Demo Application UI Guide (QuickRearCam)

Version 0.6.0

Display Audio

Solution Team



Release information

The following changes have been make to this document.

Change History

Date	Change
04 Dec. 2017	First release for v0.6.0

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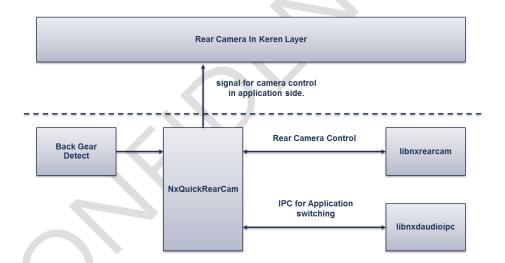
Chap 1. **Overview**

1.1 Overview

This document describes NxQuickRearCam that is demo application for Display Audio. The NxQuickRearCam is operated after taking over camera application of kernel layer. In demo application, the GPIO pin is back-gear. The application is run by GPIO pin.

1.2 Block Diagram

The NxQuickRearCam structure see as below. The application send signal to kernel for obtain control when it is started. The application is run automatically by back-gear detection.



1.3 Application UI

The Application see as below, this is displayed camera screen and parking guideline.

Draw Parking Guideline



Chap 2. Camera Library

2.1 Overview

The libnxrearcam provides to manage camera. This usage of library see as below.

2.2 APIs

2.2.1 NXDA_ShowRearCam()

2.2.2 NXDA_HideRearCam()

void NXDA_HideRearCam(
void
);

Description
Hide Rear Camera.

Parameter
None.

Return Value
None

2.2.3 NXDA_RegRenderCallback()

void NXDA_RegRenderCallback(

void *pApp



```
int32_t (callback)(void *, int32_t, void*, int32)
);
Description
 Register Rear Camera render callback.
Parameter
-. pApp
                       : private handle.
-. callback
                       : redering callback.
   int32_t callback( void* pApp, int32_t type, void* data, int32_t dataSize )
                       : private handle.
     -. pApp
                       : callback function type. ( CB_TYPE_BUFFER, CB_TYPE_HIDE, CB_TYPE_SHOW )
     -. type
                       : send data for callback.
     -. data
     -. dataSize
                       : size of data
Return Value
 None
```

2.2.4 NXDA_RegControlCallback()

```
void NXDA_RegControlCallback(
           void *pApp,
           int32_t (callback)(void *, int32_t, void *, int32_t)
);
Description
Register Rear Camera control callback.
Parameter
-. pApp
                      : private handle.
-. callback
                      : redering callback.
   int32 t callback( void* pApp, int32 t type, void* data, int32 t dataSize )
     -. pApp
                      : private handle.
                      : callback function type. ( CB\_TYPE\_BUFFER, CB\_TYPE\_HIDE, CB\_TYPE\_SHOW )
     -. type
                      : send data for callback.
     -. data
     -. dataSize
                      : size of data
Return Value
 None
```

2.2.5 NXDA_StartBackGearDetectService()



```
-. nGpio : GPIO port number.

-. nChkDelay : GPIO check delay (mSec)

Return Value

Zero is returned.
```

2.2.6 NXDA_StopBackGearDetectService()

2.2.7 NXDA_RegisterBackGearEventCallback()

```
void NXDA_RegisterBackGearEventCallback(
           void *pAppData,
           void (*callback)(void *pAppData, int32_t nOnOff )
);
Description
Please describe this function.
Parameter
                      : private handle.
-. pAppData
                      : register back gear detection callback.
-. callback
   void (*callback)(void *pAppData, int32_t nOnOff)
     -. pAppData
                     : private handle.
     -. nOnOff
                      : back gear status.
Return Value
 None.
```



Chap 3. History

3.1 Known Issue

-. Not yet.

3.2 To do list

-. Apply to change audio focus scenario.

