

Version	Date	Document Owner	Changes
1.0	2-27	PanJuan	初稿
2.0	2-28	PanJuan	1、修改 openCamera 接口的参数; 2、删除 getNewFrame 和 doneWithFrame 接口, 同时增加回调接口 postFrameFromNative 和 postEventFromNative; 3、附加使用限制说明。
2.1	03-02	PanJuan	增加待确认项 1 和 2

1 EVC Camera

1.1 `boolean initCameraService(void);`

This function initializes the camera service.

Returns:

true if success ,false if failure.

1.2 `ArrayList<CameraDesc> getCameraList(void);`

This function returns description of all cameras.

Class CameraDesc defines variables: camera id(int), camera description(string:left ,right,rear,front), width(int), height(int), format(int).

Returns:

The description of cameras.

1.3 `boolean openCamera(int cameraId, CameraCallback callback);`

This function will open the camera about the camera id.

Parameters:

cameraId the id of camera will be opened.

callback the listener which should implement the callback functions.

Returns:

True if success, false if failure.

1.4 `boolean startStream(int cameraId);`

This function will start the video frame flow.

Confidential

Parameters:

cameraId the id of camera will be started to transit the frame.

Returns:

true if success ,false if failure.

~~boolean getNewFrame(int cameraId, byte[] buffer);~~

~~This function will return the video frame pointer, the default format is yuv422.~~

~~Parameters:~~

~~cameraId the id of camera.~~

~~buffer the byte array to store buffer~~

~~Returns:~~

~~true if success ,false if failure.~~

~~boolean doneWithFrame(int cameraId);~~

~~When you used up the frame, you must call the API, it will put the buffer back to the list.~~

~~Parameters:~~

~~cameraId the id of camera which is used up.~~

~~Returns:~~

~~true if success ,false if failure.~~

1.5 boolean stopStream(int cameraId);

This function will stop the video frame flow.

Parameters:

cameraId the id of camera will be stopped to transit the frame.

Returns:

true if success, false if failure.

1.6 boolean closeCamera(int cameraId);

This function will close the camera about the camera id.

Parameters:

cameraId the id of camera will be closed.

Returns:

True if success, false if failure.

2 Evs CameraCallback

2.1 void postFrameFromNative(byte[] buffer, long size, int cameraId);

The callback function in Class CameraCallback. App get the frame buffer data and size in this callback. CameraCallback is parameter of openCamera.

Parameters:

buffer the byte array of data.

size the buffer size.

cameraId the id of camera which post the frame.

2.2 void postEventFromNative(int errorId, int cameraId);

The callback function in Class CameraCallback. App get the error code in this callback.

CameraCallback is parameter of openCamera.

Parameters:

errorId The error code which will be defined in the manager.

cameraId the id of camera which post the error.

3 Additional Notes

3.1 使用限制:

跟 App 沟通接口后, App 表示可以保证在第二帧 Camera 数据到来之前完成对第一帧数据 buffer 的使用, 所以不想调用 doneWithFrame 通知底层 buffer 使用完了, 因此我们会删除这个接口不给 App 调用。App 要确保这点, 以防使用超时导致出现第二帧数据把第一帧数据改写的情况。

4 待确认项

1. 关于跟仪表盘的接口, 还需后续根据具体需求展开讨论;
 2. 关于数据格式yuv422转yuv420的, desay会评估是否有硬件方案可以支持格式转换, 如果没有的话, 只能提供原始格式, 由百度负责格式转换。
-