

Android Camera 架构介绍

极客成像出品 deepinout.com

Agenda

- Android Camera 架构演进
- Android Camera HAL3
 - 软件栈
 - Pipeline介绍
 - 控制流程

Android Camera架构演进

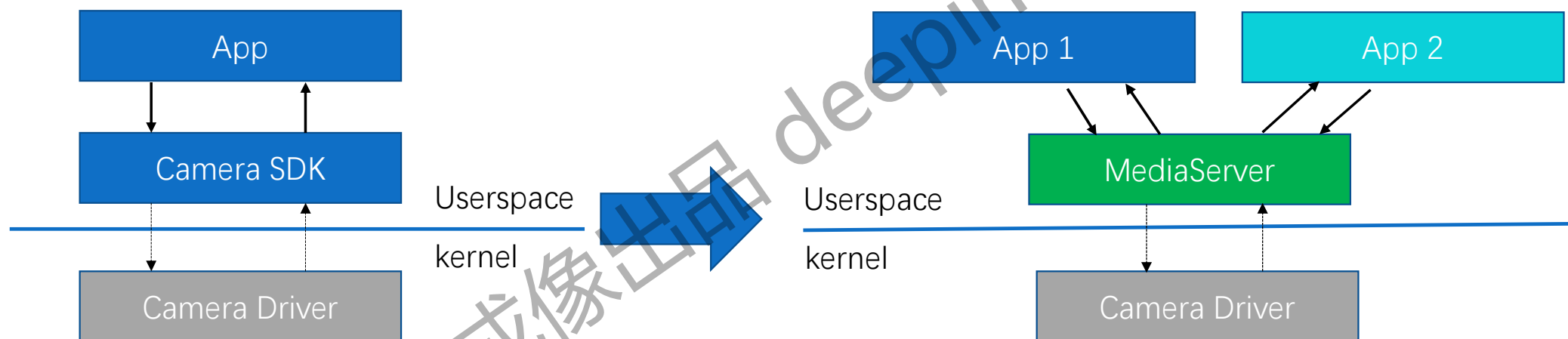
1. 为何Android Camera架构要分多层

- 总体上Camera遵循Client-Server架构
- 从MediaServer到独立的CameraServer
- 从CameraServer再拆出android.hardware.camera.provider

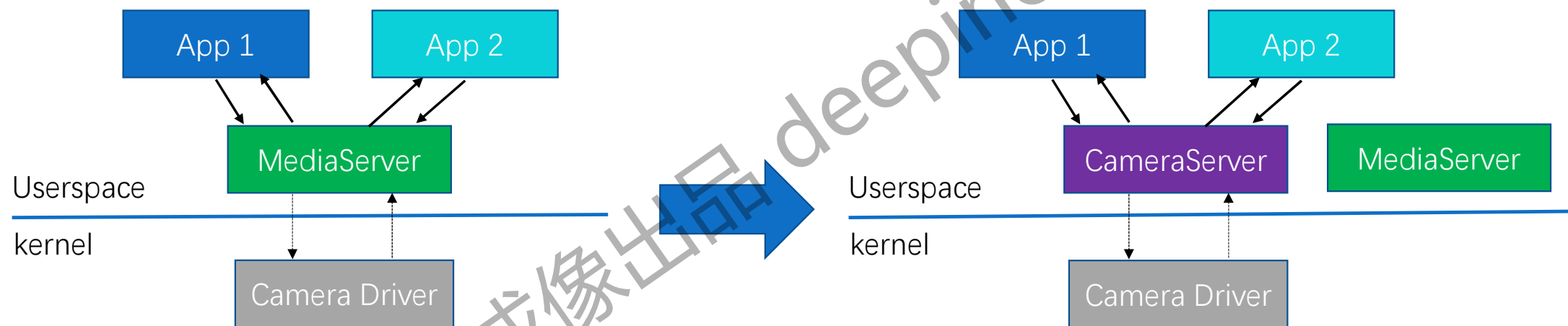
2. 为什么要引入Camera HAL3

- 从Camera HAL1到CameraHAL3

总体上Camera遵循Client-Server架构

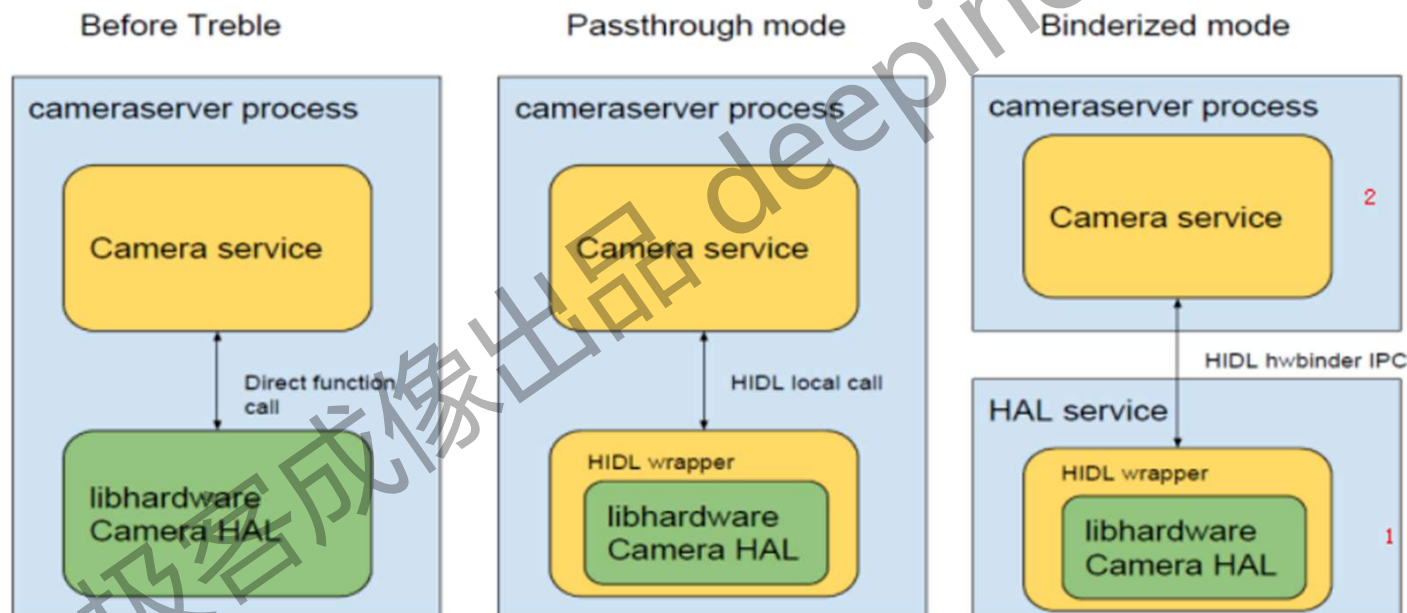


从MediaServer到独立的CameraServer

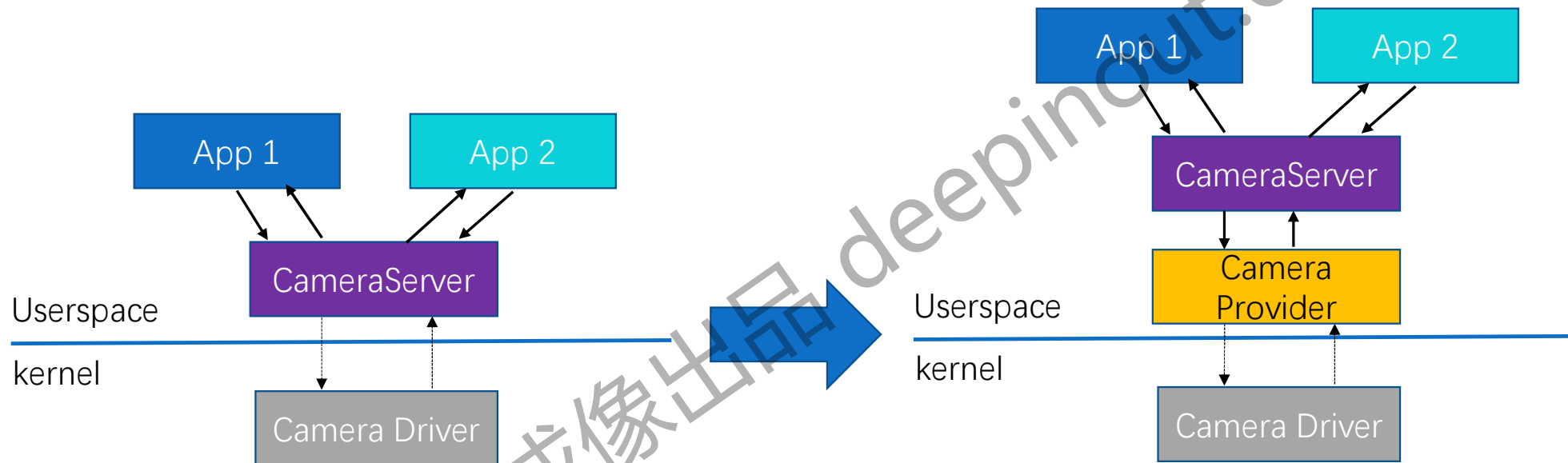


从CameraServer再拆出 android.hardware.camera.provider

- Android O Treble计划

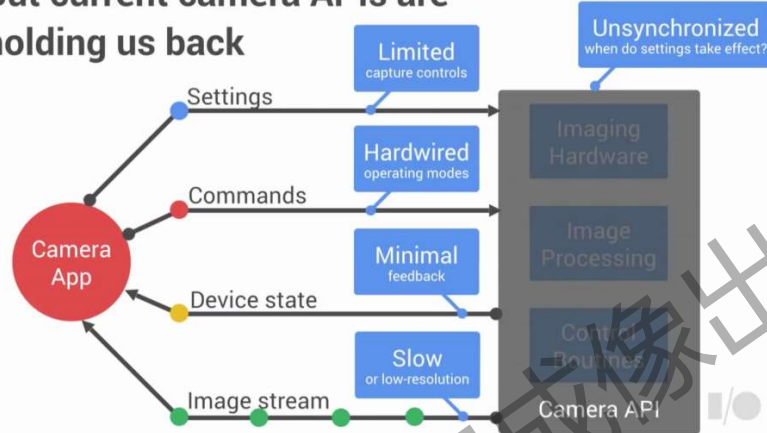


从CameraServer再拆出 android.hardware.camera.provider



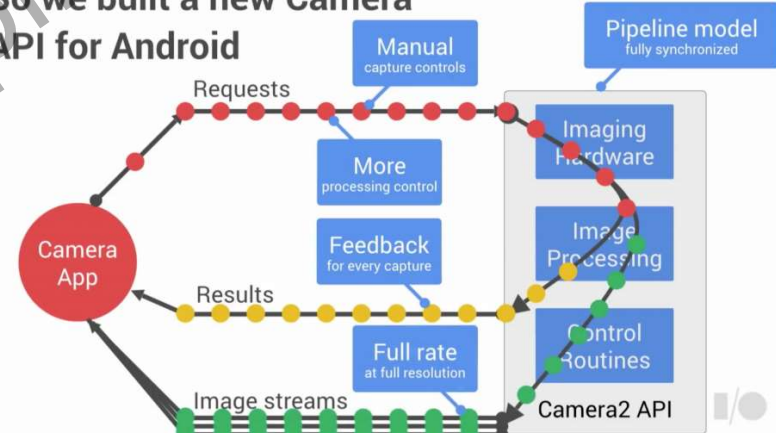
从Camera HAL1到CameraHAL3

But current camera APIs are holding us back



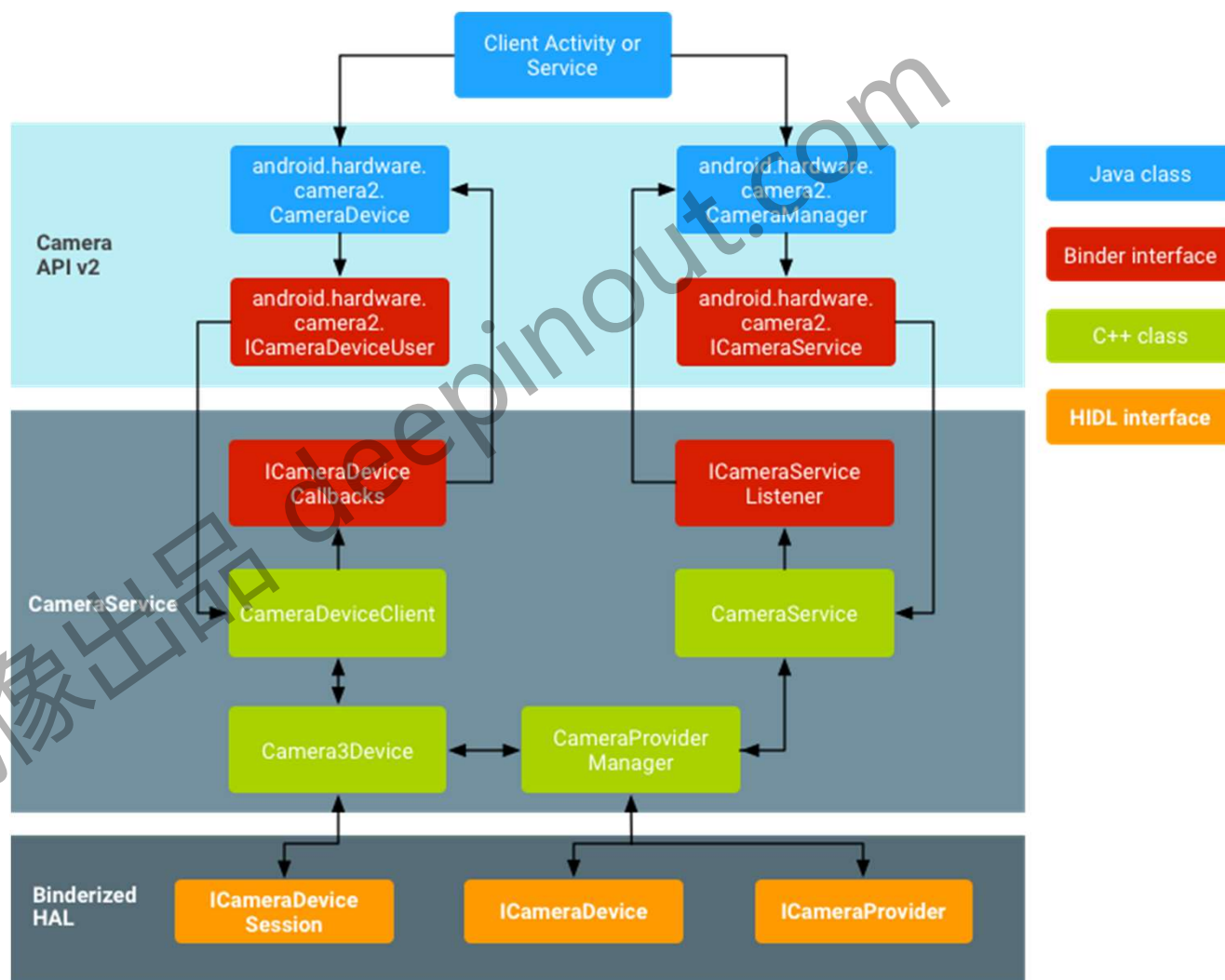
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So we built a new Camera API for Android



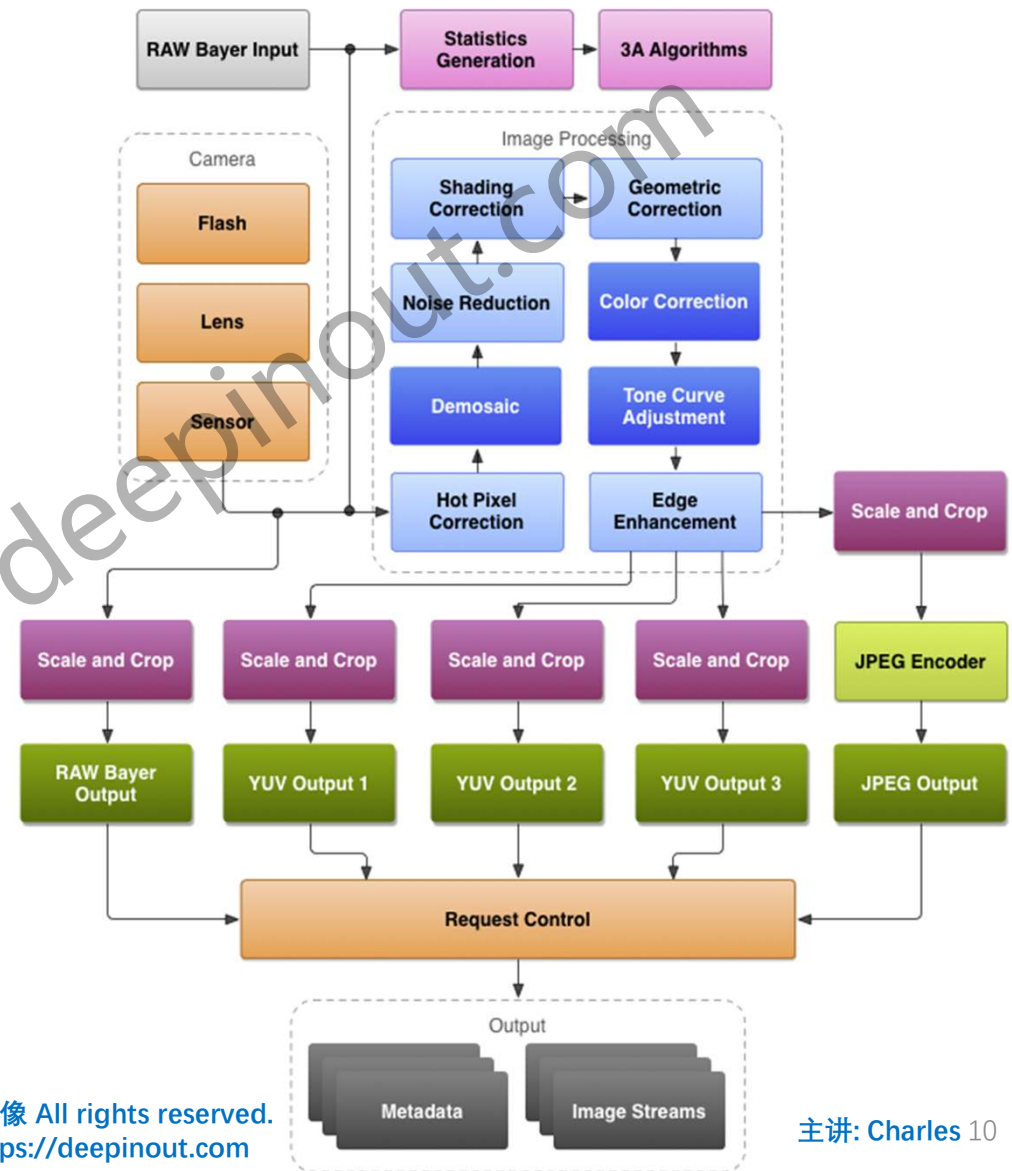
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Android Camera HAL3 软件栈

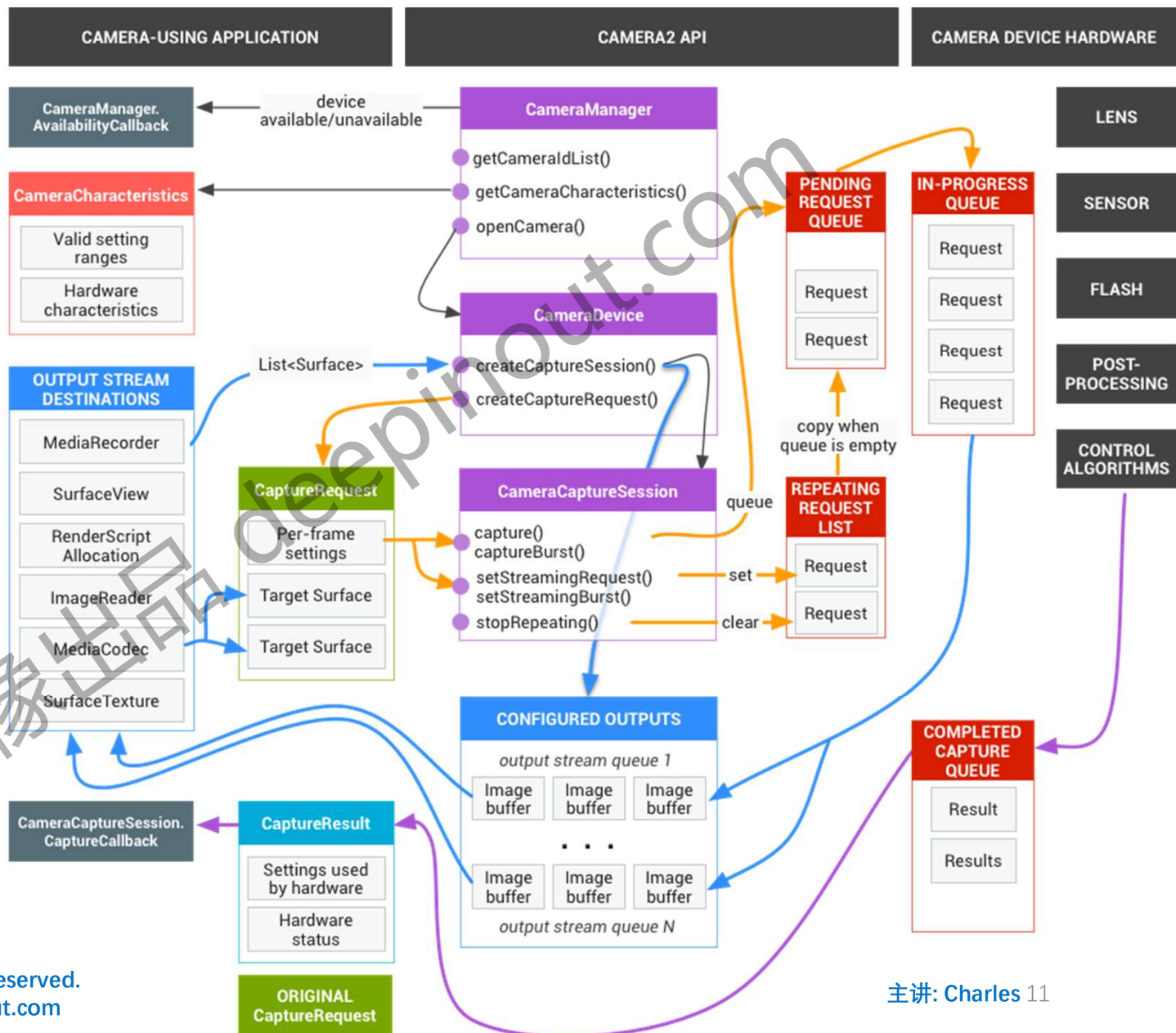


Android Camera Pipeline介绍

ANDROID CAMERA ARCHITECTURE



Android Camera 控制流程



相关文档

- 参考资料

- <https://deepinout.com/android-camera-official-documentation/android-camera-hal-dev/android-camera-hal-develop-overview.html>

- 答疑

- <https://deepinout.com/android-camera-official-documentation/android-camera2-api/android-camera-architecture-intro.html>

- 课程配套文档下载

- git clone https://e.coding.net/deepinout/camera/android_camera_docs.git

Thanks

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