

=====RK3399PRO Linux SDK Release Note=====

【rk3399pro_linux_release_v1.1.0_20190706.xml Release Note】

1. update kernel
 - (1) fix host mode resume fail for rk3399/rk3399pro
 - (2) put the edp/mipi in vopl, and hdmi in vopb.
 - (3) fixes irq of BT on rk3399pro evb
 - (4) Fixes the regulator the abnormal during suspend.
2. update uboot
 - (1) update vopl init correct
 - (2) fixes avb
3. update debian
 - (1) fixes vp8 encode was abnormal on debian.
7. update docs
 - (1)add the Rockchip Linux Software_Developer_Guide_CN and Rockchip_Linux_Software_Developer_Guide_EN.pdf
 - (2) update RK3399PRO_Release_Note.txt
 - * dos2unix fixes the file format on ubuntu.
 - * change the language from Chinese to English.

【rk3399pro_linux_release_v1.0.1_20190621.xml Release Note】

1. update device/rockchip
 - (1) support to run './build.sh debian' for debian9 and run './build.sh distro' for debian10.
 - (2) Fix broken cleanall with './build.sh cleanall'.
2. update RK3399PRO_Release_Note.txt
 - (1) dos2unix fixes the file format on ubuntu.
 - (2) change the language from Chinese to English.
3. update kernel
 - (1) support headphone jack.
 - (2) support NTFS filesystem.
4. update debian
 - (1) support usb3.0 for adbd.
 - (2) support rk809 switch configure.
 - (3) fixes the online video crash on chromium.
 - (4) support the camera 3a function on debian.

5. update buildroot

- (1) support NTFS filesystem.
- (2) Fixes somethings in rockchip_test
- (3) Fixes the rootfs size is larger than befor.

6. update wlan on app/settings

- (1) Fixed frequency display error
- (2) Fixed failure to reconnect automatically
- (3) Support Chinese ssid
- (4) Fixed connection failure in softap mode
- (5) Fixed save configuration fail in softap mode

7. update docs

- (1) add the Rockchip Linux Software_Developer_Guide_CN and Rockchip_Linux_Software_Developer_Guide_EN.pdf
- (2) update RK3399PRO_Release_Note.txt
 - * dos2unix fixes the file format on ubuntu.
 - * change the language from Chinese to English.

【rk3399pro_linux_release_v1.0.0_20190606.xml 更新日志】

一 NPU 的更新:

- (1) Updates npu driver to version 6.3.3.2, rknn server 0.9.7
- (2) rknn-api: update to v0.9.6
- (3) npu_transfer to 1.9.2
- (4) RKNN Toolkit to 1.0.0
- (5) 增加新的仓库 external/RKNPUtool, 里面包含 rknn api Linu/Android SDK

更新记录:

- a. rknn c/c++ api 、 npu_transfer 支持多计算棒
 - 1) rknn api 接口有更新, 对于单计算棒或者原有 rk3399pro, api 接口不变
 - 2) 对于多计算棒, 增加 rknn_init2() 函数
- b. rk1808 支持 Android NNAPI 1.1 (for Linux), 编程接口与 Android 一致
- c. rk3399pro 支持 Android NNAPI 1.1 (for NPU)
- d. 解决 rk3399pro 3 个以上模型同时跑时, 可能存在卡住的问题
- e. 解决驱动中存在的一些内存泄露
- f. rknn server 支持将 non precompile 的模型转换成 precompile 模型 (需要和 rknn toolkit 1.1 配合))

二 Buildroot 更新:

1. usb3.0 adbd 的支持
2. uvc_app 的支持
3. rockchip_test 添加 camera 等测试的完善

4. freerdp 的支持

三 Debian 更新:

1. npp_fw 和 rknn_demo 的更新
2. 修复日期无法修改问题
3. 修复低概率系统第一次起来被损坏问题
4. debian10 buster 版本编译添加
5. 电源按键对待机唤醒的处理

四 文档和工具的更新:

1. AndroidTool 更新到 v2.67
2. DriverAssitantg 更新到 v4.8
3. FactoryTool 更新到 v1.66
4. add rk3399pro RKNN_API document
5. wifi/bt 相关文档的更新
6. recovery and pcba document 更新
7. 添加 DRM Display Develop 文档
8. uboot、camera 文档的更新

五 Camera 更新:

librkisp: v2.0.0

3A lib version:

af: v0.2.14

awb: v0.0.b

aec: v0.0.9

iq version: v1.0.0

iq magic version code: 635075

matched rkispl driver version:

v0.1.3

主要更新点:

- 1) iq 文件加入严格校验机制, 防止乱改 iq 文件及改错等原因造成的与 engine 库不匹配的问题
- 2) iq 效果与 hal100 做了一致性验证
- 3) 本次发布的 iq 文件, 经过 iq 效果验证的会在 iq 文件中加 verify 标识
- 4) af 效果有提升, 连续对焦及触摸对焦, 速度及准确度都有提升

六 kernel 的更新:

1. 修复 lpddr4 的一些 bugs 和专门的 lpddr4 dts 的支持

七 uboot/rkbin 的更新:

1. rknpu-lion: bl31: update version to v1.05

Build from ATF commit:

301942b plat: rk1808: fix pmic_sleep pin config

update features:

301942b plat: rk1808: fix pmic_sleep pin config

549d145 plat: rk1808: ddr: fix rx de-skew switch bug

c0933ee rockchip: common: atags: sync from u-boot

2. rk3399pro: bl31: update version to 1.28

Build from ATF commit:

51f2096 plat: rk3399: ddr: fix lpddr4 some timing error

update feature:

this bl31 is match ddr bin Version "DDR Version 1.22 20190506"

3. rk3399pro: ddr: update ddr version to v1.22 20190506

build from:

8132b62 Version: DDR Version 1.22 20190506

update feature:

ce4c893 lpddr4: fix lpddr4 some timing error

八 App 的修复

1. settings: fixup softap connection failure

<https://redmine.rockchip.com.cn/issues/192401>

2. camera:

camera: match the new isp driver

There are 5 node on /dev/video* by one isp.c

camera: fixup ui status confusion sometimes when mode switch

<https://redmine.rockchip.com.cn/issues/192550>

3. gallery:

fix update longPressedFlag return from QPushButton::mousePressEvent

<https://redmine.rockchip.com.cn/issues/192549#change-1840929>

add /tmp for file search

<https://redmine.rockchip.com.cn/issues/192504>

4. music:

popup the messagebox instead of Qt::Dialog

<https://redmine.rockchip.com.cn/issues/192388>

add /tmp for file search

<https://redmine.rockchip.com.cn/issues/192504>

5. video:

main: support the .m4v format video

This patches fixes issues on

<https://redmine.rockchip.com.cn/issues/191171>

add /tmp for file search

<https://redmine.rockchip.com.cn/issues/192504>

【rk3399pro_linux_beta_v0.02_20190321.xml 更新日志】

3. v0.02 beta version

buildroot:

- * npu_fw (版本升级: rknn 0.9.4, ddr v1.20, bl31: v1.04)
- * fixes dual panel with hdmi display is abnormal.
- * 优化 Glmark2
- * 默认双屏同显的支持
- * 修复 wifi 密码无法保存问题, 蓝牙音箱无法链接问题
- * 增加 gstreamer1. 一些音视频格式的支持, 比如 Mpeg2/Dvd

Debian:

- * npu_fw 升级到 0.9.4
- * libmali&&qt 的升级
- * 修复 ffmpeg 的 bug
- * 优化 Glmark2

Camera:

camera_engine_rkisp 和 gst-plugins-rockchip 的更新, 更新 rkisp 到 v1.9 版本

librkisp.so: v1.9.0

librkisp_aec.so: v0.0.9

librkisp_awb.so: v0.0.9

librkisp_af.so: v0.2.10

iq xml: v0.2.5

Camera HAL3: v1.9.0

rkisp1 driver: v0.1.1

版本主要更新点如下:

1) 修复以下重要 bug:

- × 初始化 ISP 参数未在数据流输出前设置导致的 死机, 采不到数据等问题
- × 拍照拷机, 拍照按钮变灰, 预览正常

2) AE 平滑收敛

3) ISPv12(rk3326) 特性全功能支持

4) 自动匹配 iq 文件

5) 支持 sensor OTP

6) 支持自定义 metadata

Loader:

rk3399pro:npuloader: Add hash for rk atags

rk3399pro: npu: ddr: update to v1.02 20190312

Kernel:

kernel 升级较多部分，同步内部最新 20190321。
主要修复 hdmi 无声音问题。BT 异常中断等

【rk3399pro_linux_beta_v0.01_20190217.xml 更新日志】

2. v0.01 beta version

buildroot:

- * 增加 npu-powerctrl 源码
- * npu_fw 的升级
- * rknn_demo 添加
- * usb camera bug 的修复
- * 修复 wifi settings, 密码框退出问题
- * gcc 升级到 6.5 版本
- * 修复 rk3399pro 待机唤醒问题

uboot/docs/kernel/mpp 升级至内部最新 code.

【rk3399pro_linux_beta_v0.01_20190124.xml 更新日志】

1. v0.01 beta version

Working and tested (to some extent):

- * cluster cpu/gpu support -- including frequency, performance
- * UART / console
- * Thermal
- * Touchscreen
- * EDP
- * Wifi
- * Bluetooth / Webcam
- * eMMC
- * USB2/USB3
- * Backlight
- * DVFS: included cpu/gpu/ddr
- * CAMERA: had tested the ov13850 camera
- * VIDEO: tested the h264 video source
- * AUDIO: play and mic music
- * NPU
- * HDMI
- * GMAC

Not tested:

- * Pcie

- * MIPI

Not working:

- * SD CARD: no sure, maybe the board sd card is broken by hardware.