MODEL YEAR 2020 CONTROLLER POWER DOWN PROCEDURE VALIDATION

February 21, 2017

Software Quality Assurance

Power Down Procedure Validation

Test Scenario 3.1.2-1 - Sample Sample Sample Sample Sample Sample Sample Sample Sample

Setup
- Sample Sample Sample Sample Sample Sample Sample Sample Sample
    o Sample Sample Sample Sample Sample Sample Sample Sample Sample
    o Sample Sample Sample Sample Sample Sample Sample Sample Sample
    o Sample Sample Sample Sample Sample Sample Sample Sample Sample
    o Sample Sample Sample Sample Sample Sample Sample Sample Sample
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- Sample Sample Sample Sample Sample Sample Sample Sample Sample
- Sample Sample Sample Sample Sample Sample Sample Sample Sample

Test Case 3.1.2_1 - Sample Sample Sample Sample Sample Sample Sample Sample Sample

1. *Measure current draw steps*
2. Sample Sample Sample Sample Sample Sample Sample Sample Sample
3. Sample Sample Sample Sample Sample Sample Sample Sample Sample
4. Sample Sample Sample Sample Sample Sample Sample Sample Sample
5. Sample Sample Sample Sample Sample Sample Sample Sample Sample
6. Sample Sample Sample Sample Sample Sample Sample Sample Sample
7. Sample Sample Sample Sample Sample Sample Sample Sample Sample
8. Sample Sample Sample Sample Sample Sample Sample Sample Sample
9. Sample Sample Sample Sample Sample Sample Sample Sample Sample Flip Ignition Switch from load box to Turn OFF Ignition. This will cause controller SHUTDOWN to be invoked.
10. Sample Sample Sample Sample Sample Sample Sample Sample Sample

11. *Measure Power-Down execution time steps*
12. Sample Sample Sample Sample Sample Sample Sample Sample Sample
13. Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample
14. Sample Sample Sample Sample Sample Sample Sample Sample Sample

15. Subtracting Two times will provide Power Down Procedure execution time.

16. *Measure output voltages steps*
17. Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample
18. Sample Sample Sample Sample Sample Sample Sample Sample Sample
19. Sample Sample Sample Sample Sample Sample Sample Sample Sample
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32. Sample Sample Sample Sample Sample Sample Sample Sample Sample
33. Sample Sample Sample Sample Sample Sample Sample Sample Sample
34. Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample

Results

Test Step	Input	Expected Output	Pass/ Fail
9	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
15	Power Down completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
19	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
20	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	

21	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
22	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
23	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
24	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
25	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
26	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
27	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
28	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
27	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
28	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
29	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
30	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
31	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
32	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
33	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
34	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
35	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
36	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
37	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
38	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	

Test Scenario 3.1.2-2 - Sample Sample Sample Sample Sample Sample Sample Sample Sample

Setup
- Sample Sample Sample Sample Sample Sample Sample Sample Sample
  - Sample Sample Sample Sample Sample Sample Sample Sample Sample
  - Sample Sample Sample Sample Sample Sample Sample Sample Sample
  - Sample Sample Sample Sample Sample Sample Sample Sample Sample
- Sample Sample Sample Sample Sample Sample Sample Sample Sample
  - Sample
  - Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample
- Sample Sample Sample Sample Sample Sample Sample Sample Sample has completed, Sample Sample Sample Sample Sample Sample Sample Sample Sample

Test Case 3.1.2_2 - Sample Sample Sample Sample Sample Sample Sample Sample Sample

1. *Running Reset Test Steps*
2. Sample Sample Sample Sample Sample Sample Sample Sample Sample
3. Sample Sample Sample Sample Sample Sample Sample Sample Sample
4. Sample Sample Sample Sample Sample Sample Sample Sample Sample
5. Sample Sample Sample Sample Sample Sample Sample Sample Sample
6. Sample Sample Sample Sample Sample Sample Sample Sample Sample
7. Sample Sample Sample Sample Sample Sample Sample Sample Sample
8. Sample Sample Sample Sample Sample Sample Sample Sample Sample
9. Sample Sample Sample Sample Sample Sample Sample Sample Sample
10. Sample Sample Sample Sample Sample Sample Sample Sample Sample
11. Sample Sample Sample Sample Sample Sample Sample Sample Sample
12. Sample Sample Sample Sample Sample Sample Sample Sample Sample
13. Sample Sample Sample Sample Sample Sample Sample Sample Sample

14. *Measure output voltages steps*
15. Sample Sample Sample Sample Sample Sample Sample Sample Sample
16. Sample Sample Sample Sample Sample Sample Sample Sample Sample
17. Sample Sample Sample Sample Sample Sample Sample Sample Sample Current Control Output F is on J1-4. Measure it with respect to GND.
18. Sample Sample Sample Sample Sample Sample Sample Sample Sample Transmission Sensor V9B is on J1-8. Measure Transmission Sensor (V9B) with respect to GND.
19. Sample Sample Sample Sample Sample Sample Sample Sample Sample

20. Sample Sample Sample Sample Sample Sample Sample Sample Sample Current Sample Sample Sample Sample Sample Sample Sample Sample Sample
21. Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Configurable Sample Sample Sample Sample Sample Sample Sample Sample Sample
22. Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample
23. Sample Sample Sample Sample Sample Sample Sample Sample Sample CAN BUS Sample Sample Sample Sample Sample Sample Sample Sample Sample
24. Sample Sample Sample Sample Sample Sample Sample Sample Sample CAN BUS Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample
25. Sample Sample Sample Sample Sample Sample Sample Sample Sample
26. Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample
27. Sample Sample Sample Sample Sample Sample Sample Sample Sample
28. Sample Sample Sample Sample Sample Sample Sample Sample Sample

Results

Test Step	Input	Expected Output	Pass/ Fail
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset	Sample Sample Sample Sample Sample Sample Sample	

	completed	Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	

Test Scenario 3.1.2-3 - Sample Sample Sample Sample Sample Sample Sample Sample Sample

Setup
- Sample Sample Sample Sample Sample Sample Sample Sample Sample
    - Sample Sample Sample Sample Sample Sample Sample Sample Sample
    - Sample Sample Sample Sample Sample Sample Sample Sample Sample
    - Sample Sample Sample Sample Sample Sample Sample Sample Sample
- Sample Sample Sample Sample Sample Sample Sample Sample Sample

- o Sample
  - o Sample
  - o Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample
- Sample Sample Sample Sample Sample Sample Sample Sample Sample

Test Case 3.1.2_3 - Sample Sample Sample Sample Sample Sample Sample Sample Sample

29. *Ignition ON Power-Up Reset Test Steps*
30. Connect target JTAG to Trace32 Power Debug Pro
31. Connect ETAS Trace connector from target to Power Trace II (Two piece hardware)
32. Invoke Trace32 Debugger
33. Turn ON Load Box
34. Execute Lauterbach script to load code in target PFLASH and load symbols in trace32 hardware.
35. Sample Sample Sample Sample Sample Sample Sample Sample Sample
36. Power up the controller
37. Execute controller application from host.
38. After we come out of Ignition ON Power-Up Reset, code will hit the breakpoint and stop at reset vector.

Results

Test Step	Input	Expected Output	Pass/ Fail
46	Reset Vector Breakpoint Hit	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
46	Reset Vector Breakpoint Hit	Sample Sample Sample Sample Sample Sample Sample Sample Sample	

Test Scenario 3.1.2-4 - Validate power consumption level, execution time, and output signals in boot mode after completion of normal power down.

Setup
- Sample Sample Sample Sample Sample Sample Sample Sample Sample
  - Sample
  - Sample
    ```
    while(1);
    ```
  -
- Insert 0.01 ohm resistor in series with Infineon CAN Transceiver TJA1145T/FD BAT pin.

Test Case 3.1.2_4 - To test if controller current draw, shutdown delay time, and output signal levels are as expected after power-down procedure has completed in boot mode.

35. *Measure current draw steps*
36. Connect Trace32 Automotive JTAG Cable from Trace32 Power Debug Pro to target
37. Connect ETAS Trace connector from target to Power Trace II (Two piece hardware)
38. Invoke Trace32 Debugger Software
39. Turn ON Load Box
40. Sample Sample Sample Sample Sample Sample Sample Sample Sample symbols in trace32 hardware.
41. Flip Ignition Switch from load box to Turn ON Ignition
42. Power up the target
43. Execute controller application from host. Test code will run on target and request controller power down. Trace will be collected and reports will be saved to hard disk.
44. Flip Ignition Switch from load box to Turn OFF Ignition. This will cause controller SHUTDOWN to be invoked.
45. Using micro-voltmeter, measure voltage across 0.01 ohm resistor that is in series with CAN Transceiver TJA1145T/FD BAT pin. Calculate current draw by multiplying measured voltage with 100

46. *Measure Power-Down execution time steps*
47. Navigate to text file that contains stored trace data and open it

48. There should be Four windows arranged in one big rectangle. Two Trace.Chart windows on left are for core0 and core1. Two source code windows on right are for core0 and core1.
49. Sample Sample Sample Sample Sample Sample Sample Sample Sample
50. Sample Sample Sample Sample Sample Sample Sample Sample Sample
51. Subtracting Two times will provide Power Down Procedure execution time.

52. *Measure output voltages steps*
53. Sample Sample Sample Sample Sample Sample Sample Sample Sample
54. Sample Sample Sample Sample Sample Sample Sample Sample Sample
55. Sample Sample Sample Sample Sample Sample Sample Sample Sample Current Sample Sample Sample Sample Sample Sample Sample Sample Sample
56. Sample Sample Sample Sample Sample Sample Sample Sample Sample Transmission Sensor V9B is on J1-8. Measure Transmission Sensor (V9B) with respect to GND.
57. Sample Sample Sample Sample Sample Sample Sample Sample Sample
58. Sample Sample Sample Sample Sample Sample Sample Sample Sample ND
59. Sample Sample Sample Sample Sample Sample Sample Sample Sample
60. Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample
61. Sample Sample Sample Sample Sample Sample Sample Sample Sample
62. Sample Sample Sample Sample Sample Sample Sample Sample Sample Configurable Output C is on J1-24. Measure CFGOUTC with respect to GND
63. Sample Sample Sample Sample Sample Sample Sample Sample Sample
64. Sample Sample Sample Sample Sample Sample Sample Sample Sample
65. Sample Sample Sample Sample Sample Sample Sample Sample Sample
66. Sample Sample Sample Sample Sample Sample Sample Sample Sample
67. Sample Sample Sample Sample Sample Sample Sample Sample Sample
68. Sample Sample Sample Sample Sample Sample Sample Sample Sample
69. Shared High Side #2 is on J1-49. Measure HSD 2 with respect to GND Sample Sample Sample Sample Sample Sample Sample Sample Sample

Results

Test Step	Input	Expected Output	Pass/ Fail
9	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	

15	Power Down completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
19	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
20	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
21	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
22	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
23	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
24	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
25	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
26	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
27	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
28	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
27	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
28	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
29	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
30	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
31	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
32	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
33	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
34	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
35	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
36	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
37	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
38	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	

Test Scenario 3.1.2-5 - Sample Sample Sample Sample Sample Sample Sample Sample Sample

Setup
- Sample Sample Sample Sample Sample Sample Sample Sample Sample
  - Sample Sample Sample Sample Sample Sample Sample Sample Sample
  - Sample Sample Sample Sample Sample Sample Sample Sample Sample
  - Sample Sample Sample Sample Sample Sample Sample Sample Sample
- Sample Sample Sample Sample Sample Sample Sample Sample Sample
  - Sample
  - Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample
- Sample Sample Sample Sample Sample Sample Sample Sample Sample has completed, Sample Sample Sample Sample Sample Sample Sample Sample Sample

Test Case 3.1.2_5 - Sample Sample Sample Sample Sample Sample Sample Sample Sample

39.   *Running Reset Test Steps*
40.   Sample Sample Sample Sample Sample Sample Sample Sample Sample
41.   Sample Sample Sample Sample Sample Sample Sample Sample Sample
42.   Sample Sample Sample Sample Sample Sample Sample Sample Sample
43.   Sample Sample Sample Sample Sample Sample Sample Sample Sample
44.   Sample Sample Sample Sample Sample Sample Sample Sample Sample
45.   Sample Sample Sample Sample Sample Sample Sample Sample Sample
46.   Sample Sample Sample Sample Sample Sample Sample Sample Sample
47.   Sample Sample Sample Sample Sample Sample Sample Sample Sample
48.   Sample Sample Sample Sample Sample Sample Sample Sample Sample
49.   Sample Sample Sample Sample Sample Sample Sample Sample Sample
50.   Sample Sample Sample Sample Sample Sample Sample Sample Sample
51.   Sample Sample Sample Sample Sample Sample Sample Sample Sample

52.   *Measure output voltages steps*
53.   Sample Sample Sample Sample Sample Sample Sample Sample Sample
54.   Sample Sample Sample Sample Sample Sample Sample Sample Sample
55.   Sample Sample Sample Sample Sample Sample Sample Sample Sample Current Control Output F is on J1-4. Measure it with respect to GND.

56. Sample Sample Sample Sample Sample Sample Sample Sample Sample Transmission Sensor V9B is on J1-8. Measure Transmission Sensor (V9B) with respect to GND.
57. Sample Sample Sample Sample Sample Sample Sample Sample Sample
58. Sample Sample Sample Sample Sample Sample Sample Sample Sample Current Sample Sample Sample Sample Sample Sample Sample Sample Sample
59. Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Configurable Sample Sample Sample Sample Sample Sample Sample Sample Sample
60. Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample
6l. Sample Sample Sample Sample Sample Sample Sample Sample Sample CAN BUS Sample Sample Sample Sample Sample Sample Sample Sample Sample
62. Sample Sample Sample Sample Sample Sample Sample Sample Sample CAN BUS Sample Sample Sample Sample Sample Sample Sample Sample Sample
63. Sample Sample Sample Sample Sample Sample Sample Sample Sample
64. Sample Sample Sample Sample Sample Sample Sample Sample Sample
65. Sample Sample Sample Sample Sample Sample Sample Sample Sample
66. Sample Sample Sample Sample Sample Sample Sample Sample Sample

Results

Test Step	Input	Expected Output	Pass/ Fail
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset	Sample Sample Sample Sample Sample Sample Sample	

	completed	Sample Sample	
11	Power Down Completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
11	Watchdog reset completed	Sample Sample Sample Sample Sample Sample Sample Sample Sample	

Test Scenario 3.1.2-6 - Sample Sample Sample Sample Sample Sample Sample Sample Sample

Setup
- Sample Sample Sample Sample Sample Sample Sample Sample Sample

- Sample Sample Sample Sample Sample Sample Sample Sample Sample
    - Sample Sample Sample Sample Sample Sample Sample Sample Sample
    - Sample Sample Sample Sample Sample Sample Sample Sample Sample
- Sample Sample Sample Sample Sample Sample Sample Sample Sample
    - Sample
    - Sample
    - Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample Sample
- Sample Sample Sample Sample Sample Sample Sample Sample Sample

Test Case 3.1.2_6 - Sample Sample Sample Sample Sample Sample Sample Sample Sample

67. *Ignition ON Power-Up Reset Test Steps*
68. Connect target JTAG to Trace32 Power Debug Pro
69. Connect ETAS Trace connector from target to Power Trace II (Two piece hardware)
70. Invoke Trace32 Debugger
71. Turn ON Load Box
72. Execute Lauterbach script to load code in target PFLASH and load symbols in trace32 hardware.
73. Sample Sample Sample Sample Sample Sample Sample Sample Sample
74. Power up the controller
75. Execute controller application from host.
76. After we come out of Ignition ON Power-Up Reset, code will hit the breakpoint and stop at reset vector.

Results

Test Step	Input	Expected Output	Pass/ Fail
46	Reset Vector Breakpoint Hit	Sample Sample Sample Sample Sample Sample Sample Sample Sample	
46	Reset Vector Breakpoint Hit	Sample Sample Sample Sample Sample Sample Sample Sample Sample	