

## Release Note. (CP2 3.6.0)

date : 2022.03.14

1. **BASE VERSION** : CP2\_3.5.1
2. **H/W**: CP2-NA, CP2-NA-LTE, CP2-EU-LTE, CP2-VZ-LTE  
CP2-NA-VZ, CP2-VZE-LTE, CP2-VZA-LTE
3. **Changes/New**
  - 1) Enhance system stability
  - 2) Add setting.ini file changed date
  - 3) Start Modem FW upgrade when super capacitor charged more than 90%
  - 4) Apply AT&T 3G Sunset
  - 5) Enhance AUTO Recovery
  - 6) Add G-Sensor calibration log in the system.log
  - 7) Add Partial Setting upload function  
Add DMSCMD\_DOWNLOADSETTINGPARTIAL server cmd
  - 8) Move ELA from RF-READER to Ext-Device
  - 9) Add modem information in the device\_info\version.ini
  - 10) Support BMI085 gsensor/gyro & unicore GPS
  - 11) Add Temperature in the Extra drv data
  - 12) Add CPU usage in the Extra drv data
  - 13) Change ENC\_USERPWD setting range (4 digit password -> 8 digit password)
4. **Fixed**
  - 1) net\_image\_fps = 1fps
  - 2) A Band information 0 in the extra drv data
  - 3) Remove temporary file after SD Card recovering
  - 4) SMS Modem reboot command
  - 5) Write MODEM FW upgrade in the system.log
  - 6) DrvExtraInfo 32~65 field bitmask setting

## Release Note. (CP2 3.5.1)

date : 2021.11.12

1. **BASE VERSION** : CP2\_3.5.0
2. **H/W** : CP2-NA, CP2-NA-LTE, CP2-EU-LTE, CP2-VZ-LTE  
CP2-NA-VZ, CP2-VZE-LTE, CP2-VZA-LTE
3. **Changes/New**
  - 1) Applied VZC 3.5.0 default config
4. **Fixed**

- 1) Debug CP2-NA-LTE model IMEI reading issue during production
- 2) Debug Automatically remove data setting issue

## Release Note. (CP2 3.5.0)

date : 2021.08.10

Released CP2\_3.5.0 version after testing CP2\_3.5.0.RC3.

## Release Note. (CP2 3.5.0.RC3)

date : 2021.08.06

1. **BASE VERSION** : CP2\_3.5.0.RC2
2. **H/W** : CP2-NA, CP2-NA-LTE, CP2-EU-LTE, CP2-VZ-LTE  
CP2-NA-VZ, CP2-VZE-LTE, CP2-VZA-LTE
3. **Changes/New**
  - 1) Change LED operation specification when Video Mask feature is activated
4. **Fixed**
  - 1) Debug DRV file transmit

## Release Note. (CP2 3.5.0.RC2)

date : 2021.07.27

1. **BASE VERSION** : CP2\_3.5.0.RC1
2. **H/W** : CP2-NA, CP2-NA-LTE, CP2-EU-LTE, CP2-VZ-LTE  
CP2-NA-VZ, CP2-VZE-LTE, CP2-VZA-LTE
3. **Changes/New**
  - 1) Enhance G-SENSOR CALIBRATION logic and add [DMS option, Reset calibration data]

**6.9.10 DMSCMD\_GSENSORCALIBRATION**

CommandParam Value is [ 0, 1, 2, 3 ]

0 : After Command received, Instant

1 : After Command received, Speed 0 is detected for more than 5 seconds

2 : Next booting time or After power off delay time, just before shutdown.

**3 : Reset calibration data**

- 2) Change G-SENSOR, GYRO SENSOR representative value to average value
- 3) Write Serial/UUID information into log when Disk Error
- 4) Enhance UploadSnapshot API refresh rate (Increase FPS)
- 5) Enhance system stability
- 6) Add Audio Record By Panic function

**4. Fixed**

- 1) Debug DRV extra data Network field 0(X) issue
- 2) Debug IOT mode serial error message issue
- 3) Debug GYRO value in the DRV
- 4) Debug wpa\_supplicant issue when there is no WIFI setting.
- 5) Debug SHDN issue when ACC ON
- 6) Image tuning for the new ZN240 sensor

## **Release Note. (CP2 3.5.0.RC1)**

date : 2021.06.01

1. **BASE VERSION** : CP2\_3.4.0

2. **H/W** : **CP2-NA, CP2-NA-LTE, CP2-EU-LTE, CP2-VZ-LTE**  
**CP2-NA-VZ, CP2-VZE-LTE, CP2-VZA-LTE**

**3. Changes/New**

- 1) Add a function: When the device was off in the geofence zone, the device know it is in the geofence zone even before receiving GPS.
- 2) Add DRIVER\_ID\_DEVICE function
- 3) Improve system reliability
- 4) Add device information transfer function when accessing FOTA URL
- 5) Add Serial information logging function when Disk Error
- 6) Change the DRV\_FRAME\_INFO\_EX structure version
- 7) Deactivation of SD Write protect
- 8) External Device
  - ✓ ELA RFID Reader
- 9) DRV ExtraData Enhancements
  - ✓ Change the DRV OBD data (Extra Info) record units
  - ✓ Add SOC thermometer capability
- 10) G-Sensor ACC filter function
- 11) Change Wakeup AlarmIn operation

12) Support ZN240 sensor

**4. Fixed**

- 1) Improve system reliability
- 2) Improve GYRO precision
- 3) Improve Recovery function
- 4) Improve Pulse Speed in DRV
- 5) Improve the FirstMDTTime logic
- 6) Improve recording start logic
- 7) Improve Overwrite logic
- 8) Improve UploadEvent logic
- 9) Debug a vertical lines in recorded images
- 10) Improve Event info log when Video loss
- 11) Debug a bit rate issue when record 2FPS
- 12) Improve communication with Power Adapter
- 13) Improve LE910-NA-LTE modem operation
- 14) Improve Drv record
- 15) Improve Network recovery
- 16) Improve Modem recognition

## **Release Note. (CP2 3.4.2)**

date : 2021.01.06

**Released CP2\_3.4.2 version after testing CP2\_3.4.2.RC2.**

## **Release Note. (CP2 3.4.2.RC2)**

date : 2021.06.11

**5. BASE VERSION :** CP2\_3.4.2.RC1

**6. H/W :** CP2-NA, CP2-NA-LTE, CP2-EU-LTE, **CP2-VZ**, CP2-VZ-LTE, CP2-VZE-LTE, CP2-VZA-LTE, CP2-AP-LTE

**7. Changes/New**

**8. Fixed**

- 1) ZN240 sensor image tuning

## Release Note. (CP2 3.4.2.RC1)

date : 2021.05.24

1. **BASE VERSION : CP2\_3.4.0**
2. **H/W : CP2-NA, CP2-NA-LTE, CP2-EU-LTE, CP2-VZ, CP2-VZ-LTE, CP2-VZE-LTE, CP2-VZA-LTE, CP2-AP-LTE**
3. **Changes/New**
  - 1) Support ZN240 sensor

## Release Note. (CP2 3.4.0)

date : 2021.02.25

**Released CP2\_3.4.0 version after testing CP2\_3.4.0.RC4.**

1. **BASE VERSION : CP2\_3.3.0**
2. **H/W: CP2-NA, CP2-NA-VZ, CP2-NA-LTE, CP2-EU-LTE, CP2-VZ-LTE, CP2-NA-VZ, CP2-VZE-LTE, CP2-VZA-LTE**
3. **Changes/New**
  - 1) UploadEvent: support multi-events  
Before: EventType[int64] has one event. After: EventType[int64] has multi events.
  - 2) Enhance Thread hang checking method  

WATCHDOG	2021.01.21 07:35:24.000 (00:35:45)	O	Thread hang (Thread ID: 0x80000000)
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  - 3) Enhance SD card checking logic when remove/re-insert
  - 4) Support creation of Engineering log partition and recreate Engineering log

## 1.2 DMSCMD\_SENDDEV

CommandSeq : Server managed value. Device returns same value to Seq field of SendDEV API

Data Value is 0 ~ N : For sub command. Device returns same value to Data field of SendDEV API

CommandData.length = 0 fixed

Data Field (Sub Command)	Purpose	Response API	NotiTxt String (for engineers only)
1	Send debug message data (zipped enc)	Response from device API : SendDEV Devdata[bin] : debug message	#Debug-1 (DCS/DMS5 only)
101	Make device to debug mode on. All data will be cleared case by case.	Response from device API : CommandComplete (CP2/CP4)	#Debug-101 (DCS/DMS5 only)
102	Make device to debug mode off.	Response from device API : CommandComplete (CP2/CP4)	#Debug-102 (DCS/DMS5 only)

⇒ Please refer to DMS5\_Protocol\_v5.5\_Only\_For\_DEV\_20210120.docx file

5) WIFI driver(RTL8723BU) update

#### 4. Fixed

1) [BUG FIX] SD Format log included in the log file.

## Release Note. (CP2 3.3.0)

date : 2021.01.06

**Released CP2\_3.3.0 version after testing CP2\_3.3.0.RC10.**

**H/W : CP2-NA, CP2-NA-VZ, CP2-NA-LTE, CP2-EU-LTE, CP2-VZ-LTE, CP2-NA-VZ, CP2-VZE-LTE, CP2-VZA-LTE**

## Release Note. (CP2 3.3.0.RC10)

date : 2020.12.29

**BASE VERSION : CP2\_3.3.0.RC9**

#### 1. Changes/New

#### 2. Fixed

1) Found unknown reboot during OnOff Cycle Test (Debug tvd kernel thread dead)

## Release Note. (CP2 3.3.0.RC9)

date : 2020.12.24

**BASE VERSION : CP2\_3.3.0.RC7**

### **1. Changes/New**

- 1) Enhanced the shutdown process when use INT1-T

### **2. Fixed**

- 1) Fixed F/W Name after F/W Upgrading in the system.log

### **3. Etc.**

- 1) 3.3.0.RC8 F/W wasn't released

## Release Note. (CP2 3.3.0.RC7)

date : 2020.12.17

**BASE VERSION : CP2\_3.3.0.RC5**

### **1. Changes/New**

- 1) Changed "Modem F/W Upgrade" message in the system.log
- 2) Apply SWA Default setting per model

### **2. Fixed**

- 1) Enhanced WIFI communication
- 2) Debug message of "Modem F/W Upgrade" in the system.log
- 3) Debug disconnection when continuously upload files using WIFI
- 4) Debug message log encryption decrypt
- 5) Debug CH1 PAL 30FPS recording (Record 25FPS => 30FPS)

### **3. Etc.**

- 1) Change implementation method of Micom WOG
- 2) 3.3.0.RC6 F/W wasn't released.

## Release Note. (CP2 3.3.0.RC5)

date : 2020.11.30



**BASE VERSION : CP2\_3.3.0.RC4**

**H/W : CP2-NA, CP2-NA-VZ, CP2-NA-LTE, CP2-EU-LTE, CP2-VZ-LTE, CP2-NA-VZ,  
CP2-VZE-LTE, CP2-VZA-LTE**

**1. Changes/New**

- 1) Add Modem reboot by Modem control status
- 2) Support TLS 1.3
- 3) Support 30FPS when video type PAL
- 4) Add LE910Cx PPP Mode
- 5) Add Ignition Filter

**2. Fixed**

- 1) Debug modem upgrade using SD card
- 2) Debug MICOM version writing
- 3) Debug UploadDRV system status Record ON/OFF
- 4) Debug LED operation

## **Release Note. (CP2 3.3.0.RC4)**

date : 2020.09.24

**BASE VERSION : CP2\_3.3.0.RC3**

**1. Changes/New**

- 5) Enhance GPS power on control (5.5 seconds to 2.5 seconds)

**2. Fixed**

- 1) Debug low quality image file size
- 2) Debug Audio Masking
- 3) Debug Geofence event beep
- 4) Debug when use MAX(20) Geofence area
- 5) Debug Geofence event

## **Release Note. (CP2 3.3.0.RC3)**

date : 2020.09.09



**BASE VERSION : CP2\_3.3.0.RC2**

**H/W : CP2-NA, CP2-NA-VZ, CP2-NA-LTE, CP2-EU-LTE, CP2-VZ-LTE, CP2-NA-VZ,  
CP2-VZE-LTE, CP2-VZA-LTE**

**1. Changes/New**

- 6) Add Event AUDIO MASK function
- 7) Add new hidden setting  
[DMS5]  
NET\_NO\_DATA\_TIMEOUT=10
  - ⇒ Default is 10seconds. If you didn't set, it no data timeout is 10 seconds.
  - ⇒ Optionally, it can be set from 10seconds to 300seconds.

**2. Fixed**

- 1) Debug event MASK\_CH
- 2) Debug wakeup on alarm

## **Release Note. (CP2 3.3.0.RC2)**

date : 2020.08.26

**BASE VERSION : CP2\_3.3.0.RC1**

**H/W : CP2-NA, CP2-NA-VZ, CP2-NA-LTE, CP2-EU-LTE, CP2-VZ-LTE, CP2-NA-VZ,  
CP2-VZE-LTE, CP2-VZA-LTE**

**1. Changes/New**

- 8) Telit modem version checking new AT CMD
  - ⇒ It's not related to the function. The old AT CMD show a wrong modem version.
- 9) Add Geofence function
- 10) Add CONFIG UPLOAD log into the System.log
  - ⇒ Added more information into the System.log.
- 11) Changed Wake-up Interval OFF condition
- 12) Add Event MASK\_CH function
- 13) Delete CP2 Firmware Name PostFix
  - ⇒ It's related to the firmware information. NA or SP or EU or AP is simply removed from the firmware name.  
So CP2\_2.1.0.NA firmware version will be the CP2\_3.3.0 after the firmware update.

**2. Fixed**

## **Release Note. (CP2 3.2.0)**

date : 2020.07.23

**Released CP2\_3.2.0 version after testing CP2\_3.2.0.RC9.**

**BASE VERSION : CP2\_3.2.0.RC9**

**H/W : CP2-NA, CP2-NA-VZ, CP2-NA-LTE, CP2-EU-LTE, CP2-VZ-LTE, CP2-NA-VZ,  
CP2-VZE-LTE, CP2-VZA-LTE**

**3. Changes/New**

- 1) Improve Network termination process
- 2) Auto Format ON: Format only when a blank SD is inserted
- 3) Remove vendor from System log (IMEI INFO)

**4. Fixed**

- 1) LED operation bug (Network fail, shutdown)
- 2) SD unmount time bug
- 3) Beep operation bug (wifi connected, Video-loss, duration 0)
- 4) Network connection issue during ON/OFF test
- 5) DSM extra data bug
- 6) UploadDrv gdata 10hz bug

## **Release Note. (CP2 3.2.0.RC4)**

date : 2020.06.30

**BASE VERSION : CP2\_3.2.0.RC2**

**H/W : CP2-NA, CP2-NA-VZ, CP2-NA-LTE, CP2-EU-LTE, CP2-VZ-LTE, CP2-NA-VZ,  
CP2-VZE-LTE, CP2-VZA-LTE**

**1. Changes/New**

- 1) Add the firmware update standby timeout
- 2) Run Auto Recovery when abnormal shutdown
- 3) Remove Auto Recovery from the menu/setting
- 4) Add MDAS, MDSM support
- 5) Add Modem BDID test logic

**2. Fixed**

- 1) Aux warning that related with RF reader touch type
- 2) Gyro data writing
- 3) Overwrite 256GB SD

## **Release Note. (CP2 3.2.0.RC2)**

date : 2020.06.16

**BASE VERSION : CP2\_3.2.0.RC1**

**H/W : CP2-NA, CP2-NA-VZ, CP2-NA-LTE, CP2-EU-LTE, CP2-VZ-LTE, CP2-NA-VZ,  
CP2-VZE-LTE, CP2-VZA-LTE**

**1. Changes/New**

- 1) Add the extra data for ADAS/DSM on the DRV file and upload to Smart API server
- 2) Add FCW distance [ADAS]
- 3) Add PLK RoadScope8 ADAS device
- 4) Add IMSI information at the DMS4 phone number field
- 5) Enhance the Phone number check function
- 6) Remove ACC status log from NAND system.log (space issue)
- 7) Wake On G-sensor event threshold change from 150mG to 50mG
- 8) Enhance Auto format / Auto recovery function
- 9) When the LE910 modem Dongle type is 1, use PPP instead of NCM.

**2. Fixed**

- 1) Overwrite after changing the record mode
- 2) NCM related connection fail
- 3) 2.X version WI-FI only product connection issue after upgrading to 3.1.1
- 4) When using Cigar or INT1-T, there was no external signals in the config tool.  
=>Support DDC-200 or other DSM device.

## **Release Note. (CP2 3.2.0.RC1)**

date : 2020.05.18

**BASE VERSION : CP2\_3.1.1**

**H/W : CP2-NA, CP2-NA-VZ, CP2-NA-LTE, CP2-EU-LTE, CP2-VZ-LTE, CP2-NA-VZ,  
CP2-VZE-LTE, CP2-VZA-LTE**

**1. Changes/New**

- A.** Added device support:
  - i. ADAS: MDAS-9, MDAS-5
  - ii. DSM: MDSM-7
- B.** Changed Auto format function
- C.** Added Auto recovery function

**2. Fixed**

- A.** Enhance the main camera FPS accuracy

## **Release Note. (CP2 3.1.1)**

date: 2020.05.15

**Released CP2\_3.1.1 version after testing CP2\_3.1.1.RC1.**

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## Release Note. (CP2 3.1.1.RC1)

date: 2020.05.14

**BASE VERSION: CP2\_3.1.0**

**H/W: CP2-NA, CP2-NA-VZ, CP2-NA-LTE, CP2-EU-LTE, CP2-VZ-LTE, CP2-NA-VZ,  
CP2-VZE-LTE, CP2-VZA-LTE, CP2-AP-LTE**

### **3. Fixed**

- A. Debug Model value reset after Modem information refresh

## Release Note. (CP2 3.1.0.RC13)

date: 2020.05.13

**BASE VERSION: CP2\_3.1.0.RC12**

**H/W: CP2-NA, CP2-NA-VZ, CP2-NA-LTE, CP2-EU-LTE, CP2-VZ-LTE, CP2-NA-VZ,  
CP2-VZE-LTE, CP2-VZA-LTE**

### **2. Fixed**

- 1) Debug TEMP PW CONTROL INFO log

## Release Note. (CP2 3.1.0.RC12)

date: 2020.05.11

**BASE VERSION: CP2\_3.1.0.RC11**

**H/W: CP2-NA, CP2-NA-VZ, CP2-NA-LTE, CP2-EU-LTE, CP2-VZ-LTE, CP2-NA-VZ,  
CP2-VZE-LTE, CP2-VZA-LTE**

### **1. Changes/New**

- 1) Add default setting per vendor

### **2. Fixed**

- 1) Debug FOTA img file and remove\_fw
- 2) Debug TEMP SYSTEM WARNING

## Release Note. (CP2 3.1.0.RC11)

date: 2020.04.29

**BASE VERSION: CP2\_3.1.0.RC10**

**H/W: CP2-NA, CP2-NA-VZ, CP2-NA-LTE, CP2-EU-LTE, CP2-VZ-LTE, CP2-NA-VZ,  
CP2-VZE-LTE, CP2-VZA-LTE**

### **3. Changes/New**

- 1) Add the default setting per vendor
- 2) Restore NET\_FW\_RESTART, NET\_CONFIG\_RESTART function

### **4. Fixed**

- 1) Debug PULSE 2HZ error
- 2) Enhance shutdown when Telit LTE modem 3G/2G fallback
- 3) Debug RECORD ON log serial text
- 4) Add exception when handing SMS
- 5) Enhance system stability
- 6) Debug when Wi-Fi Password is wrong.
- 7) Enhance Telit LTE Modem APN setting logic
- 8) Enhance NCM Reconnect function
- 9) Debug kernel memory allocation

## Release Note. (CP2 3.1.0.RC10)

date: 2020.04.24

**BASE VERSION: CP2\_3.1.0.RC9**

**H/W: CP2-NA, CP2-NA-VZ, CP2-NA-LTE, CP2-EU-LTE, CP2-VZ-LTE, CP2-NA-VZ,  
CP2-VZE-LTE, CP2-VZA-LTE**

### **1. Changes/New**

- 1) GSENSOR\_WAKEUP function => enable when Power Type is Cigar
- 2) When set the GSENSOR\_WAKEUP, POWEROFF DELAY will be fixed at 10 minutes.
- 3) Add HW\_VERSION in the version.ini file.

### **2. Fixed**

- 4) NCM communication failed => Enhanced Modem Reboot process
- 5) Modem initialize failed -> Debug exceptions
- 6) Debug UploadSystemLog API
- 7) Debug FOTA Version check function
- 8) Debug BEEP Duration (server command)
- 9) Debug Telit LTE Modem APN setting logic
- 10) Debug Overwrite OFF

### 3. Remark

- 1) A lot of changes. Please test the NETWORK connection and FOTA after install this firmware to SWA's test unit before you release it to your customer.

## Release Note. (CP2 3.1.0.RC9)

date: 2020.04.10

**BASE VERSION: CP2\_3.1.0.RC8**

**H/W: CP2-NA, CP2-NA-VZ, CP2-NA-LTE, CP2-EU-LTE, CP2-VZ-LTE, CP2-NA-VZ,  
CP2-VZE-LTE, CP2-VZA-LTE**

### 1. Changes/New

- 1) None

### 2. Fixed

- 1) Warning sound when press the Panic button
- 2) Warning sound when start the SD card format
- 3) 1fps data (P frame recording)

### 3. Remark

- 1) A lot of changes. Please test the NETWORK connection and FOTA after install this firmware to SWA's test unit before you release it to your customer.

## Release Note. (CP2 3.1.0.RC8)

date: 2020.04.08

**BASE VERSION: CP2\_3.1.0.RC7**

**H/W: CP2-NA, CP2-NA-VZ, CP2-NA-LTE, CP2-EU-LTE, CP2-VZ-LTE, CP2-NA-VZ,  
CP2-VZE-LTE, CP2-VZA-LTE**

### 1. Changes/New

- 1) Add PFD\_RECOVER system log
- 2) Add NETWORK ERROR code information
- 3) Enhance Modem Shutdown function
- 4) Add Recording ratio information in the Frame Info
- 5) When Network error, add Modem Reboot by network condition.
- 6) When unit is at the out of service area, add NoService Log
- 7) Changed Driving Data sending timing
- 8) Add Bluetooth panic button (Flic)

## 2. Fixed

- 1) Add F/W VERSION space in the system log
- 2) Do not retry command except FOTA
- 3) Debug Command Complete issue (not send Command Complete after restart)
- 4) Debug ignored Health Check Interval when network error
- 5) Debug CURL host resolve delay while system shutdown
- 6) Debug RF Reader system warning related issue
- 7) Debug Touch type RF Reader card Aux warning issue
- 8) Debug FOTA record on the system log and LED operation issue
- 9) Debug SD format
- 10) Debug Wake up AlarmIN
- 11) Debug Wakeup Interval
- 12) Debug Channel 1 recording 15 &30fps

## 3. Remark

- 1) A lot of changes. Please test the NETWORK connection and FOTA after install this firmware to SWA's test unit before you release it to your customer.

# Release Note. (CP2 3.1.0.RC7)

## 5. BASE VERSION: CP2\_3.1.0.RC4

## 4. H/W: CP2-NA, CP2-NA-VZ, CP2-NA-LTE, CP2-EU-LTE, CP2-VZ-LTE, CP2-NA-VZ, CP2-VZE-LTE, CP2-VZA-LTE

## 6. Changes/New

- 1) Add system.log in the NAND
  - ✓ Remove VIDEO LOSS from system.log
- 2) Enhance Modem shutdown process
- 3) system.log backup from NAND
- 4) backup system.log from NAND to BRTX4K USB drive
- 5) Write DRIVERID change in to system.log
- 6) Enhance booting speed

## 7. Fixed

- 1) AUTO FORMAT failed and restart again continuously
- 2) MDT file have events which didn't happen.
- 3) Press RESET => immediately G-Sensor Calibration
- 4) RAMDISK image loading (Bad Data CRC occur bug)
- 5) LED light bug => it should work based on the LED specification.
- 6) GSENSOR\_WAKEUP setting OFF => WOG detected => write 0x80 in Car Signal field.
- 7) Sometimes run DISK check 2 times bug
- 8) Temperature value bug
- 9) FOTA Download failed and retry again continuously
- 10) not OVERWRITE during test DISK
- 11) system.log text bug
- 12) VIDEO\_STD mis-matched => Green screen at PC Viewer
- 13) B+ OFF and then occur V-Loss
- 14) When remove RF Reader => no Aux warning bug

15) Except event file setting => SD Error during Overwrite

## **Release Note. (CP2 3.1.0.RC4)**

### **5. BASE VERSION: CP2\_2.1.0**

### **6. H/W: CP2-NA, CP2-NA-VZ, CP2-NA-LTE, CP2-EU-LTE, CP2-VZ-LTE, CP2-NA-VZ, CP2-VZE-LTE, CP2-VZA-LTE**

### **7. Changes/New**

- 11) VIDEO\_STANDARD mismatch => 2<sup>nd</sup> channel display black screen
- 12) 3G / WI-FI auto switching function
- 13) Autoformat On => Create SD partition when it has no partition
- 14) Do not format a write protect switch on SD
- 15) Wake On G-sensor (WOG) function
- 16) Power adapter / Junction Box communication logic change
- 17) Detect a write protect on SD
- 18) Optimize Modem communication message
- 19) Remove Temp. related settings
- 20) Do not try CREG when the modem is LE910-SV V2 or LE910-SV1
- 21) SD write condition change
  - ✓ Previous: check time after booting
  - ✓ New: check supercap voltage after booting
- 22) DC OFF => SD write condition change
  - ✓ Previous: DC OFF => write immediately
  - ✓ New: DC OFF => check supercap voltage => write when 4.4V
- 23) [DMS] Modem F/W version send to server
- 24) Add SD S/N in the System log
- 25) Power On/Off Sequence change by modem type
- 26) External device interface
  - ✓ DNMEA
  - ✓ ATBS OBD2
  - ✓ ELM327 OBD2
  - ✓ DL550A DSM
  - ✓ RoadScope ADAS
  - ✓ DDC-200 DSM
  - ✓ RF-READER
- 27) Expansion SYSTEM WARNING function
- 28) Add Automatically remove data (MEDIA / DRV)
- 29) When SD is removed during recording, consider it as SD NONE
- 30) Add system.log in the NAND
- 31) When SD has 2<sup>nd</sup> partition, save system.log into the 2<sup>nd</sup> partition
- 32) Improved error of G-Sensor Gyro
- 33) Telit LE910CX-AP Single SKU SW Switching
- 34) Delete G-Sensor high speed algorithm THRESHOLD item value



- 35) Add D-TEG GPS FILTER
- 36) Changed FW upgrade behavior specification for FOTA
- 37) Delete Auto FIRMWARE Recovery function
- 38) Changed System.log, Error.log behavior specification
- 39) Add APPLICATION Restart function
- 40) Changed the maximum speed recognized by the main unit to 500KM/H
- 41) Add Stream Encryption function
- 42) Store the Car Pulse speed at 2Hz and storage in 0.1KM/H to the DRV file
- 43) Continuous record MDT file number from 1000 to 2000
- 44) When automatically remove data is ON, delete all files after period include event files.
- 45) Special feature for SWA (0x08)
  - Record audio by PANIC button
  - UploadMdt, UploadEvent, FOTA timeout setting
- 46) Auto APN function like CP4
- 47) AT&T Telit LE910-NA1 Modem support US Cellular
- 48) Telit module communication initialize logic change
- 49) WDT logic specification change
- 50) DMS5 communication related items
  - ✓ Send Modem information and H/W information
  - ✓ Network Config Upload => NAND update and delete setting.ini from SD
  - ✓ Network DriverID Upload => file split (It was Reboot before)
  - ✓ Enhance DMS5 process finish method
  - ✓ Add DMSCMD\_SERVERNOTITXT, DMSCOMD\_SERVERNOTIWAV function
  - ✓ UploadMdt2 API => Max time from 2 minutes to 1 hour.
  - ✓ UploadMdt2 API => FPS setting function.
- 51) G-Sensor / Gyro sensor bandwidth value change
- 52) Error Media (Add SD media additional features)
- 53) SD Card Power Save mode
- 54) syslog write function.
- 55) GPS TIME SYNC logic using NTPD
- 56) Support LE910CX-AP modem QMI driver
- 57) https support
- 58) Strengthening the handling of defective DISK exceptions
- 59) Telit module signal monitoring
- 60) [DMS5] SENDDEV => make a zip and encrypt and then transmit.
- 61) SD resolution for network
- 62) Support IPv6
- 63) DMS4 serviceurl cmd function
- 64) First MDT Time Filter function
  - ✓ When there is year 2015 file, do not consider it as the First MDT Time
- 65) GPS Speed Filter
  - ✓ GPS Speed is from 0km/h to 1km/h, consider it as 0km/h.
- 66) UploadEvent=> Add Ignition Off/On Event
- 67) MODEL item function
- 68) Remote GSensor calibration function

## 8. Fixed

- 69) Debug kernel panic during using Wi-Fi
- 70) Debug G-Sensor algorithm setting when checked Auto adjust G-sensor to vehicle speed.
- 71) Debug PF detection and High temp. detection
- 72) Micom communication packet error

- 73) Debug I-Frame twice per second
- 74) Debug no writing Network Error log
- 75) Wakeup function when B+ disconnected
- 76) Debug fork() and unnecessary file copy
- 77) PPP\_CONNECTION NG and system dead
- 78) Capture buffer and then system dead
- 79) Modem reboot after failed initialize
- 80) Disconnected during [DMS5] uploadmdt2, then send Last Mark 0byte data

## Release Note. (CP2 2.2.0.RC2)

date: 2019.12.3

Base Version: CP2\_2.2.0.RC1

### 1 Changes/New

- 1.1 Add First MDT Time Filter
  - Not use year 2015 for the First MDT Time.
- 1.2 Add] GPS Speed Filter
  - When GPS speed is from 0km/h to 1km/h, consider 1km/h as 0km/h.
- 1.3 Add Ignition Event
  - 1.3.1 UploadEvent API Trigger (Add IGNITION).
  - 1.3.2 Add settings

[DMS5]

property name	value type	description	default value
NET_EVENT_IGNITION	Int, 0 or 1	IGNITION Event Trigger 0 : Off, 1: On	0
NET_UPLOAD_EVENT_IMAGE_IGNITION	Int, 0 or 1	IGNITION Event UploadEvent Image 0: off, 1:on	0

- 1.4 When model number is in a setting.ini file, check the model number(2002) before change the settings.

#### 1.4.1 Add settings

[SYSTEM]

property name	value type	description	default value
MODEL	int	MODEL ID	2002

- 1.5 DMS5 DMSCMD\_GSENSORCALIBRATION Command: Support new MODE.
  - mode 0:instant, 1:speed, 2:shutdown

## Release Note. (CP2 2.2.0.RC1)

date: 2019.11.1

Base Version: CP2\_2.1.0



- 1 Changes/New
  - 1.1 DMS5
    - 1.1.1 Support DMSCMD\_SETSERVICEURL Command
  - 1.2 Modem
    - 1.2.1 SW Upgrade: Support LE910C1-AP, HE910-EUD, HE910-NAD

## **Release Note. (CP2 2.1.0.EU)**

date: 2019.11.25

Base Version: CP2\_2.1.0

1. Support LE910-EU V2
2. Default Configuration: Apply 2019.08 CP2-VZE-LTE-default-settings

## **Release Note. (CP2 2.1.0.AP)**

date: 2019.11.25

Base Version: CP2\_2.1.0

1. Support LE910C1-AP
2. Default Configuration: Apply 2019.08 CP2-VZA-LTE-default-settings

## **Release Note. (CP2 2.1.0.NA)**

date: 2019.10.30

Base Version: CP2\_2.0.0.NA

1. Same changes as CP2\_2.1.0

## **Release Note. (CP2 2.1.0)**

date: 2019.10.30

Base Version: CP2\_2.1.0.RC9

**Official release after QC test.  
Devices will use version 2.1.0 from Nov. 2019 production.**

## **Release Note. (CP2 2.1.0.RC9)**

date: 2019.10.22



Base Version: CP2\_2.1.0.RC8

- 1 Changes/New
  - 1.1 Modem
    - 1.1.1 NCM driver update.
- 2 Fixed
  - 2.1 DMS5
    - 2.1.1 DMS5 temp file (drv, event) delete when start.
  - 2.2 Modem
    - 2.2.1 AT#FASTSHDN Command => Not support at HE910-NAD

## **Release Note. (CP2 2.1.0.RC8)**

date: 2019.10.18

Base Version: CP2\_2.1.0.RC7

- 1 Changes/New
- 2 Fixed
  - 2.1 Modem
    - 2.1.1 AT+CGMM Command => no response => memory error.

## **Release Note. (CP2 2.1.0.RC7)**

date: 2019.10.17

Base Version: CP2\_2.1.0.RC6

- 1 Changes/New
  - 1.1 Modem
    - 1.1.1 SMS
      - 1.1.1.1 When use HE910-EUD, +CSMP dcs = 0
    - 1.1.2 APN change
      - 1.1.2.1 APN change only one time, when setting has different APN.
        - previous: Change APN all the time.
      - 1.1.2.2 Modem reboot after change APN
      - 1.1.2.3 Delete APN change command at Data Call(NCM, ppp) => No need it
    - 1.1.3 Power-On / Off Sequence
      - PWRMON check Timeout change

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- power on: 5sec-> 30sec, power off: 15sec -> 30sec
  - 1.2 DMS5
    - 1.2.1 Command: DMSCMD\_DOWNLOADSETTING
      - 1.2.1.1 Debug when it has the same VehicleID or DriverID.
        - Do not update when it has the VehicleID or DriverID.
  - 1.3 GPS Filter
    - 1.3.1 Filter default-on.
    - 1.3.2 HDOP, VDOP Filter function off.
- 2 Fixed
- 2.1 Modem
    - 2.1.1 SMS
      - 2.1.1.1 Debug Command GD, GA, GU
      - 2.1.1.2 Debug working with wrong DRID
      - 2.1.1.3 Debug system.log file contents (after Command DR)

## **Release Note. (CP2 2.1.0.RC6)**

date: 2019.10.16

Base Version: CP2\_2.1.0.RC5

- 3 Changes/New
  - 3.1 Modem
    - 3.1.1 SMS
      - 3.1.1.1 SMS function code rewriting.
        - READ, SEND, message parsing and management
- 4 Fixed
  - 4.1 Modem
    - 4.1.1 Modem FW Upgrade
      - 4.1.1.1 Delete file when it receives another model Upgrade firmware file.

## **Release Note. (CP2 2.1.0.RC5)**

date: 2019.10.07

Base Version: CP2\_2.1.0.RC4

- 1 Changes/New
  - 1.1 Modem
    - 1.1.1 Modem FW Upgrade

- 1.1.1.1 Accept firmware without extension(.img) when receive firmware using DMSCMD\_DOWNLAODFW Command

- 2 Fixed
  - 2.1 Modem
    - 2.1.1 NCM
      - 2.1.1.1 Debug memory error when it has a connection issue.

## **Release Note. (CP2 2.1.0.RC4)**

date: 2019.10.02

Base Version: CP2\_2.1.0.RC3

- 5 Changes/New
  - 5.1 Modem
    - 5.1.1 SMS function
      - 5.1.1.1 Remove LOG\_TYPE\_SMS\_INFO log when receiving SMS command
      - 5.1.1.2 Write LOG\_TYPE\_USER\_REBOOT when shut down by DR (Device-Reboot)
      - 5.1.1.3 Add error process when the SMS field (Command, Sequence, Data, DRID, phone number) is more than MAX characters.
    - 5.1.2 NCM
      - 5.1.2.1 Use AT#NCMD instead of AT+CGATT when Network-Down
    - 5.1.3 Modem FW Upgrade
      - 5.1.3.1 Support FW File format Image File as like CP4 (Support repackaging file only)
      - 5.1.3.2 Not support binary type file. (Not support Telit file)

## **Release Note. (CP2 2.1.0.RC3)**

date : 2019.9.18

Base Version: CP2\_2.1.0.RC2

- 1 Changes/New
- 2 Fixed
  - 2.1 Modem
    - 2.1.1 SMS function
      - 2.1.1.1 Debug memory error when it has a wrong and very long SMS.
- 3 etc.
  - 3.1 message log
    - 3.1.1 Add SMS message log for debugging.
    - 3.1.2 Remove unnecessary messages. (auth.err getty, Scheduling for restart)

## **Release Note. (CP2 2.1.0.RC2)**

date: 2019.9.10

Base Version: CP2\_2.1.0.RC1

- 1 Changes/New
  - 1.1 Modem
    - 1.1.1 SMS function
      - Add log when performing SMS Command MR, DR, SA, SU
      - Add LOG\_TYPE\_SMS\_COMMAND(0x40)
    - 1.1.1.1 Add setting update by SMS Command SA, SU
      - Add setting update log (LOG\_TYPE\_CONFIG\_UP)
      - Add LOG\_DATA\_CONFIG\_UP\_from\_SMS(0x04)
    - 1.1.1.2 Add modem reboot by SMS Command MR
    - 1.1.1.3 Add system restart by SMS Command DR

## **Release Note. (CP2 2.1.0.RC1)**

date: 2019.9.9

Base Version: CP2\_2.0.0

- 1 Changes/New
  - 1.1 Modem
    - 1.1.1 Use NCM adaptor when connecting Network
      - Support model: LE910-NA1, LE910-SV V2, LE910-EU V2
    - 1.1.2 Modem SW Upgrade
      - Modem SW update by FOTA
      - DMS5 Command: DMSCMD\_DOWNLOADFW
      - Support model: LE910-NA1, LE910-SV V2, LE910-EU V2
      - limitation: writing system.log, exception when power failure.
  - 1.2 Add SMS function
    - specification: Please refer to SMS\_Functionality\_Spec\_20190906.docx.
    - limitation: application of SET API(URL, APN), writing system.log

## **Release Note. (CP2 2.1.0.EU.RC1)**

date: 2019.8.9

Base Version: CP2\_2.0.0

- 2 Changes/New
  - 2.1 Modem
    - 2.1.1 Support LE910-EU V2
    - 2.1.2 Apply default Configuration – 2019\_0809\_CP2-VZE-VZA-LTE-default-settings

## **Release Note. (CP2 2.0.0)**

date: 2019.5.28

- 1 Changes/New
  - 1.1 system
    - 1.1.1 gps\_en, ext\_ser\_en, wn\_en, host\_wake\_wl, bt\_en, host\_wake\_bt pin control.
    - 1.1.2 Support 6223E-UUD (Add RTL8723DU driver)
  - 1.2 MICOM
    - 1.2.1 Debug Turn-On delay 0~900msec.
  - 1.3 Default Configuration change
    - 1.3.1 2019\_0308\_CP2-NA-LTE-DEFAULT-SETTINGS
    - 1.3.2 2019\_0505\_CP2-VZ-LTE-DEFAULT-SETTINGS-MP
  - 1.4 Modem
    - 1.4.1 LE910SV V2: AT+CGDCONT Command <cid> parameter change from 1 to 3
    - 1.4.2 Modem initialize: Add AT+CGCLASS? Command.
    - 1.4.3 AT+WS46 response timeout: 3minutes
    - 1.4.4 Remove modem reboot after AT+WS46 change.
    - 1.4.5 Debug Modem shutdown process.
    - 1.4.6 Add APN exception.
      - 1.4.6.1 Compare APN from +CGDCONT? Result and (setting.ini)  
If APN is different, run +CGDCONT=1 Command(CLEAR)
- 2 Fixed
  - 2.1 Debug Power Adaptor(INT1-T) reboot during initialize
    - 2.1.1 It happens during change the protocol as the Text Protocol.
    - 2.1.2 Debug Protocol Thread hang(0x0020)
  - 2.2 Debug Settings
  - 2.3 RECORD
    - 2.3.1 DRV 1st Data was from 45seconds. It will start from 25seconds after power on.
  - 2.4 Debug Overwrite Function
- 3 ETC
  - 3.1 Linux
    - 3.1.1 Image sensor & I2C Driver update
  - 3.2 GPS
    - 3.2.1 Checksum field: 2 character to 1~2 character.

## **Release Note. (CP2 2.0.0.RC4)**

date: 2019.3.8

Base Version: CP2\_2.0.0.RC3





- 1 Changes/New
  - 1.1 Default Configuration change
    - 1.1.1 CS Sample Default Settings CP2-VZ-LTE(2019/03/07)
- 2 Fixed
  - 2.1 Debug ENC\_USERPWD OFF condition
    - Found this issue after we add VZ default setting which has the password.

## **Release Note. (CP2 2.0.0.RC3)**

date: 2019.3.7

Base Version: CP2\_2.0.0.RC2

- 1 Changes/New
  - 1.1 Support DALLAS H/W changed point (from CS product)
    - 1.1.1 Control GPS\_EN (PD20) Pin
  - 1.2 MICOM
    - 1.2.1 Debug Turn-On 0~900msec delay
- 2 Fixed
  - 2.1 Debug Power Adaptor(INT1-T) reboot during initialize
    - 2.1.1 It happens during change the protocol as the Text Protocol.
    - 2.1.2 Debug Protocol Thread hang(0x0020)

## **Release Note. (CP2 2.0.0.RC2)**

date: 2019.1.28

Base Version: CP2\_2.0.0.RC1

- 1 Changes/New
  - 1.1 Support DALLAS H/W changed point (from CS product)
    - 1.1.1 6623E-UUD
      - 1.1.1.1 Add RTL8723DU on the network device list
      - 1.1.1.2 WL\_EN Pin control when Power On/Off control

## **Release Note. (CP2 2.0.0.RC1)**

date: 2019.1.14

Base Version: CP2\_1.2.0.RC2

- 3 Changes/New
  - 3.1 Support new hardware DALLAS
    - 3.1.1 When the BoardID0(RJP4) is High,  
Control wn\_en, host\_wake\_wl, bt\_en, host\_wake\_bt pin which new H/W have.
    - 3.1.2 Add "ext\_ser\_en pin" control (it's not related with Board ID).

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- 3.1.3 Add RTL8723DU(6223E-UUD) driver
- 3.2 modem
  - 3.2.1 When it uses "LE910SV V2" modem, AT+CGDCONT Command <cid> parameter is from 1 to 3.
  - 3.2.2 When it reset the modem, check "+CGCLASS" status value.
  - 3.2.3 AT+WS46 response timeout change to 3minutes.
  - 3.2.4 After change AT+WS46, remove "modem reboot".
- 4 Fixed
- 5 Extra
  - 5.1 Enhance bctest Program (Version 0.6.3)
    - 5.1.1 Support modem: LE910-NA1, LE910-SV V2
  - 5.2 Enhance TestIOT Program (Version 0.9.7)
    - 5.2.1 Add Modem turn-on delay 10 seconds
    - 5.2.2 Debug memory error during Modem Initialize.
    - 5.2.3 Debug response timeout after +WS46 Command

## **Release Note. (CP2 1.2.0.RC2)**

date: 2018.11.08

Base Version: CP2\_1.2.0.RC1

- 6 Changes/New
  - 6.1 Support LE910-NA1 Modem

## **Release Note. (CP2 1.2.0.RC1)**

date: 2018.11.06

Base Version: CP2\_1.1.3

- 1 Changes/New
  - 1.1 DMS5
    - 1.1.1 Support DMSCMD\_SENDDEV Command
      - Send "message log file" to server.
  - 1.2 LOG
    - 1.2.1 Write SIM Number in system.log.
      - SIM\_INFO Structure

type	Name	size (byte)	description
uint32	Magic	4	
uint32	Index	4	
uint32	Type	4	0x3D : LOG_SIM_INFO
UTC_TIME_SEC	sys_time	8	utc time
uint8[42]	String	42	information string (ICCID)

uint16	Crc	2	
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### 1.3 3G/LTE

#### 1.3.1 Select (WS46).

- Can change AT Command WS46 value by setting.  
[3G/LTE]

property name	value type	Description	default value
[3G/LTE] NET_3G_ATWS46	int, 0~1000	12: GSM Digital Cellular Systems (GERAN only) 22: UTRAN only 25: 3GPP Systems (GERAN and UTRAN and E-UTRAN) (factory default) 28 E-UTRAN only 29 GERAN and UTRAN 30 GERAN and E-UTRAN 31 UTRAN and E-UTRAN 0 or others : 변경하지 않음.	0

※ Limitation: Only for the Telit Modem.

#### 1.3.2 Modem reboot

- When CGREG response 2 (not registered, but terminal is currently searching a new operator to register to) more than 10minutes.

### 1.4 Tamper Detection.

#### 1.4.1 Write CRC on the Key Frame.

[RECORD]

property name	value type	description	default value
VIDEO_PROTECT	int 0~1	0 : OFF, 1: ON	0

### 1.5 Power Adaptor DPWR-600

#### 1.5.1 Add Register Interval

[DEVICE]

property name	value type	description	default value
REGISTER_INTERVAL	int 0~86400	Wakeup duration 0: disable, 1~86400, Unit: second	0

## Release Note. (CP2 1.1.3)

date: 2018.10.08

Base Version: CP2\_1.1.2

- 7 Changes/New
  - 7.1 DMS5
    - 7.1.1 UploadDriveData API
      - When DRV File Size is 0 byte => Do not send it to server.

## **Release Note. (CP2 1.1.2.RC1)**

date: 2018.08.31

Base Version: CP2\_1.1.1

- 1 Changes/New
- 2 Fixed
  - 2.1 VIDEOSTD setting PAL => Reboot.

## **Release Note. (CP2 1.1.1)**

date: 2018.07.19

## **Release Note. (CP2 1.1.1.RC2)**

date: 2018.07.18

Base Version: CP2\_1.1.1.RC1

- 1 Changes/New
  - 1.1 DMS5
    - 1.1.1 UploadDriveData API (Support G-value 4Hz, 5Hz)
  - 1.2 SD Card
    - 1.2.1 Enhance SD Un-mount performance.
    - 1.2.2 Application (Use Async Mode).
      - Previous version: Application start with Sync Mode => 2 min later Async Mode
- 2 Fixed
  - 2.1 DMS5
    - 2.1.1 UploadDriveData API
      - 2.1.1.1 UploadDriveData API error

## **Release Note. (CP2 1.1.1.RC1)**

Base Version: CP2\_1.1.0

- 1 Changes/New
  - 1.1 DMS5
    - 1.1.1 UploadEvent API TriggerTime difference (+1 second).
  - 1.2 Log
    - 1.2.1 RTC Battery Fail -> Add system log.
- 2 Fixed
  - 2.1.1 DMS5
    - 2.1.1.1 Fix ECall Event considered as EventType(TURN)
    - 2.1.1.2 Fix UploadNotify (ECall Notification) AP didn't work
  - 2.1.2 Event
    - 2.1.2.1 Fix When Event (Panic, G-Sensor, Overspeed) record setting (###\_RECCH) is 0, no beep and no alarm out.
- 3 Etc.
  - 3.1.1 Data Loss
    - 3.1.1.1 Changed Video0(image sensor) Channel Data Loss reboot condition
      - Detecting time from 20 seconds to 40 seconds