FlexStation-IOT Product Spotlight #2

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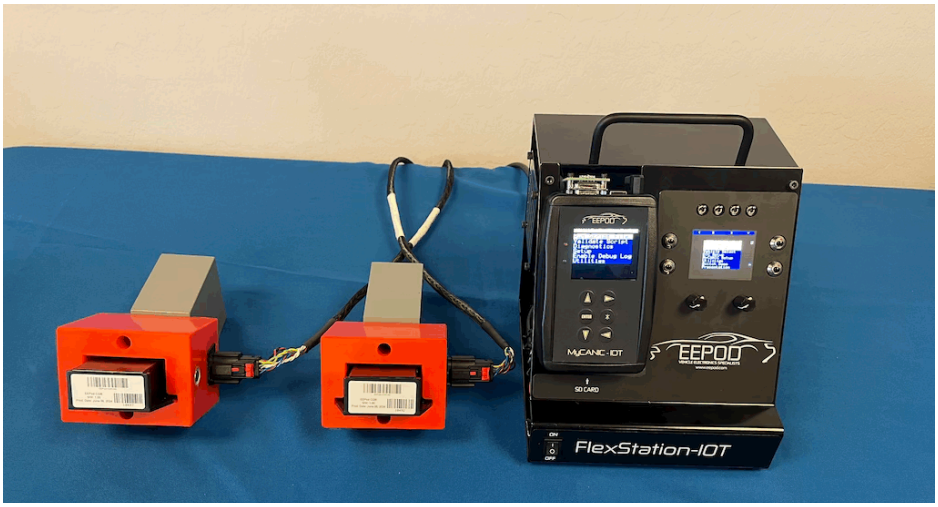
The FlexStation-IOT can be used for many different applications, including as a standalone ECU test/validation station, ECU reprogramming station, script test station with full vehicle simulation, etc. The FlexStation-IOT includes a MyCANIC-IOT mounted to the front bezel, a second MyCANIC-IOT mounted internally, a 0–24VDC 6.5A programmable power supply and a multitude of connectors on the back panel for easy connection to any ECU (all for less that $5K USD). In this product spotlight we will demonstrate how the FlexStation-IOT is used to perform an extensive end-of-line (EOL) factory test of an ECU using a relatively simple script.

EEPod FlexStation-IOT

For the EOL example below, we will be using the externally mounted MyCANIC-IOT and programmable power supply to test the ECU functions/features. The internally mounted MyCANIC-IOT is not used in this example, but it could be used for more complicated ECUs that require other CAN/LIN/Ethernet communications and other signals in order to be properly tested. In this spotlight, we will verify the features of the EEPod SPM module just as it is used in our factory at EOL before final packaging. It include the following steps:

1.) Log the date, time and serial number of the MyCANIC-IOT at the beginning of each test for traceability.
2.) Set the variable power supply to 12VDC and calibrate the current measurement device built into the FlexStation-IOT.
3.) Apply 12VDC to the ECU.
4.) Apply 12VDC to the ignition line of the ECU.
5.) Read and log the serial number and part number of the ECU being tested.
6.) Turn off the ignition line (0VDC) and wait for the ECU to go to sleep / low power mode.
7.) Measure, log and verify the current draw of the ECU in sleep / low power mode is within limits.
8.) Turn on the ignition line (12VDC) and wait for the ECU to be in full run mode.
9.) Measure, log and verify the current draw of the ECU in run mode is within limits.
10.) Read and log any DTCs from the ECU and verify none are present.
11.) Read, log and check all periodic broadcast messages from the ECU are being transmitted and are within the specified timing limits.
12.) Verify the data within the broadcast messages are correct and within limits.



FlexStation-IOT Connected to ECUs with High Volume Pogo Pin Fixtures

All of the EOL tests mentioned above, including full traceability logging, were able to be written in a simple text editor in less than 3500 lines using the powerful EEPod FSCRIPT compiler language. In addition to the ability to quickly and easily develop and run ECU testing scripts, the MyCANIC-IOT cloud server support allow the tests to be easily updated and the output log files to be collected from anywhere in the world! If you would like to learn more about how you can use a FlexStation-IOT and our FSCRIPT language to test your ECU, please contact us via email (support@eepod.com) or phone (480-288-4905 Main Office).