



## December Public Release

2021-12-21 - EFILive Support - Comments (0) - Download

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## Version Numbers

- V8 Software: V8.3.15
- V7.5 Software: V7.5.43
- FlashScan/AutoCal V3: Firmware: V3.00.084 (Dec 16, 2021)  
Boot Block: V3.00.005 (Oct 20, 2020)
- FlashScan/AutoCal V2: Firmware: V2.08.184 (Dec 16, 2021),  
Boot Block: V2.08.009 (Feb 27, 2021)

## EFILive V8

V8.3.15 (Public Release - Update 7)

- Fixed "disappearing windows" when closing dialog boxes.
- E35 operating systems: 12606128, 12616698 and 12632483 were displaying incorrect table layouts for some calibration versions.

V8.3.14 (Public Release - Update 6)

- Fixed missing checksum support for CM871, OS 08000062.
- Added read support for additional CM850 controllers.
- Display warning when an un-supported LS1 hybrid controller is detected.
- Fixed VIN change, key entry field which was not accepting any input characters.
- Fixed L31 (Vortec) [F4: OBD] display so that it now shows all segments' part numbers.
- Changed L31 segment name from "Speedometer" to "Control Module" as per the description on GM's TIS website.
- Fixed L31 transmission segment part number that was displaying an incorrect value.
- Added message to indicate the VIN change is not supported for L31.
- Added OS checksum support for final A40 OS (was missing in previous release)

V8.3.13 (Public Release - Update 5)

- Added \*.cax8 chip<->bin mapping conversion/helper tool in [F8: Tools]->[F7: Bin Mapping].
- Included missing calibrations for some alternate OS calibrations for the following

controllers: LS1B, P12, E37, E67, T42, T43, A50 and CMF.

- Added option to open Motorola \*.hex record format tune files.
- Updated the CM2350A flash routine to correctly identify when attempting to flash a tune file into an ECM that is not compatible with that tune file.
- Updated A40 checksum detection to correctly handle files that do not contain an operating system.
- Updated encrypted cax8 file handling to ignore all encrypted cax8 files that the currently connected FlashScan device is not authorized to decrypt.
- Added -l option to EFILive\_Cax8.exe command line application to allow cax8 files to be encrypted via a license number. That allows a single encrypted cax8 file to be decrypted by all FlashScan devices with that same license number.

#### **V8.3.12 (Public Release - Update 4)**

- Fixed problem with auto-incrementing filenames if/when the original filename started with a set of digits that had the same format as the sequence prefix or suffix.
- Fixed remote switch support to activate/deactivate data logging which was not working. To activate the remote switch momentarily connect the red wire in the CAN2 interface cable to 12V. Each time that pin is connected to 12V, datalogging starts or stops. The V3 device can also be configured to beep twice when starting a data log via the switch and once when terminating via the switch.
- Fixed cax8 descriptions not showing up correctly sometimes.
- Fixed pass-thru data logging for E55 and E77 controllers.
- Fixed A40 operating system checksum calculation, which incorrectly tried to compute and verify the OS checksum even the file did not contain an OS.
- Forced update of all \*.obj script files.
- Increased flash time-out for Dodge Cummins controllers to mitigate \$0371 errors.

#### **V8.3.11 (Public Release - Update 3)**

- Fixed problem with generating filename templates if filename contained embedded dot character(s).
- A40 operating system checksums are now correctly computed, verified and displayed for all calibration levels. However, the EFILive software does not support updating the A40 operating system checksums.
- Fixed units precision not being saved/restored correctly when axis are defined by other calibrations.
- Fixed V3 device crash/hang when pass-thru data logging of external messages from the "Dyno", "FPE", "FPE1" and "FPE2" PID groups.

#### **V8.3.10 (Public Release - Update 2)**

- When pasting multiple columns of data into DTC calibrations (i.e. into both "DTC Type" and "DTC MIL"), the "DTC MIL" column was not being updated.

- Fixed problem when loading \*.cax8 files, using the \$include directive inside the [Description] section to include external description file(s).
- Fixed "copy and fill" to fill all empty cells, not just cells with non-empty neighbors.
- Updated copy/paste so that when pasting into a table that has a valid selection, the data is pasted starting at the top/left cell of the selected area, instead of always starting at the focused cell.
- Fixed copy/paste not working when pasting values into non-table calibrations, such as parameter lists and DTC tables.
- Added a drop down option on the script conversion button (in the [F8: Tools]->[F6: Bulk Files]->Convert Scripts] tab page to convert just a single script file.
- Added a drop down option on the cax conversion button (in the [F8: Tools]->[F6: Bulk Files]->Convert User Calibration Files] tab page to convert just a single cax file.
- Added meta data file \Documents\EFILive\V8\User Defined\Cax8\cax\_to\_cax8.ini to allow greater control over the V7 to V8 \*.cax bulk file conversion process. See comments in that file for more information.
- Fixed tire circumference and tire diameter speedo calculator values that were being calculated/displayed incorrectly for E86 controllers.
- Fixed pass-thru scan tool data corruption if/when unsupported PIDs are logged.
- Fixed protocol selection issues that may cause Cummins light-duty flash failures.

#### **V8.3.9 (Public Release - Update 1)**

- Checksums were not being updated correctly when editing a file with the "Read Only" Windows file attribute set.
- Added virtual torque table support for E92 controllers.
- Added CMB editing to V8.
- Updated Cummins Timing Calculator to allow the user to select which switchable Injector Pulse Width table to use in the calculator when editing a CSP tune.
- The [F2: Scan] -> [F3: Data] display was not converting the PID values to non-metric units when non-metric units are selected.
- Gradient fill with linear interpolation, is now available via three new dedicated gradient toolbar icons.

#### **V8.3.8 (Public Release)**

- Gradient fill may optionally use linear interpolation for non-linear axis.
- Activated CSP5 calibrations for CMC tune files.

#### **V8.3.8 (RC2)**

- Fixed CMF flash failure.
- When the LS1-style cranking VE table is displayed in default units of g\*K/kPa, then comparing with another tune causes the software to conflate the units and incorrectly treat some data as % and some data as g\*K/kPa, causing incorrect data to

be displayed and/or compared.

- Added customer name to the title bar display for log files.

#### **V8.3.8 (RC1)**

- Cax8 files that defined identical bit count and bit shift values caused an "Integer Overflow" error. Bit shift values must always be greater than or equal to 0 and always less than bit count values.
- Cax8 files were not accurately reporting error line numbers correctly. Blank lines were not being included in the line count.
- More accurate display precision for [F3: Data] tab page.
- Scan Tool no longer prompts to discard logged data if file has already been saved.
- Option to force scan tool to continue logging after data has stalled, i.e. if the connection is lost, keep trying to restart logging until the connection is restored.

#### **V8.3.8 (Beta 3)**

- When editing dashboard gauges, copy/paste of gauge items was incorrectly displaying duplicate items.
- When data logging, if no data was recorded the user was still asked to save logged data if the "Automatically Save Log File" property setting was active.
- When starting a data log using the yellow "Monitor Only" button, the dashboard gauges were not being dynamically updated.

#### **V8.3.8 (Beta 2)**

- Added "Software ID" to the [F4: OBD] display for GM controllers that support "Software ID".
- Fixed E86B black box flash failing.
- Saving a tune file with security attributes will incorrectly set the "Master" license number to "000000000000" if the attached FlashScan device is busy - for example black box reading, flashing or data logging.
- Some E37, E38 and E67 custom OS tune files were not displaying the virtual torque tables correctly.
- Cummins mass air meter table had max g/s limit of 100 which is too low.

#### **V8.3.8 (Beta 1)**

- Some Bosch controllers were taking an excessive amount of time (>30 seconds) to validate DVT controls.
- When viewing the EFI-Locker Patch custom OS upgrade tab page, the [Apply Upgrade] button is now correctly disabled if the EFI-Locker Patch has already been applied to the tune file.
- User notes were not being saved when entered on Custom OS calibration tab pages.
- Added E39 and E39A editing support to the V8 editor.
- Added E98 editing support to the V8 editor.

- Added option to search for calibrations by their values.
- When changing display units on 2D charts, the axis labels' description changed to reflect the new units but the axis labels' values did not change.
- COS upgrades can now be applied to all files opened in a single tune window, not just the first file.
- When the LS1 VE table was displayed in its default units of g\*K/kPa, it was not possible to enter any values into the table greater than 2.
- Row and column axis label display precision is now properly initialized to the default precision configured for the units being displayed in the axis.
- Added Virtual Torque Tables for E37, E38, E67 and E78.
- Added Properties settings to control the editor's font size and to hide/show the editor table's title - allowing more data to fit on the editor's screen.
- Added two new toolbar icons in the navigator's toolbar to allow the editor's toolbar to be hidden, releasing more vertical screen space for the editor itself.
- Fixed issue that was causing reading and/or flashing of VPW controllers to abort prematurely with any of the errors: \$0101, \$0281 or \$054A.
- Fixed E67 DMA PIDs that were not reporting correct values.
- E92 EFI-Lock auto locking was not available.
- Fixed access violation when closing the Properties Settings window while the tune Editor window contains calibrations displaying non-metric row or column units.
- Fixed memory leak when opening corrupt \*.pld files. I.e. files that contain meta data records with faulty checksums.
- Fixed memory leak when accessing/updating DTCs via scripting.
- Fixed access violation caused when opening a new tune file while the tune window is currently displaying the difference between two existing tune files.
- When updating calibration differences via the [Compare] tab page, the current position in the comparison list is retained even after one or more calibrations are removed from the list for no longer being different.
- PID validation was not working.
- Fixed problem that prevented LS1, E54 and E60 controllers with faulty serial numbers from being flashed with a V2 device even when that V2 device had a valid stream license.
- Added options that allow you to choose which data is included in the script when creating scripts based on the difference between two tune files.

## Calibration Updates

### Public Release - Update 7

- Fixed A50/T87 shift tables.
- CM2350A - Multiple new OSes.
- CM2250 - Updated checksum support.

### **Public Release - Update 6**

- CM2250 - Multiple new OSes.
- CM2450A - Multiple new OSes.

### **Public Release - Update 5**

- CM2350A - Multiple new OSes.

### **Public Release - Update 4**

- Added \*.cam stubs for CM846, CM848, CM850, CM870 and CM875 so tuners may now create user defined \*.cax8 files for those Cummins HD controller types.
- T43 - Updated OS 24267571.
- CM2350A - Multiple new OSes.
- CM2250 - New OS.
- CM2450B (CMF) - New OS.

### **Public Release - Update 3**

- CM2350A - New OS.

### **Public Release - Update 2**

- CM2350A - New OS.

### **Public Release - Update 2**

- CM2350A - New OSes.
- E92 - New OSes.

### **Public Release - Update 1**

- CM2350A - New OS.

### **Beta 2**

- E39 - Updated calibrations.
- CM2350A - New OS.

### **Beta 1**

- E67 - Updated calibrations for OS 12656942.
- E39 - Updated calibrations.
- E80 - New OS.
- CM2250 - New OS.
- CM2350A - New OS.
- CM2450A - New and updated OS.
- CME - New OS.
- CMF - Fixed table F0161 address error for operating systems:

52190902,52191000,52200600,52200701,52210052,52210200,52210301

- CMC - Added editing support.
- CM2880 - New OS.

## **EFILive V7**

### **V7.5.43 (Public Release - Update 7)**

- Version synchronization.

### **V7.5.42 (Public Release - Update 6)**

- Display warning when an un-supported LS1 hybrid controller is detected.

### **V7.5.41 (Public Release - Update 4)**

- Version synchronization.

### **V7.5.40 (Public Release - Update 2)**

- Version synchronization.

### **V7.5.38 (Public Release - Update 1)**

- Fixed spelling mistake (Calibation -> Calibration).

### **V7.5.37 (Beta 1)**

- Fixed E67 DMA PIDs that were not reporting correct values.

## **FlashScan/AutoCal V3**

### **V3.00.084 (Public Release - Update 7)**

- Version synchronization.

### **V3.00.083 (Public Release - Update 6)**

- Version synchronization.

### **V3.00.081 (Public Release - Update 5)**

- Better error handling for unexcepted errors when flashing CAN based controllers.

### **V3.00.080 (Public Release - Update 4)**

- Fixed wide band PIDs showing up as N/A during black box logging.

### **V3.00.079 (Public Release - Update 4)**

- Fixed CMF black box flashing sometimes hanging at 30%..70% through the flash for no apparent reason.
- Fixed configuration "Load MRU PIDs" which now correctly loads the previously selected controller/PIDs for data logging when the V3 device is powered up.
- If only a single controller/PID selection is available, then it will be selected

automatically when starting a data log.

#### **V3.00.078 (Public Release - Update 4)**

- Fixed black box data logging for E55 and E77 controllers.

#### **V3.00.077 (Public Release - Update 4)**

- Version synchronization.

#### **V3.00.076 (Public Release - Update 3)**

- Fixed problems with pass-thru data logging of external messages from the "Dyno", "FPE", "FPE1" and "FPE2" PID groups.
- Fixed external PIDs all showing the same value as the first PID of the external message.

#### **V3.00.075 (Public Release - Update 2)**

- Fixed potential interference to data on the ALDL bus in older vehicles that use both VPW and ALDL protocols.

#### **V3.00.074 (Public Release - Update 2)**

- Internal testing.

#### **V3.00.073 (Public Release - Update 2)**

- Fixed protocol selection issues that may cause Cummins light-duty flash failures.

#### **V3.00.072 (Public Release - Update 2)**

- Added speed limiter to "Unlimited" CAN speed mode to prevent buffer overruns in Cummins ECMs.

#### **V3.00.071 (Public Release - Update 1)**

- When black box logging, pressing Left, Right, Fn+Left or Fn+Right now add user notes: #1, #2, #3 and #4 respectively to the data log. A brief click-sound is played to verify that a note was added to the log.
- When black box logging multiple controllers, DMA PIDs for the ECM are logging as N/A.
- Reduced data logging "keep alive poll" time from 2400ms to 900ms.
- BBL no longer attempts to obtain PID scaling data from wide band controller that use the CAN/OBDII interface.

#### **V3.00.070 (RC1)**

- Pass-thru flashing of Cummins controllers was not detecting the SGM (Security Gateway Module) correctly and was incorrectly reporting error \$0549 "Ignition is switched off." when an SGM was present but undetected.

### **V3.00.069 (Beta 3)**

- Black Box Flashing of an encrypted file using a FlashScan or AutoCal V3 device may fail to complete with error \$0385 or \$0331 when the OBDII connection between the V3 device and the vehicle experiences a fault. The recovery/retry process fails when flashing encrypted files.

### **V3.00.068 (Beta 2)**

- Fixed auto-locking issue on E38, E40, E67, LS1B, E54 and E60 controllers.

### **V3.00.067 (Beta 1)**

- Fixed problem that may cause \$0322 on Cummins reflashes.
- Fixed problem that may cause \$0101 on VPW controller reflashes.
- When changing "LED Mode" on V3 devices, the user's choice was not being saved and would revert back to the previous value next time the device booted.

### **V3.00.066**

- Fixed issue in VPW driver which may have caused errors \$0101, \$0281 or \$054A during reading/flashing of VPW based controllers such as LS1B, E54(LB7) and E60(LLY).
- When cancelling from setup, any changes to Theme and Font Size options were not being cancelled.
- Increased \*.pmm maximum file size limit from 64K to 128K to allow for more user defined PIDs to be defined per controller type. If a file larger than 64K (for engines) or 32K (for transmissions) results after adding user defined PIDs, then those files cannot be used for black box logging on V2 devices - which is physically limited to 32KB/64KB.
- When black box logging, some PID's audio alarms were sometimes being triggered prior to data logging starting.

## **FlashScan/AutoCal V2**

### **V2.08.184 (Public Release - Update 7)**

- Version synchronization.

### **V2.08.183 (Public Release - Update 6)**

- Version synchronization.

### **V2.08.182 (Public Release - Update 4)**

- Version synchronization.

### **V2.08.181 (Public Release - Update 3)**

- Fixed Black Box logging not starting and returning error \$0281.

- Fixed CMF Black Box Flashing failing to start with error \$0281.

#### **V2.08.180 (Public Release - Update 2)**

- Version synchronization.

#### **V2.08.178 (Public Release - Update 1)**

- When black box logging multiple controllers, DMA PIDs for the ECM are logging as N/A.
- Reduced data logging "keep alive poll" time from 2400ms to 900ms.
- BBL no longer attempts to obtain PID scaling data from wide band controller that use the CAN/OBDII interface.

#### **V2.08.177 (Beta 2)**

- Fixed A40/A50 pass-thru read failure.

#### **V2.08.176 (Beta 1)**

- Gracefully rejects \*.pmm files larger than 32KB (transmission) or 64KB (engine).

## **Documentation Updates**

#### **V8.3.14 (Public Release - Update 6)**

- EFiLive V8 Reference.pdf

#### **V8.3.12 (Public Release - Update 4)**

- EFiLive Error Codes.pdf.

#### **V8.3.10 (Public Release - Update 2)**

- EFiLive V8 Reference.pdf
- Cummins 5p9L CM849 CSP5 User Guide.pdf
- Dodge Cummins User Guide.pdf

#### **V8.3.8 (RC2)**

- EFiLive V8 Reference.pdf
- EFiLocker COS Patch for V7.pdf
- GM Controller Locking Guide.pdf

#### **Beta 3**

- Dodge Cummins User Guide.pdf
- GM Diesel User Guide.pdf
- GM Gas User Guide.pdf

#### **Beta 2**

- EFiLive Error Codes.pdf.

- GM Diesel User Guide.pdf
- Duramax E98 DSP4 App User Guide.pdf
- Duramax 2p8L E98 DSP4 User Guide.pdf

#### **Beta 1**

- EFILive V8 Reference.pdf.
- EFILive Command Line Reference.pdf.
- GM Diesel User Guide.pdf
- GM Gas User Guide.pdf

## **Known Issues**

- **Issue #1:** Importing JTAG E86B files may result in a Boot Software segment checksum error.

**Workaround:** None. Don't flash imported files with checksum errors. Don't use the EFILive software to correct checksum errors for the E86B imported files as that does not fix the underlying cause of the checksum error - it just masks the error(s) and causes additional problems.

- **Issue #2:** When logging DMA PIDs (i.e., PIDs whose names end with "\_M" or "\_DMA"), if the ignition is switched off for an extended period while data logging but data logging is not terminated, then when the ignition is switched on again the data log automatically continues. However, the DMA PIDs may no longer return valid data.

**Workaround:** EFILive recommends stopping the data log and restarting the data log when switching off the ignition for extended periods.