

Firmware Release Notes

Model	CTM-ONE
Version	1.4.1

Firmware Release Notes: CTM-ONE 3066 Beta Avenue | Burnaby, B.C. | V5G 4K4 © 2023 Cypress Solutions

Release Date

• Feb 3, 2023

Features and Improvements

- Added configuration migration from 1.3.x FW versions to 1.4.1
- Added Device ID for reporting and management
- Added spreader support to FW
- Added CPE monitoring
- Added Ping proxy feature
- Added Import/Export device configuration feature via web GUI or command line
- Added QXDM logging capability
- Ported RSSIMON command from Oxygen 3
- Improved web GUI
- Improved local web GUI session management
- Improved local password management
- Improved CTM-500 LED status
- Improved presentation of cellular information with LTE-A and 5G radios
- Added deprecated ciphers for compatibility support
- Added dual Wi-Fi radio support for CTM-ONE
- Added support for Quectel RM520N-GL 5G radio
- Added support for Variscite v 3.1 SoM based on ADI Ethernet Phy

Bug Fixes

- Fixed Passthrough mode issues with firewall settings
- Fixed Static Routes not applied issue in Passthrough mode
- Fixed Custom firewall rules lost after reboot
- Fixed CTM-ONE LED indicators
- Fixed CTM-500 Wi-Fi Client and AP functionality
- Fixed IPsec tunnel not starting up when enabled
- Fixed FC21 radio management in LPM
- Fixed failsafe configuration issues
- Fixed GUI access with Radius Authentication
- Fixed TAIP LN missing reserved 10 bytes
- Fixed SNF Count issues



Release Date

• Aug 31, 2022

Features and Improvements

- Added pass-through modes
- Added support for secondary IP
- Added GRE
- Added DDNS support
- Improved DNS support
- Added concept of firewall network zones
- Improved firewall capabilities
- Reduced image size by separating Python infrastructure from base firmware
- Added auto ping feature
- Added authentication options including RADIUS
- Added support for factory and failsafe configuration
- Added DHCP relay feature
- Added support for VLAN tagging
- Improved and simplified power management configuration
- Added firmware support for CTM-500 platform
- Added support for EM12-G and RM502Q-AE cell radios
- Ported "oxycom" utility from Oxygen-3
- Added secure boot
- Improvements to password management
- Limiting failed login attempts now
- Installer screen improvements
- Added preferred cell settings feature
- Various improvements to device web GUI
- Added factory reset trigger for CTM-ONE
- Improvements CAN based ignition detection
- Upgrade kernel to 5.4
- Moved to systemd
- Better MTU and MSS management
- Automatic Web GUI Inactivity Logout
- Temporarily removed Hotspot support
- Added support for FC21 Wi-Fi radio

Bug Fixes

• Support for IPSec full tunnel



- AUTO CAN causing power management failure
- Device backing off CAN indefinitely
- PAD requiring reboots when modes are changed
- Wake on CAN disabled breaking CAN retry algorithm
- netwd resets offline timer when entering LPM
- Fixed vehicle idling detection

Release Date

• Apr 12, 2022

Features and Improvements

- 4-hour WAKEUP mode is now changed to 24 hours and now allows for cell connection and reporting during WAKEUP state
- Added persistent pulse counting
- Checks Cypress IOT for jobs sooner after job completion
- Vehicle ignition can now be calculated without enabling suspend on vehicle ignition
- Improved Cypress VUE report connection logic
- Improved Web UI response time
- Improved vehicle idling logic

Bug Fixes

- Fixed NAT preventing IPSec tunnels from working
- Fixed serial properly applying serial port settings
- Fixed PAD mode client connection detection
- Fixed not immediately reporting IP change to Cypress IOT



Release Date

• Oct 15, 2021

Features and Improvements

- Added BTVEG message
- Added port forwarding from WLAN to LAN
- Added Telnet support for legacy applications
- Added support for 4 VUE/Remote report destinations
- Added Transit UCI file to FW image
- Improved configs save form validation speed

Bug Fixes

- Fixed Wi-Fi client traffic not SNAT-ed
- Fixed to trim leading and trailing whitespace from Telnet login username

Version 1.3.6

Release Date

• Aug 31, 2021

Features and Improvements

- Added MODBUS support
- Added BT_BLE_COUNT sysdb key

Bug Fixes

- Fixed handling long triggering event string
- Fixed ql-dialer resource leak
- Fixed unbalanced GPIO interrupt configuration



Release Date

• Jun 10, 2021

Features and Improvements

- Added WiFI Client support
- Added multi-WAN DNS handling
- Added local serial reporting
- Added local UDP/TCP reporting
- Added \$GPGGA, \$GPGSA, \$GPGSV, \$GPRMC, \$PCTM, \$PMID, TAIP messages
- Added CAN ID filtering
- Added ability to reboot device via web UI
- Added ARP utility
- Improved various web UI components
- Improved password backup/restore sequence
- Updated default GATT file

Bug Fixes

- Fixed SNF size check
- Fixed starting CAN in silent mode
- Fixed static routes for wwan0

Version 1.3.4

Release Date

• Apr 1, 2021



Features and Improvements

- Added CAN API for app_platform
- Added CAN back-off time
- Added VEH_IDLING detection
- Extended BLE support and sysdb key set
- Extended GATT support and sysdb key set
- Extended CAN sysdb key set
- Improved how VEN_IGN is calculated
- Improved CAN autodetection algorithm
- Updated posix-ipc to 1.0.5 for latest/last python2.7 support
- Made VEH_RATESPD configurable
- Most VEH_sysdb keys will now expire

Bug Fixes

- Some PAD reliability updates were added
- Some CAN error detection and suspending reliability updates were added
- Some report reliability updates were added

Version 1.3.3

Release Date

• Nov 16, 2020

Features and Improvements

• None

Bug Fixes

• Only change from 1.3.2 is a fix to CAN connection timeouts



Release Date

• Oct 15, 2020

Features and Improvements

- Support to edit APP configs were added. (note install and uninstall of apps is still manual)
- Added support for OCC
- Added Verizon dialer support
- GATT Diagnostics were added.

Bug Fixes

• Some GPS reliability updates were added

Version 1.3.1

Release Date

• Jun 23, 2020

Features and Improvements

- Works with IOT 1.3.1 and greater.
- Supports basic config validation
- Supports config migration going forward.
 - This means that going forward firmware versions greater than 1.3.1 can be upgraded and downgraded if they stay at 1.3.1 or greater.
- Dialup emulation PAD mode is now supported



Bug Fixes

• Some minor updates for FW stability

Version 1.2.4

Release Date

• May 14, 2020

Features and Improvements

- Harsh Driving Basic feature added
- A-GPS functionality added
- Hash checks done when comparing configs between IOT and Device

Bug Fixes

• Some minor updates for FW stability and GPS stability

Version 1.1.9

Release Date

• Nov 8, 2019

Features and Improvements

- Support selecting APP startup at boot time.
- Added ignition key to be used in GPSGate
- Added faster GPS lock times using XTRA.



Bug Fixes

- Fix battery report to be 0% rather than N/A when batter is drained.
- Fix PAD to work with all baud rates.
- Fixed SNF failures.

Version 1.1.6

Release Date

• Sep 26, 2019

Features and Improvements

- Apps can access GPIO pins. Opening the door to fast feature roll-out of customer specific external control requests.
- Support reporting of On Command Connect (OCC) keys.

Bug Fixes

- Cellular connection delays are fixed.
- Configuration of network interfaces is now stable.

Version 1.1.4

Release Date

• Aug 30, 2019

Features and Improvements

• Allow pass fail response from jobs sent by Cypress IOT.



- Allow internal data to be sent out as full NMEA strings
- GPS, IO, and System data reporting to GPS Gate and Cypress IOT.
- WIFI Hot spot.
- IPSec tunneling support.

Bug Fixes

• None

Version 1.0.2

Release Date

• Initial release

Features and Improvements

Basic connectivity

Bug Fixes

None

Technical Support

Cypress Solutions Service Support Group

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