Ameba Release Note

SDK release note

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Table of Contents

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1 Release v9.0

1.1 v9.0a
● First release for 8735b

1.2 v9.0b
● VOE FW upgrade to v0.4.0.4
● Support sensor ps5258
● Support build on Linux

2 Release v9.1

2.1 v9.1a
● Update base BSP
● Add posix api
● New structure for all example
● Add BT Simple Config
● Add BT coexist PTA mode
● Support sensor gc4653
● Add power save API
● Add sys_reset api
● Add QR code example
● Add kvs_webrtc_plus_producer_mmf

3 Release v9.2

3.1 v9.2a
● Update base BSP

3.2 v9.2b
● Support asdk 10.3.0
● Add at-command of isp
● Add fileloader module and filesaver module of NN
● Add mic type choose in audio examples

- BT config support pro2 5G scan
- Add baremetal modules and example of NN
- Upgrade to VOE 0.7.0.0
- support wowlan and keep alive
- Add Nand flash example
- Set char as signed char
- Update power save example
- Support OTA
- Update secure storage example
- Support sensor mis2008
- Update kvs webrtc to support aws-iot credential
- Support fast connect at Nand flash

4 Release v9.3

4.1 v9.3a

- [wlan]add wifi_get_sta_max_data_rate api
- [nn] support model store in SNAND
- [flash]Sync ftl and std example
- [nn] add fwfs to merged application
- [wlan]add set mac address without writing efue api
- [video] upgrade to VOE 1.0.0.0
- enable ota checksum in default
- [wlan] increase the lwipopt.h buffer setting
- [isp] add osd2 and example
- [wlan] wowlan tcp and mqttssl keep alive
- [nn] add yolov4-tiny and support mbnetssd store in SNAND
- [mmf] add support data channel for kvs webrtc
- [wlan] user data flash layout and add normal driver power by rate and fine tune RX spur level
- [wlan] Reverse workaround 2.4G/5G LNA_LDO / TIA_LDO and thermal trim and PA Bias K new method
- [bt:ble] fix address error in bt power on
- [isp] add sensor imx307 on voe 1.0.0.0
- [wlan] Fixed 5G 40M throughput problem due to pro2 without vht
- [wlan] thermal trim and PA Bias K new method for new lead frame RL6601B BD1031

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- [video]Support g711 format for mp4
- [file] Support VFS function
- [isp] add motion detection and example
- [sdk] add ftl nand verify code
- [bt:ble] Fix hardfault while WiFi power off after bt deinit

5 Release v9.4

5.1 v9.4a

- [sdk]support trust zone
- [video] upgrade VOE version to 1.2.2.0
- [wlan] upgrade FW version to 1007
- [wlan] Fixed 5G 40M throughput problem due to pro2 without vht
- [wlan] increase the lwipopt.h MBOX size and udp tx skb unavailable
- [nn] update nn fwfs for new nand spare definition
- [isp] add motion detection and example
- [wlan] fixed ping failure when some packet size given
- [mmf] kvs producer module support g711 audio format
- [nn] draw nn results with osd
- [mmf] Support g711 format for mp4
- [mmf] Fixed the problem linker module block when pause input
- [file] Support VFS function
- [mmf] add demuxer module and modify the related examples
- [sdk] add ftl nand verify code and fix ftl bug
- [mmf] webrtc module using VFS for reading certs
- [nn] model yamnet
- [mmf] kvs producer support resolution change
- [sdk] add api to enable backtrace
- [pwr] update power save api
- [video] Support multi sensor and FCS
- [nn] set nn rgb channel resolution according to model input size
- [nn] yamnet smoke small model
- [wlan] fix wowlan block issue
- [mmf] webrtc stability improvement
- [wlan:coex] add coex driver code
- [mmf] modify the audio setting and add EQ api

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- [sdk] configSTACK_DEPTH_TYPE to uint32_t for pthread max stack size
- [wlan] add rltk_wlan_get_bandwith function
- [mmf] adjust display roi according to isp resize method
- [wlan] add rltk_wlan_get_thermal function and errno bug fixed and pwer limit by rata table
- [mmf] support fmp4
- [sdk][ota] update NN model by fwfs ota method
- [mmf] add file cache feature for webrtc to speedup the connection
- [wlan] fix audio noise due to beacon mode and fix ATBp hardfault in tz project
- [file] Muxer driver support vfs

5.2 v9.4b

- [video] Reduce the multi sensor setup procedure
- [mmf] webrtc add flexible media source layer
- [video] Add the AE and AWB for fcs mode
- [wlan]fixed RA bug due to wireless_band setting
- [wlan] wowlan dtim setting
- [isp] add motion detect trigger nn example
- [usbd:cdc] Support usb cdc function
- [sdk] fix c++ list crash issue
- [sdk] modify nand mutex lock/unlock behavier
- [isp] osd2 update
- [wlan] fix mqtt wowlan wake up fail issue
- [file] Add the mp4 example without mmf
- [mmf] webrtc support opus and add rtw_create_secure_context
- [wlan] add wowlan wake up pattern dump
- [mbedtls] sync net_would_block from mbedtls-3.0.0
- [wlan] add wifi/bt address api and get ap dtim info api
- [lwip] fix lwip 2.1.2 dhcp renew and rebind
- [isp] replace hal_video_obj_region with osd draw
- [sdk] modify link file for DDR size
- [isp] add motion detect after AE stable mode
- [mmf] fix the choppy audio issue while using g711 streaming framesize large than 160
- [mbedtls] mbedtls-3.0.0 use bignum rom codes
- [mbedtls] mbedtls-2.16.6 use bignum rom codes
- [nn] yolo decode for multi-layer output
- [mmf] webrtc sync amazon deadlock fix

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- [isp] add condition check for safe OSD operation
- [sdk] fix strdup error
- [mmf] add howling suppression function based on AECM
- [sdk] sync VOE1.2.4.0
- [wlan] fix audio noise due to beacon mode and fix fast connect hardfault
- [bt:hci] Add BT vendor command to send cut version to BT FW
- [bt:ble] Add privacy module for ble peripheral & scatternet
- [wlan:bbrf] phydm/halrf from phydm trunk for rtl8735b V28 (RF v23)
- [sdk] change DDR to no_dss and 1t cmd setting
- [wlan] add rx ring count to avoid rx fifo overflow
- [mmf] add rtsp,video,NN,audio and SD joint test and fix some error for video examples
- [isp] fixed osd hide function fail issue and add stroke function of osd
- [video] Support OSD and snapshot for fcs mode
- [mmf] adjsut the clock rate for rtsp AAC
- [video] Check the bad block status for FCS mode
- [mbedtls] use std snprintf in mbedtls-2.16.6, sync from 3.0.0
- [video] Modify AE/AWB setup for fcs mode
- [wlan] add adjustable buffer size for wakeup pattern packet
- [mmf] webrtc sync amazon: change all the strcpy to strncpy
- [sdk] sync VOE1.2.5.0
- [wlan] fix hardfault in example_wlan_scenario
- [flash] Set flash default speed to 62.5MHz
- [sdk] fix crash when generating fwfs nn binary on linux
- [wlan:coex] add wifi change mode for Pro2
- [sdk] sync VOE1.2.6.0
- [mmf] fix the audio play slow and update Readme
- [wlan:bbrf] sync phydm for rtl8735b V29 RX DCK flow to fix BT RX deadzone
- [nn] remove unnecessary model
- [i2s] update i2s example
- [video] Support day/night mode and drop frame for FCS mode
- [eco:awsiot] update user guide of aws-iot
- [usbd] Fixed the low voltage problem for USB
- [isp] update sensor driver(voe1260)
- [wlan] add 0x6E wakeup for segmented mqtt packet, resample and decode the packet data
- [nn] default insert 2 models