	close
reset	reset
register	register
unregister	unregister
check	check
test	test
change	change
sync	Update
add	add
del	Delete
send	send
receive	receive
do	do

1.5、Global Error Code

ErrorCode

Variable Name	Error Code	Interpretation
RET_API_OK	0	Success
RET_API_ERR_NG	-1	Not supported
RET_API_ERR_PARA	-2	Wrong parameters
RET_API_ERR_FILE_EXISTS	-3	File does not exist
RET_API_ERR_PERMISSION_DENIED	-4	No permission
RET_API_ERR_EXCEPTION	-5	Exception Throwing
RET_API_ERR_PROPERTIES_EXISTS	-6	Property does not exist
RET_API_ERR_METHOD	-7	Method does not exist

2、Device Information

2.1、version

2.1.1、info_getApiVersion

function name: `public String info_getApiVersion()`

description: Gets the current API version number

parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	API Version Number

Example

```
SmdtManagerNew smdt = SmdtManagerNew.getInstance(this);
System.out.println(smdt.info_getApiVersion());
output result : V1.0.0-release
```

remarks

- without

2.1.2、info_getAndroidVersion

function name: `public String info_getAndroidVersion()`

description: Get Android system version

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	Android system version

2.1.3、info_getSoftwareVersion

function name: `public String info_getSoftwareVersion()`

description: Obtain the device software version

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	Device software version

2.1.4、info_getHardwareVersion

function name: public String info_getHardwareVersion()

description: Obtain the device hardware version

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	Device hardware version

2.1.5、info_getKernelVersion

function name: public String info_getKernelVersion()

description: Obtain device kernel version

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	device kernel version

2.1.6、info_getMCUVersion

function name: public String info_getMCUVersion()

description: Get the MCU version number

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	MCU version number

2.1.7、info_getSecurityVersion

function name: public String info_getSecurityVersion()

description: Get Android security patch level

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	Security patch date

2.1.8、info_getNPUVersion

function name: public String info_getNPUVersion()

description: Get NPU driver version number

Parameter: without

API version: V2.3.0 or above

Return Parameters Description

Parameter name	Type	Description
returned value	String	NPU driver version number

2.1.9、info_getWebViewVersion

function name: public String info_getWebViewVersion()

description: Get WebView version

API VERSION: V2.14.0 or above

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	WebView version

2.2、Storage

2.2.1、info_getTotalMemory

function name: public String info_getTotalMemory()

description: Get the total device memory capacity

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	Total memory capacity

Remarks

- Units returned.
- Return GB for more than 1G remaining
- Return MB for less than 1G remaining

2.2.2、info_getAvailMemory

function name: public String info_getAvailMemory()

description: Obtain the remaining free memory capacity of the device

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	remaining free memory capacity of the device

Remarks

- Return size unit:
- If the value exceeds 1 GB, GB is returned
- If the value is less than 1 GB and the value is more than 1 GB, MB is returned
- If the value is less than 1 MB and the value is more than 1KB, KB is returned
- Under 1KB return B

2.2.3、info_getTotalStorage

function name: public String info_getTotalStorage()

description: Get total device storage capacity

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	total device storage capacity

Remarks

- Return size unit:GB

2.2.4、info_getAvailStorage

function name: `public String info_getAvailStorage()`

description: Obtain the remaining available storage capacity of the device

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	Obtain the remaining available storage capacity of the device

Remarks

- Return size unit:
- If the value exceeds 1 GB, GB is returned
- If the value is less than 1 GB and the value is more than 1 GB, MB is returned
- If the value is less than 1 MB and the value is more than 1KB, KB is returned
- Under 1KB return B

2.2.5、info_getAppUsedMemory

function name: `public String info_getAppUsedMemory()`

description: Get the memory occupied by the app

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	Get the memory occupied by the app

Remarks

- Unit is MB

2.3、Model

2.3.1、info_getBoardType

function name: public String info_getBoardType()

description: Obtain the board model

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	board model

2.3.2、info_getModel

function name: public String info_getModel()

description: Get device model

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	device model

2.3.3、info_getFactoryCompany

function name: public String info_getFactoryCompany()

description: Obtain the equipment manufacturer

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	equipment manufacturer

2.4、Serial number

2.4.1、info_getSerialNumber

function name: public String info_getSerialNumber()

description: Obtain serial number

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	serial number

2.5、CPU

2.5.1、info_getCpuTemperature

function name: public String info_getCpuTemperature()

description: Obtain the CPU temperature of the device

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	CPU current temperature

Remarks

- Unit: °C

2.5.2、info_getCpuFrequency

function name: public String info_getCpuFrequency()

description: Obtain the CPU frequency of the device

Parameter: without

Return Parameters Description

Parameter name	Type	Description
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returned value	String	CPU frequency
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Remarks

- Unit is GHZ

2.5.3、info_getCpuUsage

function name: `public String info_getCpuUsage()`

description: Get device CPU usage

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	CPU usage

Remarks

- Unit is %

2.6、Face Recognition

2.6.1、info_getFaceDetectSupport

function name: `public int info_getFaceDetectSupport()`

description: Whether to support the acquisition of face recognition

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:Support 0:Not support

2.7、Others

2.7.1、info_getDeviceTemperature

function name: `public float info_getDeviceTemperature()`

description: Obtain device temperature

API VERSION: V2.11.0 or above

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	float	CPU current temperature

Remarks

- Unit: °C

3、Display management

3.1、Display screen

3.1.1、disp_setDispParams

function name: public int disp_setDispParams(String params)

description: Set the parameters displayed on the screen

API VERSION: V2.9.0 or above

Parameter:

Parameter name	Type	Description
params	String	Screen Parameter, refer to the cfg file with screen parameters and pass in the spliced character string, use ";" to separate the Parameter

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Example

```
SmdtManagerNew smdt = SmdtManagerNew.getInstance(this);
String params = "cpu_id=3568;disp_main=lvds;disp_aux=hdmi;";
int result = smdt.disp_setDispParams(params);
```

Remarks

- Pass in null to cancel the setting and restore the default screen reference

3.1.2、disp_getDispParams

function name: public int disp_getDispParams()

description: Get screen display Parameter

API VERSION: V2.9.0 or above

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	screen display Parameter

Example

```
SmdtManagerNew smdt = SmdtManagerNew.getInstance(this);
String params = smdt.disp_getDispParams();
System.out.println(params);
Output results: "cpu_id=3568;disp_main=lvds;disp_aux=hdmi;"
```

Remarks

- Output empty as default, no screen reference configured via external device

3.1.3、disp_setDisplayOverScan

function name: public int disp_setDisplayOverScan(int screen_id, String direction, int value)

description: Set the display area (screen zoom)

Parameter:

Parameter name	Type	Description
screen_id	int	Screen ID 0: main screen 1: secondary screen
direction	String	direction: x:X axis (Left and right at the same time) y:Y axis (Top and bottom at the same time)

		left: left right: right top: top bottom: bottom all: Four sides
value	int	Distance from the border

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Setting range 80–100
- The main and secondary screens depend on the system and the definition of the screen parameters, not on the number of screens. For example, set the primary screen to LVDS and the secondary screen to HDMI. Access to 1 HDMI screen, HDMI is also a secondary screen, you need to pass in the Parameter is also a secondary screen

3.1.4、disp_getDisplayOverScan

function name: `public int[] disp_getDisplayOverScan(int screen_id)`

description: Get display area value (screen zoom)

Parameter:

Parameter name	Type	Description
screen_id	int	Screen ID 0: Main screen 1:Secondary screen

Return Parameters Description

Parameter name	Type	Description
returned value	int[]	Array of distances of four sides from the boundary (order of members 0 left 1 right 2 top 3 bottom)

Remarks

- Range 80–100
- The main and secondary screens depend on the system and the definition of the screen parameters, not on the number of screens. For example, set the primary screen to LVDS and

the secondary screen to HDMI. Access to 1 HDMI screen, HDMI is also a secondary screen, you need to pass in the Parameter is also a secondary screen

3.1.5、disp_getScreenWidth

function name: public int disp_getScreenWidth(int screen_id)

description: Get the specified display resolution - width

Parameter:

Parameter name	Type	Description
screen_id	int	Screen ID 0: Main screen 1:Secondary screen

Return Parameters Description

Parameter name	Type	Description
returned value	int	Width

Remarks

- The main and secondary screens depend on the system and the definition of the screen parameters, not on the number of screens. For example, set the primary screen to LVDS and the secondary screen to HDMI. Access to 1 HDMI screen, HDMI is also a secondary screen, you need to pass in the Parameter is also a secondary screen

3.1.6、disp_getScreenHeight

function name: public int disp_getScreenHeight(int screen_id)

description: Get the specified display resolution - height

Parameter:

Parameter name	Type	Description
screen_id	int	Screen ID 0: main screen 1: secondary screen

Return Parameters Description

Parameter name	Type	Description
returned value	int	height

Remarks

- The main and secondary screens depend on the system and the definition of the screen parameters, not on the number of screens. For example, set the primary screen to LVDS and the secondary screen to HDMI. Access to 1 HDMI screen, HDMI is also a secondary screen, you need to pass in the Parameter is also a secondary screen

3.2、Backlight

3.2.1、disp_setLcdBackLight

function name: `public int disp_setLcdBackLight(int screen_id, int brightness, int frequency, boolean save)`

description: Set screen backlight brightness

Parameter:

Parameter name	Type	Description
screen_id	int	0 First backlight: system default interface 1 Second backlight: external PWM (MCU) interface
brightness	int	Brightness value
frequency	int	Pass in the frequency when setting the external PWM
save	boolean	Save brightness values to database

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Frequency Parameter is used for external PWM interface, you can get the default frequency first and set it directly.
- In some platforms, such as the RK3568 second backlight does not take the external PWM (MCU) interface, take the system default interface, do not need to pass in the frequency, even if passed in will not change.
- Get the maximum and minimum values of the corresponding interface brightness before setting
- Set the system default interface, it is recommended to use Parametersave to save the data to the database after the

operation is finished, so as to reduce the number of times to operate the database

3.2.2、disp_getLcdBackLight

function name: public int disp_getLcdBackLight(int screen_id)

description: Get the backlight brightness of the screen

Parameter:

Parameter name	Type	Description
screen_id	int	0 First backlight: system default interface 1 Second backlight: external PWM (MCU) interface

Return Parameters Description

Parameter name	Type	Description
returned value	int	Backlight brightness value

3.2.3、disp_getLcdPwmFrequency

function name: public int disp_getLcdPwmFrequency(int screen_id)

description: Get backlight frequency

Parameter:

Parameter name	Type	Description
screen_id	int	0 First backlight: system default interface 1 Second backlight: external PWM (MCU) interface

Return Parameters Description

Parameter name	Type	Description
returned value	int	Backlight frequency

Remarks

- Backlight frequency is generally used to set the PWM interface backlight when passed in, not support individual settings
- Generally used to obtain the frequency of the external PWM, such as the system default interface does not support the

acquisition. As well as RK3568 such two-way are the system default interface

3.2.4、disp_getLcdBackLightMaxMin

function name: public int disp_getLcdBackLightMaxMin(int screen_id, String type)

description: Get the maximum or minimum screen brightness value

Parameter:

Parameter name	Type	Description
screen_id	int	0 First backlight: system default interface 1 Second backlight: external PWM (MCU) interface
type	int	max: maximum min: minimum

Return Parameters Description

Parameter name	Type	Description
returned value	int	Get the maximum or minimum screen brightness value

3.2.5、disp_setLcdBackLightEnable

function name: public int disp_setLcdBackLightEnable(int screen_id, boolean enable)

description: Set screen backlight switch

API VERSION: V2.16.0 or above

Parameter:

Parameter name	Type	Description
screen_id	int	0:The first backlight 1:The second backlight
enable	boolean	true:turn on false:turn off

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

3.2.6、disp_getLcdBackLightEnable

function name: public int disp_getLcdBackLightEnable(int screen_id)

description: Get screen backlight on/off status

API VERSION: V2.16.0 or above

Parameter:

Parameter name	Type	Description
screen_id	int	0:The first backlight 1:The second backlight

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:turn on 0:turn off

3.3、System UI

3.3.1、disp_setDisplayDensity

function name: public int disp_setDisplayDensity(int value)

description: Set display density DPI

Parameter:

Parameter name	Type	Description
value	int	DPI value

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- The set DPI value should be ≥ 72

3.3.2、disp_getDisplayDensity

function name: public int disp_getDisplayDensity()

description: Get the current display density DPI

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	DPI value

3.3.3、disp_getScreenShotBitmap

function name: public Bitmap disp_getScreenShotBitmap()

description: Screenshot and return bitmap format image

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	Bitmap	Image Data

3.3.4、disp_getScreenShot

function name: public int disp_getScreenShot(String filepath)

description: Screenshot and save to the specified path

Parameter:

Parameter name	Type	Description
filepath	int	Image save path

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- The saved image format is PNG
- Passing in null will automatically save a default path:
under Screenshots in the root directory

3.3.5、disp_setDisplayRotation

function name: public int disp_setDisplayRotation(int screen_id, int degree)

description: Set the screen rotation angle

Parameter:

Parameter name	Type	Description
screen_id	int	Screen ID 0: main screen 1: secondary screen
degree	int	rotation angle:0/90/180/270

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Only supports setting four angles 0/90/180/270
- The main and secondary screens depend on the system and the definition of the screen parameters, not on the number of screens. For example, set the primary screen to LVDS and the secondary screen to HDMI. Access to 1 HDMI screen, HDMI is also a secondary screen, you need to pass in the Parameter is also a secondary screen

3.3.6、disp_getDisplayRotation

function name: public int disp_getDisplayRotation(int screen_id)

description: Get the screen rotation angle

Parameter:

Parameter name	Type	Description
screen_id	int	Screen ID 0: main screen 1: secondary screen

Return Parameters Description

Parameter name	Type	Description
returned value	int	rotation angle:0/90/180/270

Remarks

- The main and secondary screens depend on the system and the definition of the screen parameters, not on the number of screens. For example, set the primary screen to LVDS and the secondary screen to HDMI. Access to 1 HDMI screen, HDMI is also a secondary screen, you need to pass in the Parameter is also a secondary screen

3.3.7、disp_setBootLogo

function name: public int disp_setBootLogo(String filepath)

description: Replace the boot logo

API VERSION: V2.8.0 or above

Parameter:

Parameter name	Type	Description
filepath	String	File path

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- The file path is passed to null to cancel the setting and restore the default
- File requirements: bmp format image, bit depth 8
- Setting non-compliant files is prone to system exceptions

3.3.8、disp_getBootLogo

function name: public int disp_getBootLogo()

description: Get the current boot Logo file path

API VERSION: V2.8.0 or above

Parameter: without

Return Parameters Description

Parameter name	Type	Description
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returned value	String	The file path of the boot logo: if it is not empty, it is custom, empty is the default
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3.3.9、disp_setBootAnimation

function name: public int disp_setBootAnimation(String filepath)

description: Replace the boot animation

API VERSION: V2.8.0 or above

Parameter:

Parameter name	Type	Description
filepath	String	File path

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- The file path is passed to null to cancel the setting and restore the default
- File requirements: animation package made according to Android requirements, zip format
- Setting non-compliant files is prone to system exceptions

3.3.10、disp_getBootAnimation

function name: public int disp_getBootAnimation()

description: Get the boot animation file path

API VERSION: V2.8.0 or above

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	The file path of the boot logo:Not empty is custom, empty is default

3.3.11、disp_setStatusBar

function name: `public int disp_setStatusBar(boolean enable)`

description: Set status bar display status

Parameter:

Parameter name	Type	Description
enable	boolean	true:show false:hide

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

3.3.12、disp_getStatusBar

function name: `public int disp_getStatusBar()`

description: Get the current status bar display status

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:show 0:hide

3.3.13、disp_setNavigationBar

function name: `public int disp_setNavigationBar(boolean enable)`

description: Set the navigation bar display status

Parameter:

Parameter name	Type	Description
enable	boolean	true:show false:hide

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

3.3.14、disp_getNavigationBar

function name: public int disp_getNavigationBar()

description: Get the current navigation bar display status

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	1: display 0: hide

3.3.15、disp_setStatusBarDrag

function name: public int disp_setStatusBarDrag(boolean enable)

description: Set whether the status bar can be pulled down

Parameter:

Parameter name	Type	Description
enable	boolean	true: enable false: disable

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

3.3.16、disp_getStatusBarDrag

function name: public int disp_getStatusBarDrag()

description: Set whether the status bar can be pulled down

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	1: enable. 0: disable

3.3.17、disp_setGestureBar

function name: public int disp_setGestureBar(boolean enable)

description: Set whether the gesture can pull out the navigation bar

Parameter:

Parameter name	Type	Description
enable	boolean	true: enable false: disable

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

3.3.18、disp_getGestureBar

function name: public int disp_getGestureBar()

description: Set whether the gesture can pull out the navigation bar

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	1: enable. 0: disable

3.3.19、disp_setSystemUIMode

function name: public int disp_setSystemUIMode(boolean enable)

description: Setting the SystemUI Mode

Parameter:

Parameter name	Type	Description
enable	boolean	true:OS mode false:android native

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- After setting, the navigation bar needs to be hidden and re-displayed to have changes
- In OS mode, the status bar does not support notification

3.3.20、disp_getSystemUIMode

function name: public int disp_getSystemUIMode()

description: Get the current SystemUI mode

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	true:OS mode false:android native

3.3.21、disp_addAppLauncherHideList

function name: public int disp_addAppLauncherHideList(String packageName)

description: Add applications that require hidden icons

Parameter:

Parameter name	Type	Description
packageName	String	Application Package Name

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Set and reboot to take effect

3.3.22、disp_getAppLauncherHideList

function name: public List disp_getAppLauncherHideList()

description: Get the application that set the hidden icon

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	All set hidden APP package names

3.3.23、disp_delAppLauncherHideList

function name: `public int disp_delAppLauncherHideList(String packageName)`

description: Delete applications that require hidden icons

Parameter:

Parameter name	Type	Description
packageName	String	Application Package Name

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Pass in 'clean' to delete all set applications

3.4、HDMI

3.4.1、disp_getHdmiInStatus

function name: `public int disp_getHdmiInStatus()`

description: Get hdmi in status value

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	1: Connected 0: Not connected

Remarks

- Interface not available, not supported

3.4.2、disp_setHdmiInAudio

function name: public int disp_setHdmiInAudio(boolean enable)

description: Set the hdmi in sound switch

Parameter:

Parameter name	Type	Description
enable	boolean	true:turn on false:turn off

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Interface not available, not supported

3.4.3、disp_getHdmiInAudio

function name: public int disp_getHdmiInAudio

description: Obtain the status of the hdmi in sound switch

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:turn on 0:turn off

Remarks

- Interface not available, not supported

3.4.4、disp_setHdminInNoSignalBitmap

function name: public int disp_setHdminInNoSignalBitmapString
filepath(String filepath)

description: Set the screen for hdmi inwithout signal time
display

Parameter:

Parameter name	Type	Description
filepath	String	File path (Pictures/Video)

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Interface not available, not supported

3.4.5、disp_setHdmiOutStatus

function name: public int disp_setHdmiOutStatus(boolean enable)

API VERSION: V2.13.0 or above

description: Set hdmi out switch status

Parameter:

Parameter name	Type	Description
enable	boolean	true:turn on false:turn off

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

3.4.6、disp_getHdmiOutStatus

function name: public int disp_getHdmiOutStatus()

API VERSION: V2.13.0 or above

description: Get hdmi out switch status

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:turn on 0:turn off

4、Network management

4.1、Information

4.1.1、net_getMacAddress

function name: `public String net_getMacAddress(String type)`

description: Obtain the MAC address of the NIC device

Parameter:

Parameter name	Type	Description
type	String	Internet Type eth0:Ethernet eth1:Ethernet wlan0:WIFI

Return Parameters Description

Parameter name	Type	Description
returned value	String	MAC address

Remarks

- API VERSION 2.12.0+ Available constants class
- The obtained Wifi MAC address is the local MAC address

4.1.2、net_getCurrentNetType

function name: `public String net_getCurrentNetType()`

description: Gets the Type of the current network connection

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	WIFI:WIFI ETH:Ethernet MOBILE:Mobile Network UNKNOWN:Unknown Type

Remarks

- API VERSIONV2.12.0+ available constant class

4.1.3、net_getNetWorkInf

function name: public NetworkInfoData net_getNetWorkInf(String type)

description: Gets information about the currently connected network

Parameter:

Parameter name	Type	Description
type	String	Internet Type eth0:Ethernet eth1:Ethernet lwlan0:WIFI

Return Parameters Description

Parameter name	Type	Description
returned value	NetworkInfoData	Objects for which network information is stored

Example

```
SmdtManagerNew smdt = SmdtManagerNew.getInstance(this);
NetworkInfoData mNetworkInfoData = smdtManagerNew.net_getNetWorkInf("eth0");
if (mNetworkInfoData != null) {
    String ip = mNetworkInfoData.getIp();
    String gateway = mNetworkInfoData.getGateway();
    String netmask = mNetworkInfoData.getNetmask();
    String dns1 = mNetworkInfoData.getDns1();
    String dns2 = mNetworkInfoData.getDns2();
}
```

Remarks

- API VERSIONV2.12.0+ available constant class
- For details, view the [network information object class](#)

4.1.4、net_getWifiRssi

function name: public int net_getWifiRssi(int level)

description: Get WIFI connection signal

Parameter:

Parameter name	Type	Description
level	int	Classification, such as: pass 5 is divided into 5 levels

Return Parameters Description

Parameter name	Type	Description
returned value	int	Current signal level

4.1.5、net_getImeiNumber

function name: public String net_getImeiNumber()

description: Get the IMEI number

API VERSION: V2.14.0 or above

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	IMEI number

4.1.6、net_getIccidNumber

function name: public String net_getIccidNumber()

description: Get ICCID number

API VERSION: V2.14.0 or above

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	ICCID number

4.1.7、net_getIccidNumber

function name: public String net_getImsiNumber()

description: Get IMSI number

API VERSION: V2.14.0 or above

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	IMSI number

4.2、Setting

4.2.1、net_setNetWork

function name: `public int net_setNetWork(String type, boolean enable)`

description: Set the network switch status

Parameter:

Parameter name	Type	Description
type	String	Internet Type eth0:Ethernet eth1:Ethernet1 wlan0:WIFI mobile:移动网络
enable	boolean	true:turn on false:turn off

Linux Parameter:

Parameter name	Type	Description
type	String	Internet Type eth0:Ethernet eth1:Ethernet1 wlan0:WIFI mobile:移动网络
enable	boolean	true:turn on false:turn off

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- API VERSIONV2.12.0+ Available constant class

4.2.2、net_getNetWork

function name: `public int net_getNetWork(String type)`

description: Get network switch status

Parameter:

Parameter name	Type	Description
type	String	Internet Type eth0:Ethernet eth1:Ethernet1 wlan0:WIFI mobile:mobile network

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:turn on 0:turn off

Remarks

- API VERSIONV2.12.0+ Available constant class

4.2.3、net_setNetWorkModel

function name: `public int net_setNetWorkModel(String type, int model, String ip, String gaw, String mask, String dns1, String dns2)`

description: Setting the network connection mode

Parameter:

Parameter name	Type	Description
type	String	Internet Type eth0:Ethernet eth1:Ethernet1 wlan0:WIFI
model	int	Network Mode 0:Dynamic 1:Static
ip	String	Set the IP address in static mode
gaw	String	Set the gateway in static mode
mask	String	Set the subnet mask in static mode
dns1	String	Set the DNS1 in static mode
dns2	String	Set the DNS2 in static mode

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- This interface WIFI is modified by the current connected WIFI, if not connected WIFI will not be able to switch modes

Remarks

- API VERSIONV2.12.0+ Available constant class

4.2.4、net_getNetWorkModel

function name: public int net_getNetWorkModel(String type)

description: Gets the network connection mode

Parameter:

Parameter name	Type	Description
type	String	Internet Type eth0:Ethernet eth1:Ethernet1 wlan0:WIFI

Return Parameters Description

Parameter name	Type	Description
returned value	int	Internet Mode:0Dynamic 1Static

Remarks

- API VERSIONV2.12.0+ Available constant class

4.2.5、net_setWifiAp

function name: public int net_setWifiAp(boolean enable)

description: Set WIFI hotspot switch status

Parameter:

Parameter name	Type	Description
enable	boolean	true:turn on false:turn off

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- The WIFI hotspot and the WIFI switch are mutually exclusive. After the WIFI hotspot is turned on, the wifi will be automatically turned off

4.2.6、net_getWifiAp

function name: `public int net_getWifiAp()`

description: Get WIFI hotspot switch status

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:turn on 0:turn off

4.2.7、net_setWifiConnect

function name: `public int net_setWifiConnect(String account, String pwd, int type, int mode, NetworkInfoData info)`

description: Set the WiFi connection account password

API VERSION: V2.6.0 or above

Parameter:

Parameter name	Type	Description
account	String	account name
pwd	String	password
type	int	way of encryption 0:without password 1:WEP 2:WPA
mode	int	connection mode 0:dynamic state 1:static state
info	NetworkInfoData	Configuration required when the connection mode is static

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- API VERSIONV2.12.0+ Available constant class
- Real-time effect, after the call will connect WIFI
- NetworkInfoData network information object classes

4.2.8、net_setNetworkProtect

function name: `public int net_setNetworkProtect(boolean enable, int type, long time, String ip_internet, String ip_intranet, String log_path, boolean reboot)`

description: Setting the Network Protection Switch Status

API VERSION: V2.7.0 or above

Parameter:

Parameter name	Type	Description
enable	boolean	true:turn on false:turn off
type	int	Type 0:auto 1:Ethernet 2:WIFI 3:mobile network
time	long	The interval between diagnostic completion and re-diagnosis
ip_internet	String	IP address of the external network
ip_intranet	String	Intranet IP address
log_path	String	Log saving path
reboot	boolean	Whether to reboot after repair network failure true:reboot false:not reboot

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- type Type default is automatic: Attempt to repair all network types when current network unavailability is detected
- time Interval time default 15 minutes: the interval time of diagnosis again after the end of diagnosis(including fixing problems after they occur), can not be less than three minutes, it is not recommended to set too short time, resulting in frequent detection
- ip_internet The default IP address of the Internet is Baidu: used to check whether the Internet is communicating
- ip_intranet The default Intranet IP address is Baidu: used to check whether the Internet is communicating
- log_path By default, logs are saved in the root directory /NetworkProtectLog
- reboot Whether to restart after the network restoration fails. The system restarts by default. Restart: After the

repair fails, restart the system to diagnose the fault again. If the system is restarted for multiple times, it goes to sleep. The wait time for redetection increases after each restart. No reboot: the repair will go into sleep mode when it fails.

- Sleep mode: When network changes are detected, the system will restore the guard and re-diagnose. If the diagnosis fails, the system will continue to sleep.

4.2.9、net_getNetworkProtectEnable

function name: public int net_getNetworkProtectEnable()

description: Get network guard switch status

API VERSION: V2.7.0 or above

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:turn on 0:turn off

4.2.10、net_getNetworkProtectEnable

function name: public List net_getNetworkProtectConfig()

description: Obtain Network Guard configuration information

API VERSION: V2.7.0 or above

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	List	Array order 0:Type1:interval time 2:IP address of the external network 3:Intranet IP address 4:log path 5:Whether to restart after the network recovery fails

Example

```
SmdtManagerNew smdt = SmdtManagerNew.getInstance(this);
```

```
List config = smdt.net_getNetworkProtectConfig();
int type = Integer.parseInt(config.get(0));
long time = Long.parseLong(config.get(1));
String ip_internet = config.get(2);
String ip_intranet = config.get(3);
String log_path = config.get(4);
boolean reboot = config.get(5).equals("1");
```

4.2.11、net_setNetworkPriority

function name: public int net_setNetworkPriority(String[] types)

description: Set the network priority

API VERSION: V2.15.0 or above

Parameter:

Parameter name	Type	Description
types	String[]	Network priority sorting

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- types Sort the network from high to low Typecharacter string, for example: new String[] {"eth0", "wlan0", "mobile"}; Ethernet/WIFI/mobile network
- Can also use the constant class new String[] { TYPE_ETH0, TYPE_WLAN, TYPE_MOBILE};
- The Settings take effect after being restarted

4.2.12、net_getNetworkPriority

function name: public String[] net_getNetworkPriority()

description: Get the network priority

API VERSION: V2.15.0 or above

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String[]	Network priority sorting

Remarks

- returned value Sort the network from high to low
Typecharacter string, for example: new String[]{"eth0",
"wlan0", "mobile"};Ethernet/WIFI/mobile network
-

4.2.13、net_setNetworkMultiEnable

function name: public int net_setNetworkMultiEnable(boolean enable)

description: Set the multi-network coexistence switch

API VERSION: V2.16.0 or above

Parameter:

Parameter name	Type	Description
enable	boolean	true:turn on false:turn off

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Note that with the use of network priority, the type of network on the external network in the first place
- Settings take effect after the restart

4.2.14、net_getNetworkMultiEnable

function name: public int net_getNetworkMultiEnable()

description: Obtain the status of the multi-network coexistence switch

API VERSION: V2.16.0 or above

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:turn on 0:turn off

5、System control

5.1、Setting

5.1.1、sys_setBluetooth

function name: public int sys_setBluetooth(boolean enable)

description: Set the Bluetooth switch status

Parameter:

Parameter name	Type	Description
enable	boolean	true:turn on false:turn off

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

5.1.2、sys_getBluetooth

function name: public int sys_getBluetooth()

description: Obtain Bluetooth switch status

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:turn on 0:turn off

5.1.3、sys_setHwStack

function name: public int sys_setHwStack(boolean enable)

description: Set the HW overlay switch status

Parameter:

Parameter name	Type	Description
enable	boolean	true:turn on false:turn off

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

5.1.4、sys_getHwStack

function name: public int sys_getHwStack()

description: Obtain the HW stack switch status

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:turn on 0:turn off

5.1.5、sys_setAirPlane

function name: public int sys_setAirPlane(boolean enable)

description: Set the airplane mode switch status

Parameter:

Parameter name	Type	Description
enable	boolean	true:turn on false:turn off

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

5.1.6、sys_getAirPlane

function name: public int sys_getAirPlane()

description: Obtain airplane mode switch status

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:turn on 0:turn off

5.1.7、sys_setLocation

function name: public int sys_setLocation(int mode)

description: Set the status of the location information switch

Parameter:

Parameter name	Type	Description
mode	int	0:turn off 1:turn on 2:power saving mode 3:high accuracy

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

5.1.8、sys_getLocation

function name: public int sys_getLocation()

description: Obtain the position information switch status

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	0:turn off 1:turn on 2:power saving mode 3:high accuracy

5.1.9、sys_setSoftKeyboard

function name: public int sys_setSoftKeyboard(boolean enable)

description: Set the soft keyboard display status

Parameter:

Parameter name	Type	Description
enable	boolean	true:turn on false:turn off

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

5.1.10、sys_getSoftKeyboard

function name: public int sys_getSoftKeyboard()

description: Get the soft keyboard display status

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:turn on 0:turn off

5.1.11、sys_setKeyReport

function name: public int sys_setKeyReport(boolean enable)

description: Set whether the key can be reported

Parameter:

Parameter name	Type	Description
enable	boolean	true:enable false:forbid

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

5.1.12、sys_getKeyReport

function name: public int sys_getKeyReport()

description: Obtain whether the key can be reported

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:enable 0:forbid

5.1.13、sys_setTouchReport

function name: public int sys_setTouchReport(boolean enable)

description: Set whether touch clicks are reported

Parameter:

Parameter name	Type	Description
enable	boolean	true:enable false:forbid

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

5.1.14、sys_getTouchReport

function name: public int sys_getTouchReport()

description: Get whether touch clicks can be reported

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:enable 0:forbid

5.1.15、sys_copyFile

function name: public void sys_copyFile(String oldpath, String newpath, CopyCallback callback)

description: copy file

Parameter:

Parameter name	Type	Description
oldpath	String	source path

newpath	String	target path
callback	CopyCallback	copy status callback

Return Parameters Description without

Example

```
SmdtManagerNew smdt = SmdtManagerNew.getInstance(this);
smdt.sys_copyFile(oldpath, newpath, new SmdtManagerNew.CopyCallback
() {
    @Override
    public void onCopyProgress(int progress) throws RemoteException {
        ...
    }

    @Override
    public void onCopyFinished(int returnCode, String msg) throws Rem
oteException {
        ...
    }
});
```

Remarks

- callback interface: [CopyCallback](#)

5.1.16、sys_setDefInputMethod

function name: public int sys_setDefInputMethod(String default_input_method)

description: Set the default input method

Parameter:

Parameter name	Type	Description
default_input_method	String	The package name and class name of the input method, for example:com.android.inputmethod.pinyin/.LatinIME

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- It is recommended to get the list of input methods first before setting

5.1.17、sys_getDefInputMethod

function name: public String sys_getDefInputMethod()

description: Get the current default input method

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	Input method package name and class name, for example: com.android.inputmethod.pinyin/.LatinIME

5.1.18、sys_getDefInputMethodList

function name: public String[] sys_getDefInputMethodList()

description: Get all the input methods

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	All input method package names and class names

5.1.19、sys_setSystemFontSize

function name: public int sys_setSystemFontSize(float size)

description: Set the system font size

Parameter:

Parameter name	Type	Description
size	float	Font size, for example 0.85/1.00/1.15/1.30

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

5.1.20、sys_getSystemFontSize

function name: public float sys_getSystemFontSize()

description: Gets the font size currently set by the system

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	float	Font size, for example 0.85/1.00/1.15/1.30

5.2、Time and language

5.2.1、sys_setNtpServer

function name: public int sys_setNtpServer(String url)

description: Set the IP address of the NTP synchronization server

Parameter:

Parameter name	Type	Description
url	String	Server url, for example:"time.nist.gov"

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

5.2.2、sys_getNtpServer

function name: public String sys_getNtpServer()

description: Get the address of the current NTP synchronization time server

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	server address url

5.2.3、sys_setNationallanguage

function name: public int sys_setNationallanguage(String national, String language)

description: Set the country and language

Parameter:

Parameter name	Type	Description
national	String	Country area, for example:CN
language	String	Language, for example: zh

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Incoming Parameter errors can lead to system a system exception, please use caution.
- Advice to traverse the system access to the corresponding national region and language code, then call the interface Settings

5.2.4、sys_getNationallanguage

function name: public String sys_getNationallanguage()

description: Gets the currently set country and language

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	Country and language, for example: zh_CN

Remarks

- returned value zh_CN: country CN, Language zh

5.2.5、sys_setTimeZone

function name: `public int sys_setTimeZone(String timeZone)`

description: Setting the current Time Zone

Parameter:

Parameter name	Type	Description
timeZone	String	Time zone, for example: Asia/Shanghai

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

5.2.6、sys_getTimeZone

function name: `public String sys_getTimeZone()`

description: Get the current time zone

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	Current time zone, for example: Asia/Shanghai

5.2.7、sys_setTimeFormat

function name: `public int sys_setTimeFormat(String format)`

description: Set the default system time format

Parameter:

Parameter name	Type	Description
format	String	time format 12:12-hour system 24:24-hour system

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

5.2.8、sys_getTimeFormat

function name: public String sys_getTimeFormat()

description: Get system time in default format

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	12:12-hour system 24:24-hour system

5.2.9、sys_setTime

function name: public int sys_setTime(long time_millisecond)

description: Set the current system time

Parameter:

Parameter name	Type	Description
time_millisecond	long	Time, unit:milliseconds

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- need to turn off automatic system time synchronization before setting

5.2.10、sys_setNetworkTimeSync

function name: public int sys_setNetworkTimeSync(boolean enable)

description: Set whether to synchronize network time

Parameter:

Parameter name	Type	Description
enable	boolean	true:turn on false:turn off

Return Parameters Description

Parameter name	Type	Description
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returned value	int	Call result, reference error code
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5.2.11、sys_getNetworkTimeSync

function name: public int sys_getNetworkTimeSync()

description: Obtain the status of synchronizing network time

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:turn on 0:turn off

5.3、Application

5.3.1、sys_setDefaultLauncher

function name: public int sys_setDefaultLauncher(String packageName)

description: Set the default desktop application

Parameter:

Parameter name	Type	Description
packageName	String	Set the package name and class name of the desktop application to be set (Put "/" in the middle)

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Must have a class name, such as:android.app.smdt.launcher/.Launcher

5.3.2、sys_getDefaultLauncher

function name: public String sys_getDefaultLauncher()

description: Get the default desktop application

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	Application package name and class name

5.3.3、sys_setSystemBootTestApp

function name: public int sys_setSystemBootTestApp(String packageName)

description: Set the applications that need to be auto-started

Parameter:

Parameter name	Type	Description
packageName	String	Application Package Name (When need to specify the class name, add "/" followed by the class name)

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- If the set application not have a desktop icon, need to specify the class name
- Example: Specify package name android.app.smdt.apidemo
specify class name android.app.smdt.apidemo/.MainActivity

5.3.4、sys_getSystemBootTestApp

function name: public String sys_getSystemBootTestApp()

description: Obtain the application that needs to be auto-started

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	Application Package Name

5.3.5、sys_setDaemonsActivity

function name: `public int sys_setDaemonsActivity(String packageName, long time_millisecond, boolean broadcast_enable)`

description: Setting up the daemon

Parameter:

Parameter name	Type	Description
packageName	String	Set the name of the Daemon (To specify a class name, add a "/" followed by the class name)
time_millisecond	long	How long it takes to remount the application after it exits the front end, in milliseconds
broadcast_enable	boolean	Whether to send a global broadcast when the application exits

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- If the Daemon application does not have a desktop icon, you need to specify the class name
- Example: specify the package name `android.app.smdt.apidemo` specify the class name `android.app.smdt.apidemo/.MainActivity`
- Global broadcast is `"android.app.smdt.PROTECT_CHECK"`

5.3.6、sys_getDaemonsActivity

function name: `public String sys_getDaemonsActivity()`

description: Gets the name of the currently Daemon application package

Parameter: without

Return Parameters Description

Parameter name	Type	Description
----------------	------	-------------

returned value	String	The name of the Daemon application package、
----------------	--------	---

5.3.7、sys_doSilentInstallApp

function name: public void sys_doSilentInstallApp(String apkPath, InstallCallback callback)

description: Silent installation application

Parameter:

Parameter name	Type	Description
apkPath	String	Path of the application to be installed
callback	InstallCallback	Installation callback

Return Parameters Description without

Example

```
SmdtManagerNew smdt = SmdtManagerNew.getInstance(this);
smdt.sys_doSilentInstallApp(path, new SmdtManagerNew.InstallCallback
() {
    @Override
    public void onInstallFinished(String packageName, int returnCode,
String msg) throws RemoteException {
        ...
    }
});
```

Remarks

- Callback interface: [InstallCallback](#)

5.3.8、sys_doSilentUninstallApp

function name: public void sys_doSilentUninstallApp(String packageName, DeleteCallback callback)

description: Silent uninstall application

Parameter:

Parameter name	Type	Description
packageName	String	Name of the application package to be uninstalled
callback	DeleteCallback	Uninstall callback

Return Parameters Description without

Example

```
SmdtManagerNew smdt = SmdtManagerNew.getInstance(this);
smdt.sys_doSilentUninstallApp(pkg, new SmdtManagerNew.DeleteCallback
() {
    @Override
    public void onDeleteFinished(String packageName, int returnCode,
String msg) throws RemoteException {
        ...
    }
});
```

Remarks

- Callback interface: [DeleteCallback](#)

5.3.9、sys_addBlackWhiteList

function name: public int sys_addBlackWhiteList(String packageName, int type, int function)

description: Add application to the whitelist

Parameter:

Parameter name	Type	Description
packageName	String	Application package name
type	int	Type 0:blacklist 1:whitelist
function	int	Function 0: uninstall 1: install

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- API VERSIONV2.12.0+ available constant class
- Allow all applications to be installed/uninstalled when both black and white lists are empty
- When the whitelist is not empty, whitelisted applications can be installed, but other applications cannot be installed

- When the whitelist is empty and the blacklist is not empty, the blacklisted application cannot be installed and other applications can be installed.

5.3.10、sys_getBlackWhiteList

function name: public List sys_getBlackWhiteList(int type, int function)

description: Get black and white list

Parameter:

Parameter name	Type	Description
type	int	Type 0:blacklist 1:whitelist
function	int	Function 0:uninstall 1:install

Return Parameters Description

Parameter name	Type	Description
returned value	List	Application Package Name List

Remarks

- API VERSIONV2.12.0+ available constant class
- Allow all applications to be installed/uninstalled when both black and white lists are empty
- If the whitelist is not empty, the whitelist application can be installed, but other applications cannot be installed
- When the whitelist is empty and the blacklist is not empty, the blacklisted application cannot be installed and other applications can be installed.

5.3.11、sys_delBlackWhiteList

function name: public int sys_delBlackWhiteList(String packageName, int type, int function)

description: Delete the application from the whitelist

Parameter:

Parameter name	Type	Description
packageName	String	Application Package Name

type	int	Type 0:blacklist 1:whitelist
function	int	Function 0: uninstall 1: install

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- API VERSIONV2.12.0+ available constant class
- Application package name special value: "clean"Clear all data; "clean_type"Clear the list with the type passed in; "clean_funtion"Clear the list with the function passed in "clean_type_function" Clear the list with the type and function passed

5.3.12、sys_backupApplication

function name: public void sys_backupApplication(String packageName, BackUpCallback callback)

description: Backing up application data

Parameter:

Parameter name	Type	Description
packageName	String	Application package name
callback	BackUpCallback	Backup callback

Return Parameters Description without

Example

```
SmdtManagerNew smdt = SmdtManagerNew.getInstance(this);
smdt.sys_backupApplication(packageName, new SmdtManagerNew.BackUpCallback() {
    @Override
    public void onBackUpProgress(int progress) throws RemoteException
    {
        ...
    }

    @Override
    public void onBackUpFinished(int returnCode, String msg) throws R
```

```

RemoteException {
    ...
}

@Override
public void onBackupPath(String path) throws RemoteException {
    ...
}
});

```

Remarks

- Callback interface: [BackUpCallback](#)
- Condition: APP must exist for backup/root required
- Backup: /data/data/ package name /data/user/0/ package name /data/user_de/0/ package name /Android/data/ package name

5.3.13、sys_recoveryApplication

function name: public void sys_recoveryApplication(String packageName, RecoveryCallback callback)

description: Recovery of application data

Parameter:

Parameter name	Type	Description
packageName	String	Application package name
callback	RecoveryCallback	Recovery callback

Return Parameters Description without

Example

```

SmdtManagerNew smdt = SmdtManagerNew.getInstance(this);
smdt.sys_recoveryApplication(packageName, new SmdtManagerNew.RecoveryCallback() {
    @Override
    public void onRecoveryProgress(int progress) throws RemoteException {
        ...
    }

    @Override
    public void onRecoveryFinished(int returnCode, String msg) throws

```

```

RemoteException {
    ...
}

@Override
public void onRecoveryPath(String path) throws RemoteException {
    ...
}
});

```

Remarks

- Callback interface: [RecoveryCallback](#)
- Condition: APP must exist for recovery/root required
- Will restore: /data/data/package name /data/user/0/package name /data/user_de/0/package name /Android/data/package name

5.3.14、sys_setAutoInstallEnable

function name: public int sys_setAutoInstallEnable(boolean enable)

description: Set whether to allow automatic application installation

API VERSION: After V2.6.0

Parameter:

Parameter name	Type	Description
enable	boolean	true:allow false:not allow

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

5.3.15、sys_getAutoInstallEnable

function name: public int sys_getAutoInstallEnable(boolean enable)

description: Gets whether to allow automatic application installation

API VERSION: After V2.6.0

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:allow 0:not allow

5.3.16、sys_addAutoInstallAppList

function name: public int sys_addAutoInstallAppList(String path, String packageName)

description: Add automatic application installation policy configuration

API VERSION: After V2.6.0

Parameter:

Parameter name	Type	Description
path	String	Installation package path
packageName	String	Application package name

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- The installation package path is a relative path, relative to the external storage, for example, external inserted U disk, the root directory to create app directory, the directory to place test.apk, then fill in: app/test.apk can
- Multiple package name policies can be set under the same path
- Passing null for a package name will clear all policies in that path

5.3.17、sys_getAutoInstallAppList

function name: public List sys_getAutoInstallAppList()

description: Obtain the automatic installation application policy configuration

API VERSION: After V2.6.0

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	List	Auto Install Application Policy Configuration List

Example

```
SmdtManagerNew smdt = SmdtManagerNew.getInstance(this);
List list = smdt.sys_getAutoInstallAppList();
if (list != null && list.size() > 0) {
    for (int i = 0; i < list.size(); i++) {
        String[] inf = list.get(i).split(",");
        String path = inf[0];
        String packageName = "";
        if (inf.length > 1) {
            packageName = inf[1];
        }
    }
}
```

Remarks

- Returns a list member consisting of path + "," + package name. For example, path root app.apk, package name android.app.smdt.apidemo, then the obtained value: app.apk,android.app.smdt.apidemo

5.3.18、sys_delAutoInstallAppList

function name: public int sys_delAutoInstallAppList(String path, String packageName)

description: Remove the automatic installation application policy configuration

API VERSION: After V2.6.0

Parameter:

Parameter name	Type	Description
path	String	Installation package path
packageName	String	Application package name

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- path Installation package path Special pass value: "clean" Clear all data;
- If the Application package name is empty, all policy configurations in the path are deleted

5.4、Audio

5.4.1、sys_setVolume

function name: public int sys_setVolume(int value)

description: Set the system media volume

Parameter:

Parameter name	Type	Description
value	int	Volume value

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Get the maximum and minimum volume values first and then set

5.4.2、sys_getVolume

function name: public int sys_getVolume()

description: Get the system media volume value

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	volume value

5.4.3、sys_getVolumeMaxMin

function name: public int sys_getVolumeMaxMin(String type)

description: Obtain the maximum and minimum values of the system media volume

Parameter:

Parameter name	Type	Description
type	String	max:maximum min:minimum

Return Parameters Description

Parameter name	Type	Description
returned value	int	Maximum volume/Minimum volume

5.4.4、sys_setVolumeMute

function name: public int sys_setVolumeMute(boolean enable)

description: Set system media sound mute

Parameter:

Parameter name	Type	Description
enable	boolean	true:mute false:cancel mute

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

5.4.5、sys_getVolumeMute

function name: public int sys_getVolumeMute()

description: Obtain whether the system media sound is muted

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:mute 0:not mute

5.4.6、sys_setOutVolume

function name: public int sys_setOutVolume(int type, int value)

description: Set the volume gain of the device output

API VERSION: V2.16.0 or above

Parameter:

Parameter name	Type	Description
type	int	Device Type 1:Speaker sound 2:Headphone sound 3:HDMI sound
value	int	The set volume gain value Range: 0<=vlaue<=99

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Currently, only the horn gain can be set

5.4.7、sys_getOutVolume

function name: public int sys_getOutVolume(int type)

description: Gets the volume gain of the sound device output

API VERSION: V2.16.0 or above

Parameter:

Parameter name	Type	Description
type	int	Device Type 1:Speaker sound 2:Headphone sound 3:HDMI sound

Return Parameters Description

Parameter name	Type	Description
returned value	int	Volume gain value 0-99

Remarks

- Currently only speaker gain is supported

5.4.8、sys_setAudioOutput

function name: public int sys_setAudioOutput(int type)

description: Set the audio output Type

API VERSION: V2.16.0 or above

Parameter:

Parameter name	Type	Description
type	int	audio output Type 0: auto 1: loudspeaker 2: earphone 3: speaker + earphone 4: hdmi 5: speaker+HDMI 6: earphone+HDMI 7: speaker+earphone+HDMI

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- For hardware reasons, the headphones will also output sound when selecting speaker-related configurations on some boards

5.4.9、sys_getAudioOutput

function name: public int sys_getAudioOutput()

description: Get audio output Type

API VERSION: V2.16.0 or above

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	0: auto 1: loudspeaker 2: earphone 3: speaker + earphone 4: hdmi 5: speaker+HDMI 6: earphone+HDMI 7: speaker+earphone+HDMI

5.4.10、sys_setAudioInput

function name: public int sys_setAudioInput(int type)

description: Set the audio input Type

API VERSION: V2.16.0 or above

Parameter:

Parameter name	Type	Description
type	int	audio input Type 0: auto 1: loudspeaker 2: earphone

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- This interface does not support

5.4.11、sys_getAudioInput

function name: public int sys_getAudioInput()

description: Get the audio input Type

API VERSION: V2.16.0 or above

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	audio input Type 0: auto 1: microphone 2: earphone

Remarks

- This interface does not support

5.5、IO

5.5.1、sys_setGpioDirection

function name: public int sys_setGpioDirection(int io, int direction, int value)

description: Setting the GPIO input and output states

Parameter:

Parameter name	Type	Description
io	int	io port, from 1 to 10
direction	int	GPIO direction 0:input 1:output
value	int	When setting GPIO direction to output, set 0:low level 1:high level

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- API VERSIONV2.12.0+ Available constant class

5.5.2、sys_getGpioDirection

function name: public int sys_getGpioDirection(int io)

description: Get GPIO input and output status

Parameter:

Parameter name	Type	Description
io	int	io port, from 1-10

Return Parameters Description

Parameter name	Type	Description
returned value	int	GPIO direction 0: input 1: output

Remarks

- API VERSIONV2.12.0+ Available constant class

5.5.3、sys_getGpioValue

function name: public int sys_getGpioValue(int io)

description: Get the level state of the GPIO

Parameter:

Parameter name	Type	Description
io	int	io port, from 1-10

Return Parameters Description

Parameter name	Type	Description
returned value	int	0:low level 1:high level

Remarks

- API VERSIONV2.12.0+ Available constant class

5.5.4、sys_setExGpioDirection

function name: public int sys_setExGpioDirection(int io, int direction, int value)

description: Set external GPIO input/output status

Parameter:

Parameter name	Type	Description
io	int	io port, from 1-10
direction	int	GPIO direction 0: input 1: output
value	int	When setting GPIO direction to output, set 0: low level 1: high level

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- API VERSIONV2.12.0+ Available constant class

5.5.5、sys_getExGpioDirection

function name: public int sys_getExGpioDirection(int io)

description: Get external GPIO input/output status

Parameter:

Parameter name	Type	Description
io	int	io port, from 1-10

Return Parameters Description

Parameter name	Type	Description
returned value	int	GPIO direction 0: input 1: output

Remarks

- API VERSIONV2.12.0+ Available constant class

5.5.6、sys_getExGpioValue

function name: public int sys_getExGpioValue(int io)

description: Get the level state of the external GPIO

Parameter:

Parameter name	Type	Description
io	int	io port, from 1-10

Return Parameters Description

Parameter name	Type	Description
returned value	int	0: low level 1: high level

Remarks

- API VERSIONV2.12.0+ Available constant class

5.5.7、sys_setControl

function name: public int sys_setControl(int type, boolean enable)

description: Other IO related Settings (Mainboard status indicator, module power supply)

Parameter:

Parameter name	Type	Description
type	int	3:wifi power 4:wifi reset 5:led control 6:speak power 7:lvds power 8:lvds reset 9:4G power 10:4G reset 11:LAN power 12:LAN reset 13:SD power 14:SD reset 15:TP power 16:TP reset 17:GBE reset 18:EDP BackLight power 19:Fan power
enable	boolean	true:turn on false:turn off

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- API VERSIONV2.12.0+ Available constant class
- ordinary application only support the control LED lights (5) and fan (19)
- Other controls need to be at the system application level

5.5.8、sys_getControl

function name: public int sys_getControl(int type)

description: Get other IO related status (Mainboard status indicator, module power supply)

Parameter:

Parameter name	Type	Description
type	int	3:wifi power 4:wifi reset 5:led control 6:speak power 7:lvds power 8:lvds reset 9:4G power 10:4G reset 11:LAN power 12:LAN reset 13:SD power 14:SD reset 15:TP power 16:TP reset 17:GBE reset 18:EDP BackLight power 19:Fan power

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:turn on 0:turn off

Remarks

- API VERSIONV2.12.0+ Available constant class
- Common applications only support the control of LED lights (5) and fans (19)
- Other controls need to be at the system application level

5.6、Timed switch on/off

5.6.1、sys_setAutoPowerOnOff

function name: public int sys_setAutoPowerOnOff(boolean enable, int[] week, int onHour, int onMinute, int offHour, int offMinute)

description: Set the timing switch

Parameter:

Parameter name	Type	Description
enable	boolean	true:turn on false:turn off
week	int[]	Date, new int[] {0,0,0,0,0,0} represents a repeat within 7 days, with the first being Sunday 1: set 0: not set

onHour	int	Power on time point (hour) (24-hour system)
onMinute	int	Power on time point (minute)
offHour	int	Power off time point (hour) (24-hour system)
offMinute	int	Power off time point (minute)

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Example

```
SmdtManagerNew smdt = SmdtManagerNew.getInstance(this);
String offTime = "11:00";
String onTime = "12:00";
int on_hour = Integer.parseInt(onTime.split(":")[0]);
int on_min = Integer.parseInt(onTime.split(":")[1]);
int off_hour = Integer.parseInt(offTime.split(":")[0]);
int off_min = Integer.parseInt(offTime.split(":")[1]);
//int[] week = null; //Set the day
int[] week = new int[] {1,0,0,0,0,0,0} //The first one is Sunday, 1 i
s set, 0 is not set
int result = smdt.sys_setAutoPowerOnOff(true, week, on_hour, on_min,
off_hour, off_min);
```

Remarks

- The first of the week Parameter array is Sunday, and so on
- week Parameter passed in null means it is set only once, i.e. on the same day.
- When not set to repeat, but only set once, the set shutdown time needs to be after the current time.
- The shutdown time needs to be more than 3 minutes apart from the current time. The interval between power on time and power off time also needs to be more than 3 minutes
- Timing switch error code class

5.6.2、sys_getAutoPowerOnOffEnable

function name: public int sys_getAutoPowerOnOffEnable(int type)

description: Get timed on/off status

API VERSION: After V2.6.0

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	0:turn off 1:turn on

Remarks

- Before V2.6.0, the status of timed power on/off can be obtained by calling sys_getAutoPowerOnOff.

5.6.3、sys_getAutoPowerOnOff

function name: public String sys_getAutoPowerOnOff(int type)

description: Get the power on/off time of the timer switch settings

API VERSION: There are changes after V2.6.0, please refer to

RemarksParameter:

Parameter name	Type	Description
type	int	1: power on 0: power off

Return Parameters Description

Parameter name	Type	Description
returned value	String	Timer on/off time of current setting (hours and minutes 24-hour system)

Remarks

- Before V2.6.0 version, you can use this interface to determine whether the timed switch is on or not, with a value when it is on and null when it is off
- Before V2.6.0, the time can only be obtained when the timer is turned on.
- After version V2.6.0, the last setting is obtained, independent of the switch state

5.6.4、sys_getAutoPowerOnOffRepeat

function name: public int[] sys_getAutoPowerOnOffRepeat()

description: Get the duplicate status of the timing switch Settings

API VERSION: There are changes after V2.6.0, please refer to Remarks

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	date, new int[] {0,0,0,0,0,0,0,0} represents 7 days, the first is Sunday 1:set 0:not set

Remarks

- Week Parameter's array is the first day of the week, and so on
- Before version V2.6.0, the timer can be obtained only when the switch is on, and null when it is off.
- After version V2.6.0, the last setting is obtained, independent of the switch state

5.7、WatchDog

5.7.1、sys_setWatchDog

function name: public int sys_setWatchDog(boolean enable, int poweroff_time)

description: Set the WatchDog switch status

Parameter:

Parameter name	Type	Description
enable	boolean	true:turn on false:turn off
poweroff_time	int	The default shutdown time after not feeding the dog is 60 seconds. Unit: second

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- The poweroff_timeParameter in the interface is not supported yet, the default is 60 seconds

5.7.2、sys_getWatchDog

function name: public int sys_getWatchDog()

description: Obtain the WatchDog switch status

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:turn on 0:turn off

5.7.3、sys_setWatchDogFeed

function name: public int sys_setWatchDogFeed()

description: WatchDog feed the dog

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

5.7.4、sys_getWatchDogShutDownTime

function name: public int sys_getWatchDogShutDownTime()

description: Get how long to turn off WatchDog after not feeding the dog

Parameter:

without

Return Parameters Description

Parameter name	Type	Description
returned value	int	Shutdown time Unit: second

Remarks

- Interface not available, not supported

5.8、Upgrade and debug

5.8.1、sys_setPointerLoction

function name: public int sys_setPointerLoction(boolean enable)

description: Set pointer position switch status

Parameter:

Parameter name	Type	Description
enable	boolean	true:turn on false:turn off

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

5.8.2、sys_getPointerLoction

function name: public int sys_getPointerLoction()

description: Get the pointer position switch status

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:turn on 0:turn off

5.8.3、sys_setPowerOff

function name: public int sys_setPowerOff()

description: System shutdown

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

5.8.4、sys_setReboot

function name: public int sys_setReboot()

description: System reboot

Parameter:

without

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

5.8.5、sys_setRebootByMcu

function name: public int sys_setReboot()

description: System restart (MCU restart)

API VERSION: V2.13.0 or above

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

5.8.6、sys_setDeveloperOptions

function name: public int sys_setDeveloperOptions(boolean enable)

description: Set the developer option switch state

Parameter:

Parameter name	Type	Description
enable	boolean	true:turn on false:turn off

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

5.8.7、sys_getDeveloperOptions

function name: public int sys_getDeveloperOptions()

description: Get the developer option switch status

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:turn on 0:turn off

5.8.8、sys_doUpdatePackage

function name: public int sys_doUpdatePackage(int type, String filepath)

description: System upgrade

Parameter:

Parameter name	Type	Description
type	int	Upgrade Type:Interface reserved for the time being useless, pass in any can
filepath	String	Absolute path of the firmware package

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

5.8.9、sys_rebootRecovery

function name: public int sys_rebootRecovery()

description: Restore factory settings

Parameter:

without

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

5.8.10、sys_setSystemLog

function name: public int sys_setSystemLog(boolean enable, int[] type, String dirpath, long fileMaxSize, boolean boot)

description: Capture the system log to the specified path

Parameter:

Parameter name	Type	Description
enable	boolean	true:turn on false:turn off
type	int[]	Type of logs to be fetched null Default output all 0 All logs are not output continuously, only once 1 Kernel driver log (continuous output) 2 Android system log (continuous output) 3 Media main log buffer (continuous output) 4 Radio buffer related information (continuous output) 5 Prop system properties 6 Config Kernel Startup Parameter (requires root) 7 Misc Memory usage status 8 App non-pre-installed APK information 9 Mcu information
dirpath	String	Storage directory The default is stored in the system root directory /SmdtLog/
fileMaxSize	long	By default, the maximum storage value of a single log file is 50MB
boot	boolean	Startup capture log true:turn on false:turn off

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Check the system memory remaining before storing the logs, and clean up the log files when the memory is low.
- When a single log file reaches the maximum storage value, new files will be generated, up to 10 in a single directory, and the oldest files will be deleted when the limit is reached.

- Setting Typetype with 0 means that the logs to be captured are only captured up to the current time and are not output continuously.

5.8.11、sys_getSystemLog

function name: public int sys_getSystemLog()

description: Get system catch log switch status

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:turn on 0:turn off

5.8.12、sys_getProcessLogcat

function name: public void sys_getProcessLogcat(LogCallback callback)

description: Obtain system logs line by line

Parameter:

Parameter name	Type	Description
callback	LogCallback	Listening callbacks for each log line

Return Parameters Description without

Example

```
SmdtManagerNew smdt = SmdtManagerNew.getInstance(this);
int[] type = new int[] {2}; // 2 for the system log, with and including can
smdt.sys_setSystemLog(true, type, null, 0, false);
smdt.sys_getProcessLogcat(new SmdtManagerNew.LogCallback() {
    @Override
    public void onSingleLine(String log) throws RemoteException {
        ...
    }
});
```

Remarks

- callback interface: [LogCallback](#)
- need to switch on system logs, and choose the Type: 2 android
- Turn off the syslog switch or pass null to the callback to release the listener

5.8.13、sys_getProcessAnrLog

function name: public int sys_getProcessAnrLog(String filepath)

description: Get ANR logs

Parameter:

Parameter name	Type	Description
filepath	String	save path

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

5.8.14、sys_setAdbDebug

function name: public int sys_setAdbDebug(int type, boolean enable)

description: Set ADB switch status

Parameter:

Parameter name	Type	Description
type	int	ADBType 0:USB 1:Internet
enable	boolean	true:turn on false:turn off

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- API VERSIONV2.12.0+ Available constant class

5.8.15、sys_getAdbDebug

function name: `public int sys_getAdbDebug(int type)`

description: Get ADB switch status

Parameter:

Parameter name	Type	Description
type	int	ADBType 0:USB 1:Internet

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:turn on 0:turn off

Remarks

- API VERSIONV2.12.0+ Available constant class

5.8.16、sys_setOTGMode

function name: `public int sys_setOTGMode(int mode)`

description: Set the OTG mode

Parameter:

Parameter name	Type	Description
mode	int	0:HOST 1:DEVICE

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- API VERSIONV2.12.0+ Available constant class

5.8.17、sys_getOTGMode

function name: `public int sys_getOTGMode()`

description: Get the current OTG mode

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	0:HOST 1:DEVICE

Remarks

- API VERSIONV2.12.0+ Available constant class

5.8.18、sys_setFloatBall

function name: public int sys_setFloatBall(boolean enable)

description: Set the FloatBall state

Parameter:

Parameter name	Type	Description
enable	boolean	true:turn on false:turn off

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

5.8.19、sys_getFloatBall

function name: public int sys_getFloatBall()

description: Get the FloatBall state

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:turn on 0:turn off

5.8.20、sys_setUpdateExState

function name: public int sys_setUpdateExState(boolean enabled)

description: Set whether an external storage device can be cloned or upgraded

API VERSION: V2.12.0 or above

Parameter:

Parameter name	Type	Description
enable	boolean	true:turn on false:turn off

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

5.8.21、sys_getUpdateExState

function name: public int sys_getUpdateExState()

description: Set whether an external storage device can be cloned or upgraded

API VERSION: V2.12.0 or above

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	0: disable 1: allow

6、Hardware control

6.1、Storage

6.1.1、dev_getSDcardPath

function name: public String dev_getSDcardPath()

description: Obtain the SD card path of the external storage device

Parameter: without

Return Parameters Description

Parameter name	Type	Description
----------------	------	-------------

returned value	String	External storage SD card path
----------------	--------	-------------------------------

6.1.2、dev_getUdiskPath

function name: `public List dev_getUdiskPath()`

description: Get the paths to all USB drives of external storage

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	List	Path to all USB drives for external storage

6.1.3、dev_unmountExternalStorage

function name: `public int dev_unmountExternalStorage(String path, boolean force, boolean removeEncryption)`

description: Uninstalling external storage

Parameter:

Parameter name	Type	Description
path	String	Absolute path of the external storage to be uninstalled
force	boolean	Forcible uninstall or not
removeEncryption	boolean	Whether to remove an encrypted device

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

6.1.4、dev_getPublicPartitionSize

function name: `public int dev_getPublicPartitionSize(int type, int deviceId)`

description: Gets the total size of the public private partition

Parameter:

Parameter name	Type	Description
----------------	------	-------------

type	int	Type 0:emmc 1:eprom
deviceId	int	When reading the eeprom, the device ID, starting from 0, represents one EEPROM per ID

Return Parameters Description

Parameter name	Type	Description
returned value	int	Total private partition size

6.1.5、dev_readPublicPartition

function name: `public byte[] dev_readPublicPartition(int type, int deviceId, int areaId, int start_addr, int size)`

description: Read the public private partition

Parameter:

Parameter name	Type	Description
type	int	Type 0:emmc 1:eprom
deviceId	int	When reading eeprom, device ID: start from 0, each ID represents one EEPROM
areaId	int	When reading eeprom, area ID: start from 1, each ID represents an area
start_addr	int	initial address
size	int	data length

Return Parameters Description

Parameter name	Type	Description
returned value	byte[]	Read data

6.1.6、dev_writePublicPartition

function name: `public int dev_writePublicPartition(int type, int deviceId, int areaId, int start_addr, int size, byte[] buf)`

description: Writes to the public private partition

Parameter:

Parameter name	Type	Description
type	int	Type 0:emmc 1:eprom
deviceId	int	When reading an eeprom, device ID: starting from 0, each ID represents

		an EEPROM
areaId	int	When reading eeprom, area ID: start from 1, each ID represents an area
start_addr	int	initial address
size	int	data length
buf	byte[]	read-in data

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- It is recommended to read the partition size before writing, if you exceed it, you cannot write

6.1.7、dev_readMipsPartition

function name: public byte[] dev_readMipsPartition(int type, int deviceId, int areaId, int start_addr, int size)

description: Read the MIPS private partition

Parameter:

Parameter name	Type	Description
type	int	Type 0:emmc 1:eeprom
deviceId	int	When reading an eeprom, device ID: starting from 0, each ID represents an EEPROM
areaId	int	When reading eeprom, area ID: start from 1, each ID represents an area
start_addr	int	initial address
size	int	data length

Return Parameters Description

Parameter name	Type	Description
returned value	byte[]	Read data

Remarks

- This interface is for MIPS only

6.1.8、dev_writeMipsPartition

function name: public int dev_writeMipsPartition(int type, int deviceId, int areaId, int start_addr, int size, byte[] buf)

description: Writes to the MIPS private partition

Parameter:

Parameter name	Type	Description
type	int	Type 0:emmc 1:eeeprom
deviceId	int	When reading eeeprom, device ID: start from 0, each ID represents one EEPROM
areaId	int	When reading the eeeprom, the region ID: starting from 1, each ID represents a region
start_addr	int	initial address
size	int	data length
buf	byte[]	read-in data

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- This interface is for MIPS only

6.2、Serial port

6.2.1、dev_getUartPath

function name: public String dev_getUartPath(String uart)

description: Obtain the absolute path of the serial port based on the port number

Parameter:

Parameter name	Type	Description
uart	String	Serial port number, for example:uart0/uart1/uart2/uart3

Return Parameters Description

Parameter name	Type	Description
----------------	------	-------------

returned value	String	Absolute path of the serial port, for example, /dev/ttyS1 Subject to the actual serial port to be operated
----------------	--------	--

6.2.2、dev_openUart

function name: public int dev_openUart(String uartNode, int baudrate, int databits, int stopbits, int parity, int flow_ctrl)

description: Open serial port

Parameter:

Parameter name	Type	Description
uartNode	String	Absolute path of the serial port
baudrate	int	Baud rate
databits	int	data bits:8/7/6/5
stopbits	int	stop bits:1/2
parity	int	parity bit:0 without odd-even check, 1 odd parity check, 2 even parity check
flow_ctrl	int	flow Control:0 not use flow control, 1 hardware flow control, 2 software flow control

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Only one serial port can be opened to send and receive data
- Simultaneous opening of multiple serial ports requires self-development
- Turn off the serial port after operation. Otherwise, the serial port will always be occupied

Example

```
SmdtManagerNew smdt = SmdtManagerNew.getInstance(this);
String uart = "/dev/ttyS1";
int baudrate = 9600;
int databits = 8;
int stopbits = 1;
int parity = 0;
int flow_ctrl = 0;
```

```

int result = smdt.dev_openUart(uart, baudrate, databits, stopbits, p
arity, flow_ctrl);//Open serial port
if(result == RET_API_OK) {
    //After successful opening, keep receiving serial port data
    smdt.dev_receiveUart(uart, new SmdtManagerNew.DataCallback() {
        @Override
        public void onDataReceive(byte[] buffer, int size) throws Remote
Exception {
            if (buffer != null) {
                DEBUG("data size :" + size);
            }
        }
    });
}
}

```

6.2.3、dev_closeUart

function name: public int dev_closeUart(String uartNode)

description: Close serial port

Parameter:

Parameter name	Type	Description
uartNode	String	Absolute path of the serial port

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Supports opening only one serial port to open and send and receive data
- Simultaneous opening of multiple serial ports requires self-development
- Turn off the serial port after operation. Otherwise, the serial port will always be occupied

6.2.4、dev_sendUart

function name: public int dev_sendUart(String uartNode, String data, boolean hex)

description: Send serial port data

Parameter:

Parameter name	Type	Description
uartNode	String	Absolute path of the serial port
data	boolean	data
hex	boolean	true:Hexadecimal false:Decimal

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Only one serial port can be opened to send and receive data
- Simultaneous opening of multiple serial ports requires self-development
- Turn off the serial port after operation. Otherwise, the serial port will always be occupied

6.2.5、dev_receiveUart

function name: public void dev_receiveUart(String uartNode, DataCallback callback)

description: Receiving serial port data

Parameter:

Parameter name	Type	Description
uartNode	String	Absolute path of the serial port
callback	DataCallback	Serial port data callback

Return Parameters Description without

Example

```
SmdtManagerNew smdt = SmdtManagerNew.getInstance(this);
smdt.dev_receiveUart(uartNode, new SmdtManagerNew.DataCallback() {
    @Override
    public void onDataReceive(byte[] buffer, int size) throws RemoteException {
        if (buffer != null) {
```



```
        ...
    }
}
});
```

Remarks

- callback interface: [DataCallback](#)
- Only one serial port can be opened to send and receive data
- Simultaneous opening of multiple serial ports requires self-development
- Turn off the serial port after operation. Otherwise, the serial port will always be occupied

6.3、Camera

6.3.1、dev_getCameraVidPid

function name: public String dev_getCameraVidPid(int usbId)

description: Read the VID and PID of the camera

Parameter:

Parameter name	Type	Description
usbId	int	camera Id under dev, for example, /dev/video0

Return Parameters Description

Parameter name	Type	Description
returned value	String	Camera VID and PID

Remarks

- Interface not available, not supported

6.3.2、dev_getCameraConfig

function name: public int[] dev_getCameraConfig(int cameraId)

description: Get camera related Parameter

Parameter:

Parameter name	Type	Description
----------------	------	-------------

cameraId	int	Camera ID, e.g.:camera0
----------	-----	-------------------------

Return Parameters Description

Parameter name	Type	Description
returned value	int[]	Array that holds the camera Parameter

Remarks

- int[]array sequential meaning:
First: Camera direction 0: rear 1: front
Second: Camera rotation mode 0: follow system screen 1: lock
Third: Lock Angle when rotation mode is locked :0/90/180/270
Fourth: Whether the preview screen is mirrored left and right. 0: No mirroring. 1: mirrored
Fifth: Whether the image is mirrored left and right. 0: No mirroring. 1: mirrored
Sixth: Whether the image is mirrored up and down. 0: No mirroring. 1: mirrored
Seventh: Imaging rotation Angle :0/90/180/270
Eighth: Video rotation Angle :0/90/180/270

6.3.3、dev_setCameraDirection

function name: public int dev_setCameraDirection(int cameraId, int cameraDirection)

description: Set the front and rear orientation of the camera

Parameter:

Parameter name	Type	Description
cameraId	int	Camera ID, 如 camera0
cameraDirection	int	Orientation of the camera: 0: rear 1: front

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- The Settings take effect after being restarted

6.3.4、dev_setCameraRotationMode

function name: `public int dev_setCameraRotationMode(int cameraId, int rotationMode, int lockRotation)`

description: Set the camera rotation mode

Parameter:

Parameter name	Type	Description
cameraId	int	Camera ID, such as camera0
rotationMode	int	Camera rotation mode 0:Follow system screen 1:Lock
lockRotation	int	Locking angle when the rotation mode is locked:0/90/180/270

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- The Settings take effect after being restarted

6.3.5、dev_setCameraMirror

function name: `public int dev_setCameraMirror(int cameraId, boolean previewMirrorHorizontal, boolean imageMirrorHorizontal, boolean imageMirrorVertical)`

description: Set camera image

Parameter:

Parameter name	Type	Description
cameraId	int	Camera ID, camera0
previewMirrorHorizontal	boolean	Check whether the preview image is mirrored. false: No mirroring. true: mirrored
imageMirrorHorizontal	boolean	Whether the image mirrors left and right. false: No mirroring. true: mirroring
imageMirrorVertical	boolean	Whether the image is mirrored up and down. false: No mirroring. true: mirrored

Return Parameters Description

Parameter name	Type	Description
----------------	------	-------------

returned value	int	Call result, reference error code
----------------	-----	-----------------------------------

Remarks

- The setting takes effect immediately

6.3.6、dev_setCameraImageRotation

function name: public int dev_setCameraImageRotation(int cameraId, int rotation)

description: Set camera imaging rotation

Parameter:

Parameter name	Type	Description
path	String	Camera ID, e.g. camera0
rotation	boolean	Imaging rotation Angle:0/90/180/270

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- The setting takes effect immediately

6.3.7、dev_setCameraVideoRotation

function name: public int dev_setCameraVideoRotation(int cameraId, int rotation)

description: Set camera recording rotation

Parameter:

Parameter name	Type	Description
cameraId	int	Camera ID, e.g. camera0
rotation	int	Video rotation Angle:0/90/180/270

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- The setting takes effect immediately

6.4、I2C

6.4.1、dev_openI2c

function name: `public int dev_openI2c(String i2cNode)`

description: Open the i2c peripheral

Parameter:

Parameter name	Type	Description
i2cNode	String	i2c device node

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Interface not available, not supported

6.4.2、dev_closeI2c

function name: `public int dev_closeI2c(n)`

description: Turn off i2c peripherals

Parameter:

without

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Interface not available, not supported

6.4.3、dev_writeI2c

function name: `public int dev_writeI2c(int slave, int reg, byte[] data)`

description: Write data to i2c from the device register

Parameter:

Parameter name	Type	Description
slave	int	slave addr
reg	int	reg addr
data	byte[]	written data

Return Parameters Description

Parameter name	Type	Description
returned value	int	The number of bytes written

Remarks

- Interface not available, not supported

6.4.4、dev_readI2c

function name: `public byte[] dev_readI2c(int slave, int reg, int len)`

description: Read data from device registers to i2c

Parameter:

Parameter name	Type	Description
slave	int	slave addr
reg	int	reg addr
len	int	The length of the read data

Return Parameters Description

Parameter name	Type	Description
returned value	byte[]	data

Remarks

- Interface not available, not supported

6.5、SPI

6.5.1、dev_openSpi

function name: public int dev_openSpi(String spiNode)

description: Open spi peripheral

Parameter:

Parameter name	Type	Description
spiNode	String	spi device node

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Interface not available, not supported

6.5.2、dev_closeSpi

function name: public int dev_closeSpi()

description: Turn off spi peripherals

Parameter:

without

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Interface not available, not supported

6.5.3、dev_readSpi

function name: public byte[] dev_readSpi(int len)

description: Read spi device data

Parameter:

Parameter name	Type	Description
len	int	data length

Return Parameters Description

Parameter name	Type	Description
returned value	byte[]	data

Remarks

- Interface not available, not supported

6.5.4、dev_writeSpi

function name: `public int dev_writeSpi(byte[] data)`

description: Write to spi device data

Parameter:

Parameter name	Type	Description
data	byte[]	Written data

Return Parameters Description

Parameter name	Type	Description
returned value	int	The number of bytes written

Remarks

- Interface not available, not supported

6.6、Can

6.6.1、dev_openCan

function name: `public int dev_openCan(String canNode, int baudrate)`

description: Turn on the can device

Parameter:

Parameter name	Type	Description
canNode	String	can device node, such as can0/can1

baudrate	int	can device baud rate, e.g. 125000
----------	-----	-----------------------------------

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Interface not available, not supported

6.6.2、dev_closeCan

function name: `public int dev_closeCan(String canNode)`

description: Close the open can device

Parameter:

Parameter name	Type	Description
canNode	String	can device node, such as can0/can1

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Interface not available, not supported

6.6.3、dev_receiveCan

function name: `public int dev_receiveCan()`

description: Receive can device data

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Interface not available, not supported

6.6.4、dev_sendCan

function name: public int dev_sendCan(long canid, byte[] data)

description: Write can device data

Parameter:

Parameter name	Type	Description
canid	long	The id of the sent data, corresponding to the can_id of the can_frame
data	byte[]	when the data sent corresponding to hwctrl_canOpen, will be written to the node of canOpen

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Interface not available, not supported

6.7、USB

6.7.1、dev_setUsbPower

function name: public int dev_setUsbPower(int type, int usbId, boolean enable)

description: Set the USB port power switch status

Parameter:

Parameter name	Type	Description
type	int	0:USBOTG 1:USBHOST
usbId	int	USB port ID: OTG only has 1, HOST has 1, 2, 3
enable	boolean	true:turn on false:turn off

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Some power ports not support switches

6.7.2、dev_getUsbPower

function name: public int dev_getUsbPower(int type, int usbId)

description: Obtain the status of the USB port power switch

Parameter:

Parameter name	Type	Description
type	String	0:USBOTG 1:USBHOST
usbId	boolean	USB port ID: OTG only has 1, HOST has 1, 2, 3

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:turn on 0:turn off

Remarks

- Some power ports not support switches

6.8、Light

6.8.1、dev_setLedLighted

function name: public int dev_setLedLighted(String ledColor, boolean lighted)

description: Set the three-color light state

API VERSION: V2.11.0 or above

Parameter:

Parameter name	Type	Description
ledColor	String	red light: LED_RED green light: LED_GREEN white light: LED_WHITE
lighted	boolean	true:turn on false:turn off

Return Parameters Description

Parameter name	Type	Description
----------------	------	-------------

returned value	int	Call result, reference error code
----------------	-----	-----------------------------------

Remarks

- API VERSIONV2.12.0+ Available constant class

6.8.2、dev_getLedState

function name: public int dev_getLedState(String ledColor)

description: Get the three-color light state

API VERSION: V2.11.0 or above

Parameter:

Parameter name	Type	Description
ledColor	String	red light: LED_RED green light: LED_GREEN white light: LED_WHITE

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:turn on 0:turn off

Remarks

- API VERSIONV2.12.0+ Available constant class

7、Industry custom

7.1、Wiegand

7.1.1、custom_sendWiegandCard

function name: public int custom_sendWiegandCard(String idCard, int transformat)

description: Wigand sends the card number

Parameter:

Parameter name	Type	Description
idCard	String	Wiegand card number
transformat	int	1:Wiegand 26 2:Wiegand 34

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

7.1.2、custom_sendWiegandCardHIDPID

function name: public int custom_sendWiegandCardHIDPID(String HID_value, String PID_value, int transformat)

description: Wiegand sends card numbers using hidden and public codes

Parameter:

Parameter name	Type	Description
HID_value	String	hidden codes
PID_value	String	public Code
transformat	int	1: Wiegand 26 2: Wiegand 34

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

7.1.3、custom_readWiegandData

function name: public void custom_readWiegandData(WiegandCallback callback)

description: Read the Wiegand input

Parameter:

Parameter name	Type	Description
callback	WiegandCallback	Wiegand Callback

Return Parameters Description without

Example

```
SmdtManagerNew smdt = SmdtManagerNew.getInstance(this);
smdt.custom_readWiegandData(new SmdtManagerNew.WiegandCallback() {
    @Override
    public void onReadData(String data) throws RemoteException {
```

```

        ...
    }
}));

```

Remarks

- callback interface: [WiegandCallback](#)

7.1.4、custom_releaseWiegandRead

function name: public int custom_releaseWiegandRead()

description: Exit the Wiegand input block

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

7.2、Relay

7.2.1、custom_setRelayIoMode

function name: public int custom_setRelayIoMode(int mode, int delay)

description: Set relay mode and delay

Parameter:

Parameter name	Type	Description
mode	int	0:not automatically close mode 1:Automatic closing mode(High active - default low level, then high for X seconds, finally low level) 2:Automatic closing mode(Low active - default low level, then high for X seconds, finally low level)
delay	int	The delay of automatic closing mode

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Set the delay of auto-closing mode in seconds, maximum 63 seconds

7.2.2、custom_getRelayIoMode

function name: public int custom_getRelayIoMode

description: Get the current mode of relay

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	0:not automatically close mode 1:Automatic closing mode(High active - default low level, then high for X seconds, finally low level) 2:Automatic closing mode(Low active - default low level, then high for X seconds, finally low level)

7.2.3、custom_setRelayIoEnable

function name: public int custom_setRelayIoEnable(boolean enable)

description: Set the relay switch status

Parameter:

Parameter name	Type	Description
enable	boolean	true:turn on false:turn off

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

7.2.4、custom_getRelayIoEnable

function name: public int custom_getRelayIoEnable()

description: Get the relay switch status

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:turn on 0:turn off

7.3、Application

7.3.1、custom_dial

function name: `public int custom_dial(String number)`

description: Customizable interface-free dialing

Parameter:

Parameter name	Type	Description
number	String	phone number

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

7.3.2、custom_endCall

function name: `public int custom_endCall()`

description: Customized hang-up calls without interface

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

7.3.3、custom_addAppliesEncryption

function name: `public int custom_addAppliesEncryption(String packageName, String oldpwd, String pwd)`

description: Add the application that requires encryption

Parameter:

Parameter name	Type	Description
packageName	String	Application package name
oldpwd	String	Set the old password, used to modify the verification; If there is no password, pass it blank
pwd	String	Set password

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- This interface is called for both adding and modifying passwords, and for modifying passwords you need to enter the old password

7.3.4、custom_getAppliesEncryption

function name: `public List custom_getAppliesEncryption(String packageName)`

description: Obtain the encryption application and its password

Parameter:

Parameter name	Type	Description
packageName	String	Application package name Find the password for the specified package name

Return Parameters Description

Parameter name	Type	Description
returned value	List	Obtain the encryption application and its password

Remarks

- Returns all encrypted applications and their corresponding passwords if the package name parameter is entered as null

7.3.5、custom_delAppliesEncryption

function name: `public int custom_delAppliesEncryption(String packageName, String pwd)`

description: Delete the application from the encryption list

Parameter:

Parameter name	Type	Description
packageName	String	Application package name
pwd	String	The password of the application

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

7.4、System

7.4.1、custom_cleanRecentTasks

function name: public int custom_cleanRecentTasks()

description: Clear the latest running tasks of the system

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

7.4.2、custom_killPidProcess

function name: public int custom_killPidProcess(int pid)

description: End the process according to the pid

Parameter:

Parameter name	Type	Description
pid	int	Process PID

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- will kill the process directly, use with caution

7.4.3、custom_getPidProcess

function name: `public int custom_getPidProcess(String packageName)`

description: Get the PID based on the package name

Parameter:

Parameter name	Type	Description
packageName	String	Application package name

Return Parameters Description

Parameter name	Type	Description
returned value	int	PID corresponding to Application package name

7.4.4、custom_getPidProcessInfo

function name: `public String custom_getPidProcessInfo(int pid)`

description: Obtain the packet name of the pid process

Parameter:

Parameter name	Type	Description
pid	int	PID process

Return Parameters Description

Parameter name	Type	Description
returned value	String	Packet name of the PID process

7.4.5、custom_getLedBrightness

function name: `public int custom_getLedBrightness(int id)`

description: Obtain the brightness of the external light strip

Parameter:

Parameter name	Type	Description
id	int	Light serial number [0,1]

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

7.4.6、custom_setLedBrightness

function name: `public int custom_setLedBrightness(int id, int value)`

description: Set the brightness of the external light strip

Parameter:

Parameter name	Type	Description
id	int	Light serial number [0,1]
value	int	Brightness value[0~100]

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

7.4.7、custom_setDesktopApp

function name: `public int custom_setDesktopApp(String packageName)`

description: Set a custom desktop shortcut icon

API VERSION: V2.5.0 or above

Parameter:

Parameter name	Type	Description
packageName	String	Application package name

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- applications need to exist and have a desktop icon can be set up
- This interface replaces the first icon position of the OS-Launcher home interface
- Passing in null clears the current binding status and restores the icon to its original state, or does not display the content if it is removed

7.4.8、custom_getDesktopApp

function name: `public String custom_getDesktopApp()`

description: Obtain the custom desktop shortcut icon

API VERSION: V2.5.0 or above

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	String	Application package name

8、Other

8.1、Constants Class

Constants Class `VariableUtil`

API VERSION or higher is available for this class

Connected network type:

Ethernet `public static final CONNECT_TYPE_ETHERNET = "ETH";` **WIFI** `public static final CONNECT_TYPE_WIFI = "WIFI";` **mobile network**

`public static final CONNECT_TYPE_MOBILE = "MOBILE";`

Network Type

Ethernet0 `public static final String TYPE_ETH0 = "eth0";` **Ethernet1** `public static final String TYPE_ETH1 = "eth1";` **WIFI** `public static final String TYPE_WLAN = "wlan0";` **mobile network** `public static final String TYPE_MOBILE = "mobile";`

Network connection mode

dynamic state public static final int MODE_DHCP = 0; **static state** public static final int MODE_STATIC = 1;

WIFI encryption Type

Without password public static final int SECURITY_NONE = 0; **WEP** public static final int SECURITY_WEP = 1; **WPA** public static final int SECURITY_WPA = 2;

Application List

blacklist public static final int BLACK_LIST = 0; **whitelist** public static final int WHITE_LIST = 1; **Unload list** public static final int UNINSTALL_LIST = 0; **Installation list** public static final int INSTALL_LIST = 1;

GPIO

GPIO direction input public static final int GPIO_IN = 0; **GPIO direction output** public static final int GPIO_OUT = 1; **GPIO output low level** public static final int GPIO_LOW = 0; **GPIO output high level** public static final int GPIO_HIGH = 1;

ADB OTG

USB ADB public static final int ADB_USB = 0; **Internet ADB** public static final int ADB_NETWORK = 1; **OTG pattern mode** public static final int OTG_HOST = 0; **OTG mode DEVICE** public static final int OTG_DEVICE = 1;

Storage partition

EMMC public static final int PARTITION_EMMC = 0; **EEPROM** public static final int PARTITION_EEPROM = 1;

Camera

Rear camera public static final int CAMERA_FACING_BACK = 0; **Front camera** public static final int CAMERA_FACING_FRONT = 1; **The camera direction follows the screen** public static final int CAMERA_ROTATION_FOLLOW = 0; **Camera orientation lock** public static final int CAMERA_ROTATION_LOCK = 1;

Light

```
white light public static final String LED_WHITE = "LED_WHITE"; red light public static final String LED_RED = "LED_RED"; green light public static final String LED_GREEN = "LED_GREEN";
```

Wiegand

```
Wiegand 26 public static final int WIEGAND_26 = 1; Wiegand 34 public static final int WIEGAND_34 = 2;
```

Log Type

All logs are not output continuously and are captured only once

```
public static final int LOG_ONLY_ONE = 0; KERNEL log(Continuous output) public static final int LOG_KERNEL = 1; Android system log
```

```
(Continuous output) public static final int LOG_ANDROID = 2; primary log buffer public static final int LOG_MEDIA = 3; Information about buffers public static final int LOG_RADIO = 4; System attribute public static final int LOG_PROP = 5; Kernel Startup Parameter(need root) public static final int LOG_CONFIG = 6; Memory usage status public static final int LOG_MISC = 7; Non-preinstalled APK information public static final int LOG_APP = 8; Mcu information public static final int LOG_MCU = 9;
```

IO

```
WIFI power supply public static final int WIFI_POWER = 3; WIFI reset public static final int WIFI_RESET = 4; LED light public static final int LED_CONTROL = 5; Speaker power supply public static final int SPEAK_POWER = 6; LVDS power supply public static final int LVDS_POWER = 7; LVDS reset public static final int LVDS_RESET = 8; Mobile network module power supply public static final int MOBILE_POWER = 9; mobile network module reset public static final int MOBILE_RESET = 10; LAN power supply public static final int LAN_POWER = 11; LAN reset public static final int LAN_RESET = 12; SD power supply public static final int SD_POWER = 13; SD reset public static final int SD_RESET = 14; TP power supply public static final int TP_POWER = 15; TP reset public static final int TP_RESET = 16; GBE reset public static final int GBE_RESET = 17; EDP backlight power supply public static final int EDP_POWER = 18; Fan power public static final int FAN_POWER = 19;
```

8.2、Network information object class

Network information object class NetworkInfoData

Obtain IP addressfunction name: public String getIp()

description: Get the IP address of the current network

Return Parameters Description

Parameter name	Type	Description
returned value	String	IP address

Access gateway

function name: public String getGateway()

description: Get the gateway of the current network

Return Parameters Description

Parameter name	Type	Description
returned value	String	gateway

Obtain the subnet mask

function name: public String getNetmask()

description: Get the subnet mask of the current network

Return Parameters Description

Parameter name	Type	Description
returned value	String	subnet mask

Obtain DNS1

function name: public String getDns1()

description: Get the DNS1 of the current network

Return Parameters Description

Parameter name	Type	Description
returned value	String	DNS1

Obtain DNS2

function name: `public String getDns2()`

description: Get the DNS2 of the current network

Return Parameters Description

Parameter name	Type	Description
returned value	String	DNS2

8.3、Timing switch error code

Error code class TimerCode

variable name	error code	explanation
SET_SUCCESS	0	succeed
ERROR_UNKNOWN	-1	error
ERROR_CONFIG	-2	Parameter error
ERROR_EXCEPTION	-5	abnormal
ERROR_TIME_PASSED	100	The setting time has expired
ERROR_COMPARE_ON_OFF_TIME	101	There is no difference of 3 minutes between startup time and shutdown time
ERROR_COMPARE_NOW_OFF_TIME	102	The current time does not differ from the shutdown time by 3 minutes

API VERSION: V2.14.1 or above

Remarks

Before V2.14.1, the error code starting with 10 is not returned.

8.4、InstallCallback

Install application callbacks

function name: `public void onInstallFinished(String packageName, int returnCode, String msg);`

description: installation completed

ParameterDescription

Parameter name	Type	Description
packageName	String	Application package name

returnCode	int	Reference error code
msg	String	Information

8.5、DeleteCallback

Unmount application callbacks

function name: `public onDeleteFinished(String packageName, int returnCode, String msg);`

description: Uninstall Completed

ParameterDescription

Parameter name	Type	Description
packageName	String	Application package name
returnCode	int	Reference error code
msg	String	information

8.6、CopyCallback

Copy file and directory callbacks

function name: `public void onCopyProgress(int progress);`

description: Copy progress

ParameterDescription

Parameter name	Type	Description
progress	int	progress

function name: `public void onCopyFinished(int returnCode, String msg);`

description: copy completed

ParameterDescription

Parameter name	Type	Description
returnCode	int	Reference error code
msg	String	information

8.7、DataCallback

Callback of serial port data read

function name: `public void onDataReceive(byte[] buffer, int size);`

description: Serial port data reception

ParameterDescription

Parameter name	Type	Description
buffer	byte[]	data
size	int	data length

8.8、WiegandCallback

Weigand reads the callback of the data

function name: `public void onReadData(String data);`

description: reading data

ParameterDescription

Parameter name	Type	Description
data	String	The data that Weigand read

8.9、BackUpCallback

A callback for backing up application data

function name: `public void onBackUpProgress(int progress);`

description: Backup progress

ParameterDescription

Parameter name	Type	Description
progress	int	progress

function name: `public void onBackUpFinished(int returnCode, String msg);`

description: backup completed

ParameterDescription

Parameter name	Type	Description
returnCode	int	Reference error code
msg	String	information

function name: `public void onBackUpPath(String path);`

description: Return to backup path

ParameterDescription

Parameter name	Type	Description
path	String	path

8.10、RecoveryCallback

A callback for backing up application data

function name: `public void onRecoveryProgress(int progress);`

description: Recovery progress

ParameterDescription

Parameter name	Type	Description
progress	int	progress

function name: `public void onRecoveryFinished(int returnCode, String msg);`

description: Recovery completed

ParameterDescription

Parameter name	Type	Description
returnCode	int	Reference error code
msg	String	information

function name: `public void onRecoveryPath(String path);`

description: Return the path of the restore backup

ParameterDescription

Parameter name	Type	Description
path	String	path

8.11、LogCallback

Retrieve callbacks from the system log line by line

function name: `public void onSingleLine(String log);`

description: Calls back each line of system logs

ParameterDescription

Parameter name	Type	Description
log	String	progress

9、Obsolete interface

9.1、Overview

- Deprecated APIs will indicate an updated deprecated version and are not recommended for use thereafter. If a replacement method is available it is recommended that the new method be used. Generally the interface will be completely eliminated after three iterations, after the elimination of the interface will be completely unusable. For details, please refer to the completely eliminated version.
- List of obsolete APIs

function name	description	Date of elimination	Obsolete version	Complete elimination	Writer
net_setWifiDefaultPassword	Set the password of the default WiFi account	2022-05-19	V2.6.0	V2.9.0	Xu Linrui
net_getWifiDefaultPassword	Obtain the password of the default WiFi connection account	2022-05-19	V2.6.0	V2.9.0	Xu Linrui
info_setModel	Set the device model	2022-09-14	V2.14.0	V2.14.0	Xu Linrui
info_setFactoryCompany	Set equipment manufacturer	2022-09-14	V2.14.0	V2.14.0	Xu Linrui
info_setSoftwareVersion	Set the device software version	2022-09-14	V2.14.0	V2.14.0	Xu Linrui
sys_setInVolume	Set the microphone switch status of the	2022-10-25	V2.16.0	V2.16.0	Xu Linrui

	device				
sys_getInVolume	Obtain the microphone switch status of the device	2022-10-25	V2.16.0	V2.16.0	Xu Linrui
disp_getScreenModel	Get double screen different display combination	2022-10-25	V2.16.0	V2.16.3	Xu Linrui

9.2、net_setWifiDefaultPassword

function name: public int net_setWifiDefaultPassword(String account, String pwd, int type)

description: Set the password of the default WiFi account

API VERSION: Available before V2.6.0 Not recommended after V2.6.0
Suggested replacement method:[net_setWifiConnect](#)

Parameter:

Parameter name	Type	Description
account	String	account name
pwd	String	password
type	String	way of encryption 0:without password 1:WEP 2:WPA

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Settings take effect after the restart
- Account name incoming empty cancel setting

9.3、net_getWifiDefaultPassword

function name: public String net_getWifiDefaultPassword()

description: Obtain the password of the default WiFi connection account

API VERSION: Available before V2.6.0 Not recommended after V2.6.0

Parameter:

without

Return Parameters Description

Parameter name	Type	Description
returned value	String	Return character string, separated by commas: account +", "+password+", "+way of encryption

Remarks

- such as returned value:smdt,123456,1 indicates that the user name is smdt, password is 123456, and encryption Type is WEP
- Encryption mode 0:without password 1:WEP 2:WPA

9.4、info_setSoftwareVersion

function name: `public int info_setSoftwareVersion(String verison)`

description: Set the device software version

API VERSION: Not recommended, please use the Burning Tool to Burn

Parameter:

Parameter name	Type	Description
verison	String	Device software version

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- The Settings take effect after being restarted

9.5、info_setModel

function name: `public int info_setModel(String modelname)`

description: Set the device model

API VERSION: Not recommended, please use the Burning Tool to Burn

Parameter:

Parameter name	Type	Description
modelname	String	Device Model

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- The Settings take effect after being restarted

9.6、info_setFactoryCompany

function name: `public int info_setFactoryCompany(String company)`

description: set equipment manufacturer

API VERSION: Not recommended, please use the Burning Tool to Burn

Parameter:

Parameter name	Type	Description
company	String	equipment manufacturer

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- The Settings take effect after being restarted

9.7、sys_setInVolume

function name: `public int sys_setInVolume(int type, boolean enable)`

description: Set the microphone switch status of the device

API VERSION: Eliminated after V2.16.0

Suggested replacement method: [sys_setAudioInput](#)

Parameter:

Parameter name	Type	Description
type	int	Device Type 0:Earphone microphone 1:Mainboard microphone 2:USB microphone
enable	boolean	true:turn on false:turn off

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result, reference error code

Remarks

- Interface not available, not supported

9.8、sys_getInVolume

function name: `public int sys_getInVolume(int type)`

description: Obtain the microphone switch status of the device

API VERSION: Eliminated after V2.16.0 Suggested replacement

method:[sys_getAudioInput](#)

Parameter:

Parameter name	Type	Description
type	int	Device Type 0:Earphone microphone 1:Mainboard microphone 2:USB microphone

Return Parameters Description

Parameter name	Type	Description
returned value	int	1:turn on 0:turn off

Remarks

- Interface not available, not supported

9.9、disp_getScreenModel

function name: `public int disp_getScreenModel()`

description: Get double screen different display combination

API VERSION: Eliminated after V2.16.0

Parameter: without

Return Parameters Description

Parameter name	Type	Description
returned value	int	0:single display 4 is the default dual display

10、Linux

10.1、Introduction

Linux OS-API interface introduction

- The following interface is consistent with Android API interface Parameter name, please search the following function name directly. The function name or Parameter method which is different from Android has been put in the directory of different interfaces

returned value	function name	description
char*	info_getSoftwareVersion	Obtain the software version number
char*	info_getKernelVersion	Obtain the release information of the kernel
char*	info_getMCUVersion	Get the MCU version number
char*	info_setFactoryCompany	Get the current API VERSION number
char*	info_getApiVersion	Set the device software version
char*	info_getTotalMemory	Obtain the total memory capacity of the device
char*	info_getTotalStorage	Obtain the total storage capacity of the device
char*	info_getSerialNumber	Obtain serial number
int	sys_getControl	Other IO related Settings (Mainboard status indicator, module power supply)
int	sys_getWatchDog	Obtain the Watch Dog switch status

int	sys_setWatchDogFeed	Watch Dog Feed
int	sys_setPowerOff	System shutdown
int	sys_setReboot	System reboot
int	custom_setRelayIoMode	Set relay mode and delay
int	custom_getRelayIoMode	Get the current mode of relay
int	disp_setLcdBackLight(int values)	Set the backlight brightness
int	disp_getLcdBackLight()	Get the backlight brightness
int	disp_getLcdPwmFrequency()	Get the backlight frequency
char*	net_getMacAddress()	Obtain Ethernet mac
int	sys_setGpioDirection(int direction, int value, char *pData, int len)	Set GPIO input/output status
int	sys_getGpioDirection(char *pData, int len)	Get GPIO input/output status
int	sys_getGpioValue(char *pData, int len)	Get the level state of the GPIO Gets the level state of the GPIO
int	sys_setControl(int type, int values)	Other IO related Settings (mainboard status indicator, module power supply)
int	sys_setAutoPowerOnOff(char off_h, char off_m, char on_h, char on_m, char enable)	Set the timing switch
int	sys_setWatchDog(char enable)	Set the Watch Dog switch status
int	dev_setUsbPower(int num, int values)	Set the USB port power switch status
int	dev_getUsbPower(int num)	Obtain the status of the USB port power switch
int	dev_getUsbPower(int num)	Obtain the status of the USB port power switch
int	dev_setLedLighted(int led, int value)	Set the three-color light state
int	dev_getLedState(int led)	Get the three-color light state
int	custom_sendWiegandCardHIDPID(char <i>HID_value</i> , char <i>PID_value</i> , char transform)	Wiegand sends card numbers using hidden and public codes
char*	custom_readWiegandData()	Read the Wigand input
int	custom_releaseWiegandRead()	Exit the Wigand input block

10.2、Version change record

- API VERSION for external publishing

Version	description	date	author
V1.0	create	2021-01-04	Luo Jun
V2.0	update	2022-10-24	Luo Jun

10.3、API Usage

Get an object instance method

function name: `const char * info_getApiVersion();`

description: Get the current API VERSION number

Parameter:

Parameter name	Type	Description
context	Context	Context

Return Parameters Description

Parameter name	Type	Description
returned value	char*	character string


Example

```
char * str = info_getApiVersion();
output result : V1.0.0-release
```

Add library file

Linux Qt

1. Copy smdtio.h and libsmdtio.so to the project directory;  2. Add

the header file and find smdtio.h:  3. Select the item and right-click Add Library and follow the steps below to add it;



4. Then just call the method after the instance object in the code.

10.1、Differential interface

10.1.1、sys_setBluetooth

function name: char *info_getRtcDateTime();

description: Get date and time information for the rtc

Parameter:

Parameter name	Type	Description
enable	boolean	true:turn on false:turn off

Return Parameters Description

Parameter name	Type	Description
returned value	char*	Call result, return RTC information

Remarks

This interface is different from the Android interface in terms of Parameter

10.1.2、disp_setLcdPwmFrequency

function name: int disp_setLcdPwmFrequency(int frequency, char ratio); **description:** Set the backlight screen rate

Parameter:

Parameter name	Type	Description
frequency	int	Frequency size
ratio	char	Ratio

Return Parameters Description

Parameter name	Type	Description
returned value	int	Call result 0 succeeds, less than 0 fails

10.1.3、gpio_export

function name: int gpio_export(int pin) **description:** Set the pin export

Parameter:

Parameter name	Type	Description
----------------	------	-------------

pin	int	Pin Numbering
-----	-----	---------------

Return Parameters Description

Parameter name	Type	Description
returned value	int	0 success, less than 0 failure

10.1.4、 gpio_unexport

function name: int gpio_unexport(int pin) **description:** Cancel pin export

Parameter:

Parameter name	Type	Description
pin	int	Pin Numbering

Return Parameters Description

Parameter name	Type	Description
returned value	int	0 success, less than 0 failure

10.1.5、 gpio_direction

function name: int gpio_direction(int pin, int dir)
description: Set the GPIO input/output

Parameter:

Parameter name	Type	Description
pin	int	Pin Numbering
dir	int	0 input, 1 output

Return Parameters Description

Parameter name	Type	Description
returned value	int	0 success, less than 0 failure

10.1.6、 gpio_readdirection

function name: int gpio_readdirection(int pin) **description:**
Read the GPIO input/output

Parameter:

Parameter name	Type	Description
pin	int	Pin Numbering

Return Parameters Description

Parameter name	Type	Description
returned value	int	0 input, 1 output

10.1.7、gpio_write

function name: int gpio_write(int pin, char *buffer)

description: Set the value of GPIO

Parameter:

Parameter name	Type	Description
pin	int	Pin Numbering
buffer	char *	0 low level, 1 high level

Return Parameters Description

Parameter name	Type	Description
returned value	int	Greater than 0 success, 0 failure

10.1.8、gpio_read

function name: int gpio_read(int pin); **description:** Read the value of GPIO

Parameter:

Parameter name	Type	Description
pin	int	Pin Numbering

Return Parameters Description

Parameter name	Type	Description
returned value	int	0 low level, 1 high level

10.1.9、sys_setTimerSwitchOffJson

function name: int sys_setTimerSwitchOffJson(); **description:** Get shutdown time

Return Parameters Description

Parameter name	Type	Description
returned value	int	Shutdown time

10.1.10、 sys_setTimerSwitchOnJson

function name: int sys_setTimerSwitchOnJson(); **description:** Get startup time

Return Parameters Description

Parameter name	Type	Description
returned value	int	boot time

10.1.11、 sys_setUtcPowerOnOff

function name: int sys_setUtcPowerOnOff(int year, int mon,int offday, int offhour, int offmin, int onday,int onhour, int onmin, int enable); **description:** Timed UTC time shutdown

Parameter:

Parameter name	Type	Description
year	int	year
mon	int	month
offday	int	Shutdown time days
offhour	int	Shutdown time hours
offmin	int	Shutdown time minutes
onday	int	Turn-on time days
onhour	int	Turn-on time hours
onmin	int	Turn-on time minutes
enable	int	Set 1,3, and cancel other values

Return Parameters Description

Parameter name	Type	Description
returned value	int	0 success, less than 0 failure

10.1.12、 sys_setUtcPowerOnOff

function name: int sys_setUtcPowerOnOff(time_t timesoff, time_t timeson,int enable); **description:** Timed UTC time shutdown

Parameter:

Parameter name	Type	Description
timesoff	time_t	Shutdown time structure
timeson	time_t	Boot time structure
enable	int	1,3 is enabled, and other values are disabled

Return Parameters Description

Parameter name	Type	Description
returned value	int	0 success, less than 0 failure

10.1.13、dev_readEeprom

function name: char* dev_readEeprom(int deviceId, int areaId, int start_addr, int size)

description: Read and write EEPROM content

Parameter:

Parameter name	Type	Description
deviceId	int	Device ID, starting from 0, each ID represents an EEPROM
areaId	int	Area IDs, starting from 1, each ID represents an area of the EEPROM
start_addr	int	Start address, indicating that data is read from this area
size	int	The length of the read data

Return Parameters Description

Parameter name	Type	Description
returned value	char*	Read data

10.1.14、dev_readEeprom_3399

function name: char* dev_readEeprom_3399(int deviceId, int areaId, int start_addr, int size)

description: Read and write EEPROM content

Parameter:

Parameter name	Type	Description
deviceId	int	Device ID, starting from 0, each ID represents an EEPROM
areaId	int	Area IDs, starting from 1, each ID represents an area of the

		EEPROM
start_addr	int	Start address, indicating that data is read from this area
size	int	The length of the read data

Return Parameters Description

Parameter name	Type	Description
returned value	char*	Read data

10.1.15、dev_writeEeprom

function name: int dev_writeEeprom(int deviceId, int areaId,int start_addr, int size, char * pData);

description: Read and write EEPROM content

Parameter:

Parameter name	Type	Description
deviceId	int	Device ID, starting from 0, each ID represents an EEPROM
areaId	int	Area IDs, starting from 1, each ID represents an area of the EEPROM
start_addr	int	Start address, indicating that data is read from this area
size	int	The length of the read data
pData	char*	The length of the read data

Return Parameters Description

Parameter name	Type	Description
returned value	int	Write data length

10.1.16、dev_writeEeprom_3399

function name: int dev_writeEeprom_3399(int deviceId, int areaId,int start_addr, int size, char * pData);

description: Read and write EEPROM content

Parameter:

Parameter name	Type	Description
deviceId	int	Device ID, starting from 0, each ID represents an EEPROM
areaId	int	Area IDs, starting from 1, each ID represents an area of the EEPROM

start_addr	int	Start address, indicating that data is read from this area
size	int	The length of the read data
pData	char*	The length of the read data

Return Parameters Description

Parameter name	Type	Description
returned value	int	Write data length

10.1.17、custom_setRelayIoValue

function name: int custom_setRelayIoValue(int value)

description: Set relay size

Parameter:

Parameter name	Type	Description
value	int	Pin Numbering

Return Parameters Description

Parameter name	Type	Description
returned value	int	0 success, less than 0 failure

10.1.18、custom_getRelayIoValue

function name: int custom_getRelayIoValue()

description: Get relay size

Parameter:

Parameter name	Type	Description
value	int	Pin Numbering

Return Parameters Description

Parameter name	Type	Description
returned value	int	0 success, less than 0 failure

10.1.19、dev_startFlag_on

function name: int dev_startFlag_on()

description: MCU Settings

Return Parameters Description

Parameter name	Type	Description
returned value	int	0 success, less than 0 failure

10.1.20、dev_startFlag_off

function name: int dev_startFlag_off()

description: MCU Settings

Return Parameters Description

Parameter name	Type	Description
returned value	int	0 success, less than 0 failure

10.1.21、dev_getregval

function name: unsigned char dev_getregval(unsigned char value)

description: Get relay size

Parameter:

Parameter name	Type	Description
value	unsigned char	Acquired register

Return Parameters Description

Parameter name	Type	Description
returned value	unsigned char	Register value

10.1.22、dev_setregval

function name: int dev_setregval(unsigned char reg, unsigned char value)

description: Sets the mcu register value

Parameter:

Parameter name	Type	Description
reg	unsigned char	register

value	unsigned char	Sets the value of a register
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Return Parameters Description

Parameter name	Type	Description
returned value	unsigned char	register

10.1.23、dev_getMCUstatus

function name: int dev_getMCUstatus()

description: Get the mcu status

Return Parameters Description

Parameter name	Type	Description
returned value	int	Mcu status

10.1.24、info_getArch

function name: char *info_getArch()

description: Capture architecture

Return Parameters Description

Parameter name	Type	Description
returned value	char*	architecture

10.1.25、sys_getSystemNa

function name: char * sys_getSystemName();

description: Get the system name

Return Parameters Description

Parameter name	Type	Description
returned value	char*	system name

10.1.26、info_getRtcDateTime

function name: char * info_getRtcDateTime();

description: Get date and time information for the RTC

Return Parameters Description

Parameter name	Type	Description
returned value	char*	Information about the RTC