

How log Data for reverse engineering a serial Protocol

What you need

Serial Data Cable for your ECU

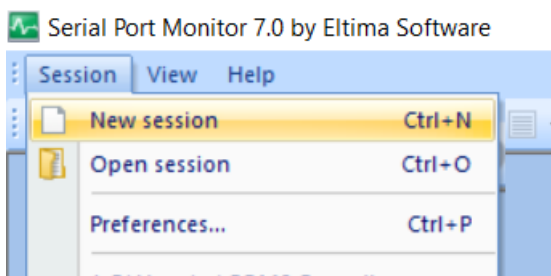
Laptop

OEM Software for your ECU

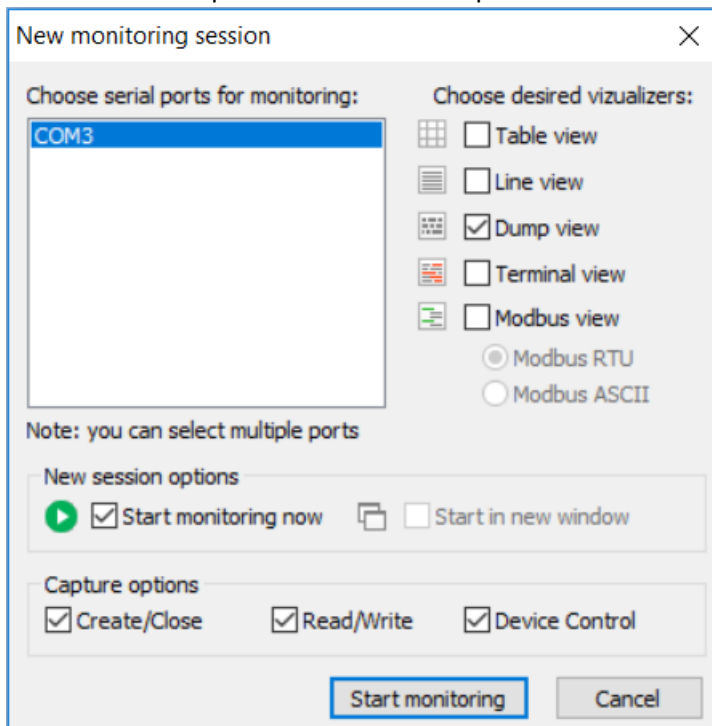
Serial port monitor software <https://www.eltima.com/products/serial-port-monitor/> (14 day trial will be sufficient)

How to log the Data

1. Connect Laptop with Serial cable to your ECU
2. Open Serial Port Monitor and select "new session"

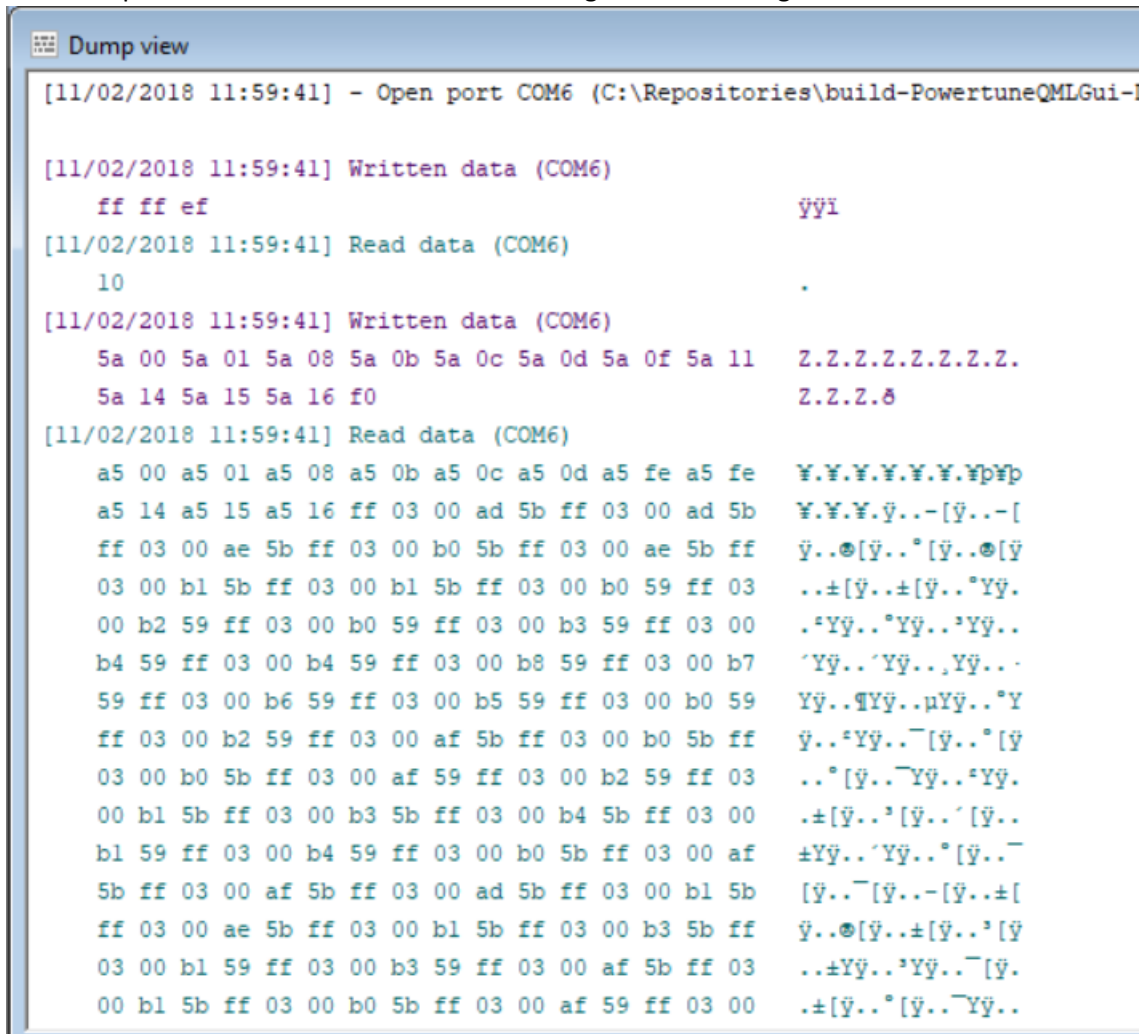


- 3.
4. Select the "COM port" and "select dump view "



- 5.
6. Click "Start monitoring "
7. Now Start your car and open your ECU software and select to monitor the Live Data

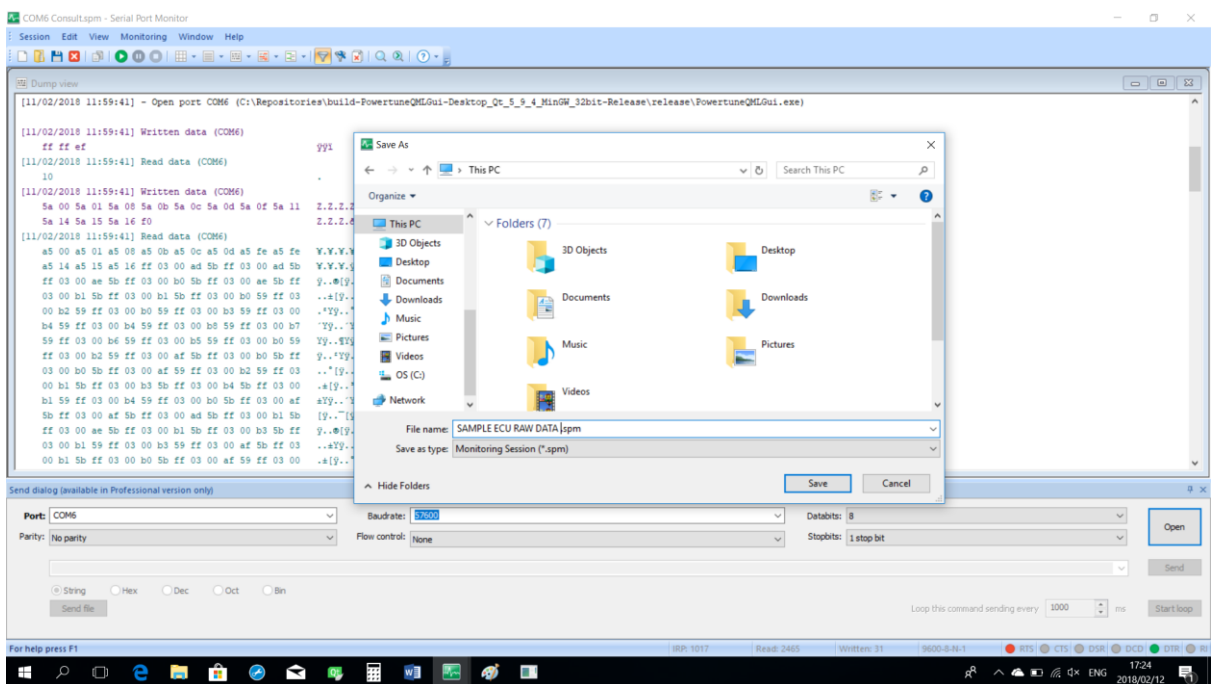
8. The serialport monitor window should start filling with something like this



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[11/02/2018 11:59:41] - Open port COM6 (C:\Repositories\build-PowertuneQMLGui-1

[11/02/2018 11:59:41] Written data (COM6)
ff ff ef
[11/02/2018 11:59:41] Read data (COM6)
10
[11/02/2018 11:59:41] Written data (COM6)
5a 00 5a 01 5a 08 5a 0b 5a 0c 5a 0d 5a 0f 5a 11 5a 14 5a 15 5a 16 f0
[11/02/2018 11:59:41] Read data (COM6)
a5 00 a5 01 a5 08 a5 0b a5 0c a5 0d a5 fe a5 fe
a5 14 a5 15 a5 16 ff 03 00 ad 5b ff 03 00 ad 5b
ff 03 00 ae 5b ff 03 00 b0 5b ff 03 00 ae 5b ff
03 00 b1 5b ff 03 00 b1 5b ff 03 00 b0 59 ff 03
00 b2 59 ff 03 00 b0 59 ff 03 00 b3 59 ff 03 00
b4 59 ff 03 00 b4 59 ff 03 00 b8 59 ff 03 00 b7
59 ff 03 00 b6 59 ff 03 00 b5 59 ff 03 00 b0 59
ff 03 00 b2 59 ff 03 00 af 5b ff 03 00 b0 5b ff
03 00 b0 5b ff 03 00 af 59 ff 03 00 b2 59 ff 03
00 b1 5b ff 03 00 b3 5b ff 03 00 b4 5b ff 03 00
b1 59 ff 03 00 b4 59 ff 03 00 b0 5b ff 03 00 af
5b ff 03 00 af 5b ff 03 00 ad 5b ff 03 00 b1 5b
ff 03 00 ae 5b ff 03 00 b1 5b ff 03 00 b3 5b ff
03 00 b1 59 ff 03 00 b3 59 ff 03 00 af 5b ff 03
00 b1 5b ff 03 00 b0 5b ff 03 00 af 59 ff 03 00
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- 9.
10. If possible drive the car around the block while logging so I can also get a speed signal.
11. Now save the file and send the file to us



- 12.