

### BCM 写 VIN:

- 1、Connect your OBD cable to FD1.
- 2、Open and connect your DET tool.
- 3、On DET tool, the View should be on ECU config.
- 4、Select "Security" and load Master Security
- 5、Module ID should be 726 and click on Generic Inhale ECU. (should pull all configurations).
- 6、Change new VIN ASCII value to HEX by using [ASCII to HEX converter](#) (make sure there is not extra spaces).

i.e.: if VIN # **2LMPJ6KR3HBL47178** is the new value that we are going to apply, the corresponding HEX value is **32 4C 4D 50 4A 36 4B 52 33 48 42 4C 34 37 31 37 38**

### ASCII,Hex,Binary,Decimal,Base64 converter

Enter **ASCII text** or hex/binary/decimal numbers:

Number delimiter  
Space

ASCII text

Hex

Binary

- 7、Update related bits for DE0B in DET, On the DID Data Values, skip bit 1 and 2. Update new bits starting from 3<sup>rd</sup> bit by entering the first 6 HEX values from the converter

File Initialize Hardware Display Tools Quick Connect View Help

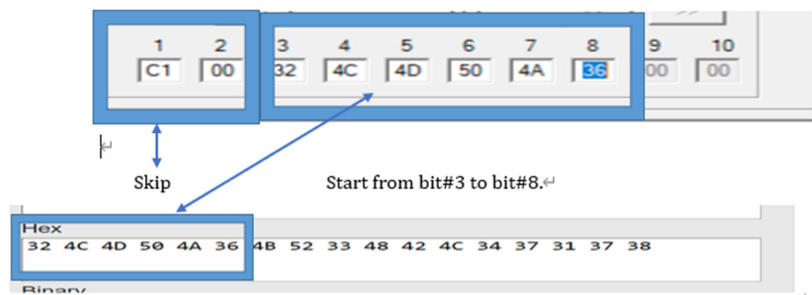
User Initialized Connection View: ECU Config

TXfer Current Sequence Add New Seq Remove Seq Rename Seq Decode Seq Copy Seq Generic Inhale ECU Inhale ID  
TXfer All Sequences Inhaled from 0x726 (BCM) on Date: 2018-10-01, Time: 12:03:06 PM Generic Inhale All 726  
Inhale Current Sequence

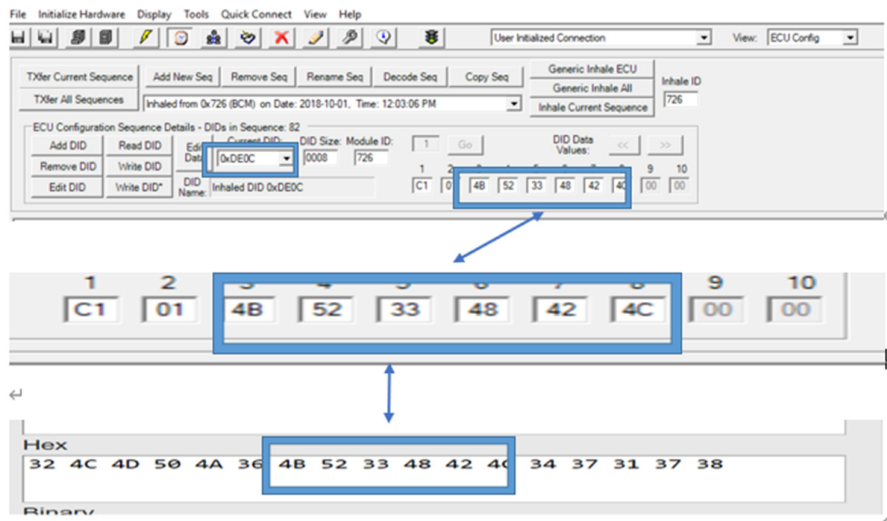
ECU Configuration Sequence Details - DIDs in Sequence: 82

Add DID Read DID Edit Data Current DID: 0xDE0B DID Size: 0008 Module ID: 726 DID Data Values: << >>  
Remove DID Write DID 1 2 3 4 5 6 7 8 9 10  
Edit DID Write DID\* DID Name: Inhaled DID 0xDE0B C1 00 32 4C 4D 50 4A 36 00 00

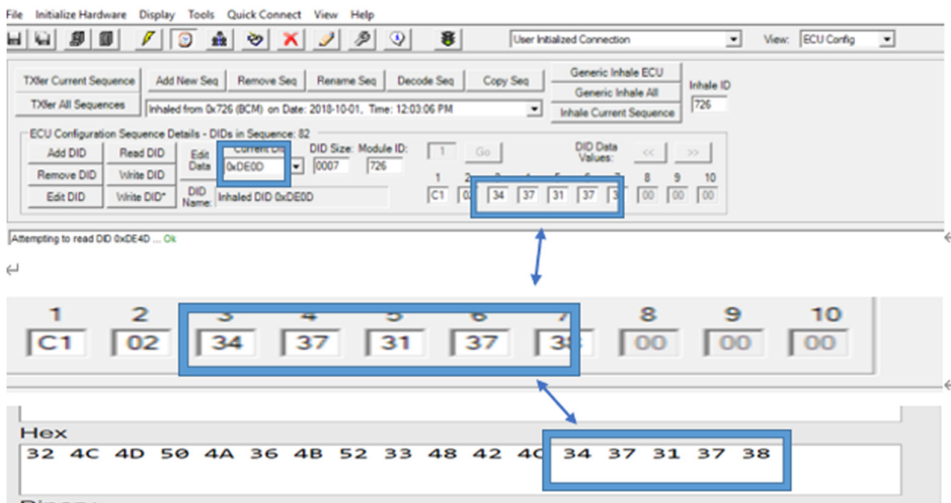
Attention to read DID 0xDE0B OK



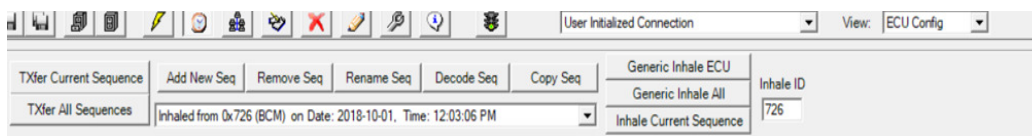
- 8、Update related bits for DE0C. Skip the first two bits and update bits start from 3<sup>rd</sup> to the 8<sup>th</sup> by using the second 6 bits set from the converter.



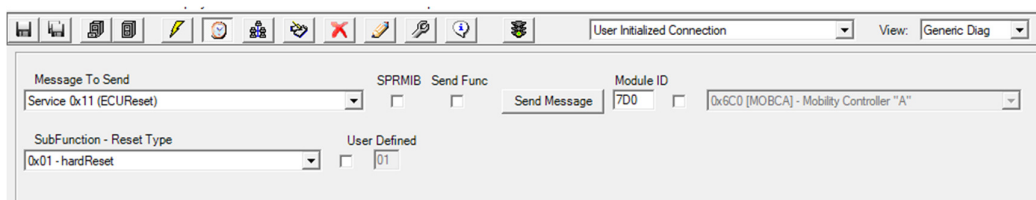
9、 Update related bits for DEOD, Skip the first two bits and apply new bits starting from 3rd bit to the 7th. User the last Hex 5 bits from the converter



10、 Transfer Current sequences.



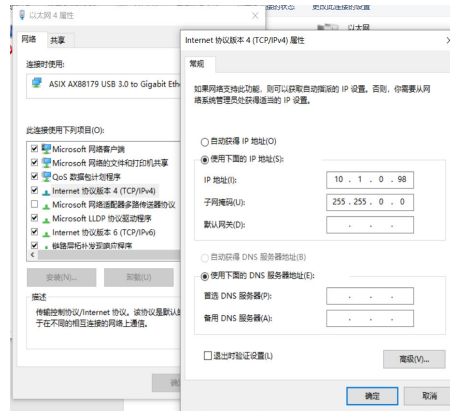
11、 Do 0x726 and 0x7D0 reset. Send "11 01" via Generic Diagnostic



12、 Check new VIN is applied to the Vehicle via IVI HMI

## ECG2 软件刷写

- 1、ECG2 write ap\_gen\_debug and unsign token and 11 01 reset (read F17F and EEFA to apply) .
- 2、ECG2 DE00 Modem or IVI port config reserved, only one reserved.
- 3、Use Radmoon connect ECG2 Modem or IVI port. Then Revise IP, such as: 10.1.0.99



- 4、完成之后去 cmd ping 10.1.0.1 能否连通

```
C:\Users\LPENG32>ping 10.1.0.1

Pinging 10.1.0.1 with 32 bytes of data:
Reply from 10.1.0.1: bytes=32 time<1ms TTL=255
Reply from 10.1.0.1: bytes=32 time=1ms TTL=255
Reply from 10.1.0.1: bytes=32 time=1ms TTL=255
Reply from 10.1.0.1: bytes=32 time=1ms TTL=255

Ping statistics for 10.1.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

- 5、找到 ECG 的软件，在 out 路径下运行 cmd， Use **loadproduct.bat -e --cdx707\_my23\_base** to flash ECG2 SW.

- 6、Then Use DET SWDL F16B file and re-start.

(**ECG2-milestone-2021-11-Bundle-Release-1.0.30.98\out\target\product\ECG2\_LINCD\_WRLinux\ggmt\CDX707\my23\_base**)

- 7、Check the p/n

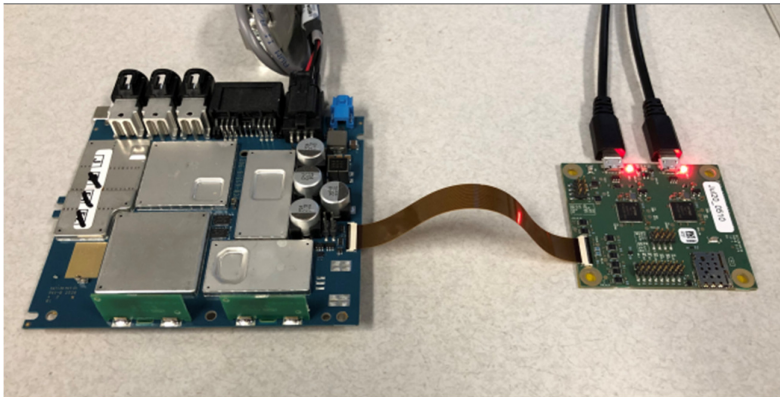
ECG: 22 F1 88 80 68 80 33 check SW version

22 F1 6C F1 0A F1 6B check VIM and calibration version

- 8、After check p/n is OK. Change ECG DE00 MODEM or IVI to “Enable”

## TCU2 软件刷写

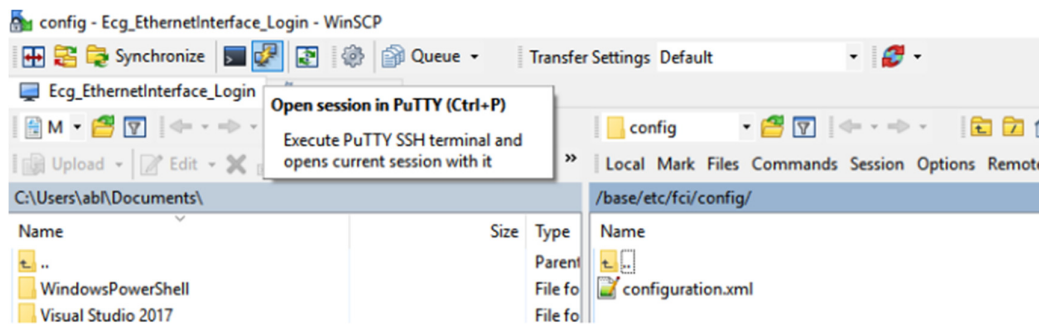
- 1、Make sure PC has installed debug board driver
- 2、connect debug board to TCU2, TCU2 need dis-assembly first



- 3、run cmd and put adb devices, should can read out one device
  - 4、Open cmd in "out Path" of TCU2 released file, Use **loadproduct.bat** to flash TCU2 SW.
  - 5、Check the p/n
- TCU2: 22 D0 27 F1 88 80 68 F1 20 F1 21  
22 D0 49 F1 22

## ECG2+TCU2 Provisioning Process

- 1、make sure the ECG2&TCU2 flash successfully.
- 2、enter into ECG2 WinSCP, Open ECG shell prompt via WINSCP-PUTTY.



- 3、Run the following command in the console window. This allows to modify the configuration.xml file.

**mount -o remount,rw /**

- 4、Open "configuration.xml" file in the editor and ensure that the values corresponding to the parameters align (OR) else modify the following values. (OR) Replace the "configuration.xml" with the already edited "configuration.xml" file attached.

**/base/etc/fci/config**

- Line 4: ▪ **pdConnection** → **true**
- Line 5: ▪ **devMode** → **false**
- Line 6: ▪ **powerHandling** → **true**
- Line 17: ▪ **enablePassword** → **true**
  - **enableSyncP** → **true**
  - **useSingleSyncPKey** → **false**

- 5、Disconnect RADMOON and plug in the TCU and SYNC connections back to the ECG.

Provisioning status

- 6、make sure the ECG2&TCU2 has internet
- 7、make sure the ECG2&TCU2 DID has correct value

ECG2:

D01E: DEV environment should be [fstgvehups.cv.ford.com:8883](http://fstgvehups.cv.ford.com:8883)

DE00:

[tcuDestRegion: China](#)  
[optionalConfigurationState: In-Vehicle content is configured](#)  
[Vehicle\\_Market\\_Config: Connected Market](#)  
[TCU\\_Presence: Presented and to be provisioned](#)

DE07: 43 48

F190: VIN same as BCM or iCAN

FD02

TCU2:

DE00:

[tcuDestRegion: China](#)  
[optionalConfigurationState: In-Vehicle content is configured](#)

FD10 : TCU has signal

DE09: 43 48

8、ECG DE00 DID is modified. Byte2 Change to 07, then change to 06.

9、TCU DE00 DID is modified. Byte2 Change to 07, then change to 06.

10、Once the modules are reset, ECG and TCU will attempt to provision. "Provisioning" status of ECG and TCU can be queried individually using D021 DID using the DET tool.

Request for ReadDataByIdentifier (Service 0x22) -- [ECU ID: 0x716 (GWM)] - Single DID

DataIdentifier: 0xD021

Positive Response to ReadDataByIdentifier (Service 0x22) -- [ECU ID: 0x71E (GWM)]

DataIdentifier: 0xD021 Data Size: 1 byte(s)

Data (Hex): 26

[0xD021] Authorization State: Provisioned Mode

Request for ReadDataByIdentifier (Service 0x22) -- [ECU ID: 0x754 (TCU)] - Single DID

DataIdentifier: 0xD021

Positive Response to ReadDataByIdentifier (Service 0x22) -- [ECU ID: 0x75C (TCU)]

DataIdentifier: 0xD021 Data Size: 1 byte(s)

Data (Hex): 32

[0xD021] Authorization State: Provisioned Mode