

ICameraDevice::
open()

open
/* 通过之前注册好的g_jumpTableHAL3结构体函数指针调到camxhal3.cpp中的open函数*/

pHAL3->open

StrToUL(pCameraIdAPI, &pNameEnd, 10) /* 上层下发的cameraID字符串转为整形数据*/

GetCHIAppCallbacks()->chi_remap_camera_id /* 根据之前注册的chi里的callback接口函数调到chi-cdk里的相应接口*/

chi_remap_camera_id

RemapCameraId

GenerateExtendOpenData

FillTokenList

/* 将定制化的settings——填充到tokenlist里*/

ProcessCameraOpen

m_CHIAppCallbacks.chi_extend_open

pExtensionModule->ExtendOpen

GetActiveResourceCost

PerfLockManager::Create

pPerfLockManager->Initialize

MappingConfigSettings

/* 初始化了m_pConfigSettings数组*/

更新记录camera open和close状态

SetCameraStatus

DisplayConfig::Initialize

IDisplayConfig::getService

DisplayConfig::SetCameraStatus

mDisplayConfig->setCameraLaunchStatus

GenerateModifySettingsData /* 将之前初始化存在pStaticSettings里的配置值写入到刚定义的setting结构体数组里*/

GetCHIAppCallbacks()->chi_modify_settings /* 循环遍历setting结构体数组，将每个配置值都写入m_pConfigSettings数组或者其它全局成员变量里*/

pExtensionModule->ModifySettings

m_cameraId = cameraId
/* 将前面remap后的cameraId赋给成员变量m_cameraId*/

将camxhal3entry.cpp中的close函数注册到m_camera3Device里

将g_camera3DeviceOps结构体地址注册给pDeviceOps

将入参HwModule* pHwModule赋给pModule

将ProcessCaptureResult函数注册给m_HALCallbacks

将Notify函数注册给m_HALCallbacks

ClearFrameworkRequestBuffer()

HALDevice::Create

pHALDevice->Initialize

pHwEnvironment->GetStaticMetadataKeysInfo(&requestKeysInfo, RequestAvailableRequestKeys)

Titan17xContext::

GetStaticMetadataKeysInfo

CalculateSizeAllMeta

pHwEnvironment->GetStaticMetadataKeysInfo(&resultKeysInfo, RequestAvailableResultKeys)

Titan17xContext::

GetStaticMetadataKeysInfo

VendorTagManager::PopulateControlVendorTagId()

HAL3MetadataUtil::CreateMetadata

HALDevice::ConstructDefaultRequestSettings

pHALDevice->GetCameraDevice()
/* 拿到初始化过程中注册的m_camera3Device并转化成camera3_device_t指针*/

ppHwDeviceAPI = &pCamera3Device->common; / 将初始化过程中填充的m_camera3Device.hwDevice信息回给上层的ppHwDeviceAPI接口*/