

建立一个诊断任务。

输入要读取的 ECU 内存地址， 点击 Copy to Tranmit Table.



Read Memory By Address (\$23)

Functional Addressing Arb ID: 101 Extended: FE
 Physical Address ECU Tester Req ID: 7E0

Response ID: 7E8

Network Type: HS CAN

Address (Hex): 11 Length (Bytes): 1 Bytes Used For Address: 2

Signal	Value

Signal Definition:

Send Tester Present Message
 Pad Messages with: 00 High Voltage Wake Error: No Errors

CAN Frame(s): 7E0 05 23 00 11 00 01 00 00

New Spy Setup - Vehicle Spy 3

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Offline Desktop 1

Setup Diagnostics X Messages Editor X

Edit Receive Transmit Database on Network HS CAN

Key	Description	Type	Arb ID	Multi	DLC	B1	B2	B3	B4	B5	B6	B7	B8	Src
out0	\$23 Read Mem Job	Std 11 bit	7E0	ISO15765-2	23	00	11	00	01					

Setup for \$23 Read Mem Job

Description: \$23 Read Mem Job Source Node: (none) Color: Custom... Hotkey: (No Hotkey)

Higher Level Protocol: None

CAN Type: Std 11 bit Arbitration Identifier (Arb ID): 7E0 Length (DLC): ... High Voltage Remote Frame:

Multiframe Message: ISO15765-2

Byte 1: 23 Byte 2: 00 Byte 3: 11 Byte 4: 00 Byte 5: 01 Byte 6: ... Byte 7: ... Byte 8: ...

Signals in Message

对于要进行程序控制或自动生成的部分，如上图中的 B3 - Address, 定义一个 signal 与其相关联:



Key	Description	Type	Arb ID	Multi	DLC	B1	B2	B3	B4	B5	B6	B7	B8	Src Node	Tx Msg	Color
ut0	\$23 Read Mem Job	Std 11 bit	7E0	ISO15765-2	23	00	11	00	01						None	

Setup for \$23 Read Mem Job

Description: \$23 Read Mem Job
Source Node: (none)
Color: Custom...
Hotkey: (No Hotkey)

Message Filter Specification
CAN Type: Std 11 bit
Arbitration Identifier (Arb ID): 7E0
Length (DLC): 23
High Voltage Remote Frame:
Multiframe Message: ISO15765-2

Value Decoding
Raw Value Type: Unsigned Integer
Start Bit: 16, Length: 3, Endian-ness: Or, Protocol: 7

Signals in Message
Description: Address
Signal Type: Analog
Units: Min: 0
Equation: $Engineering\ Value = 1.0 * Raw\ Value + 0.0$

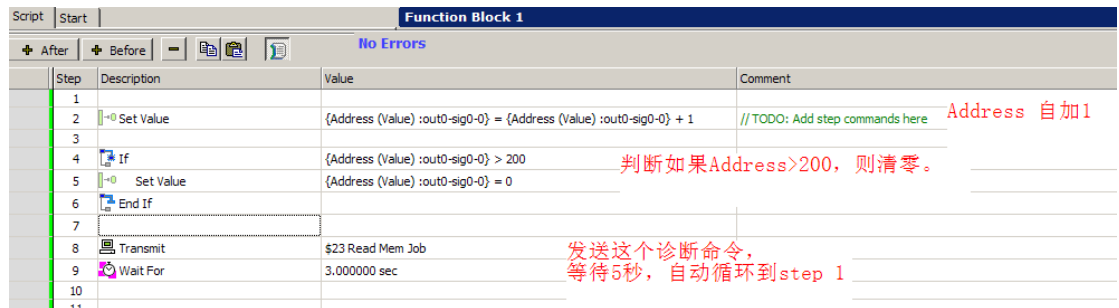
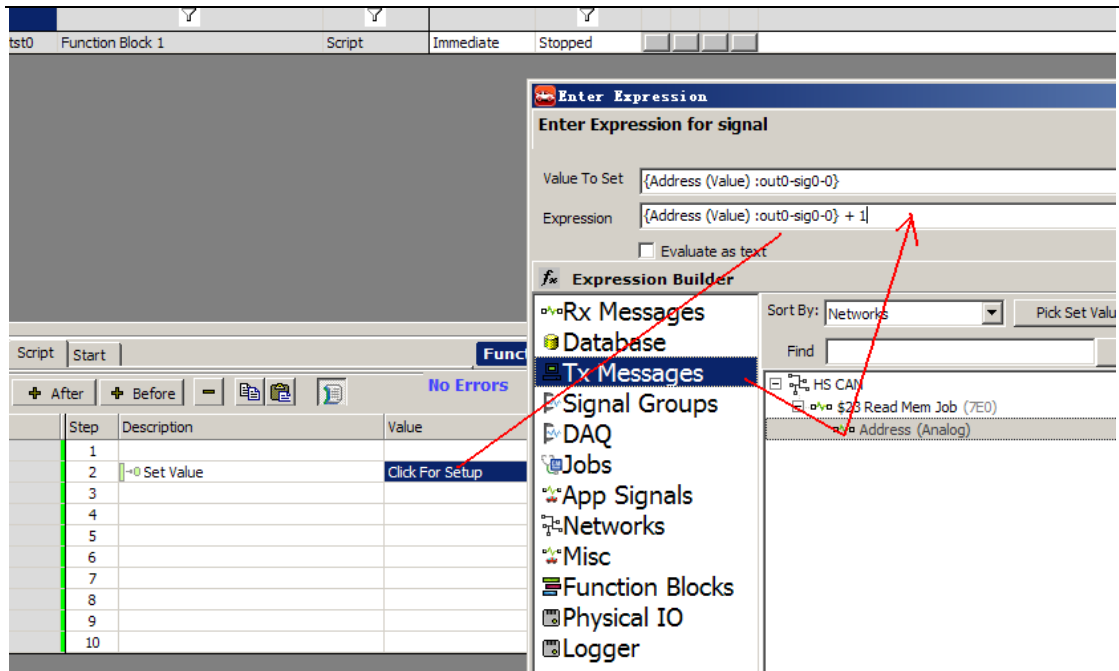
从第三字节开始取，取1个字节的长度，作为Address的定义。

然后进入 function block 编程:

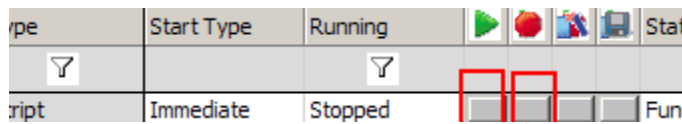
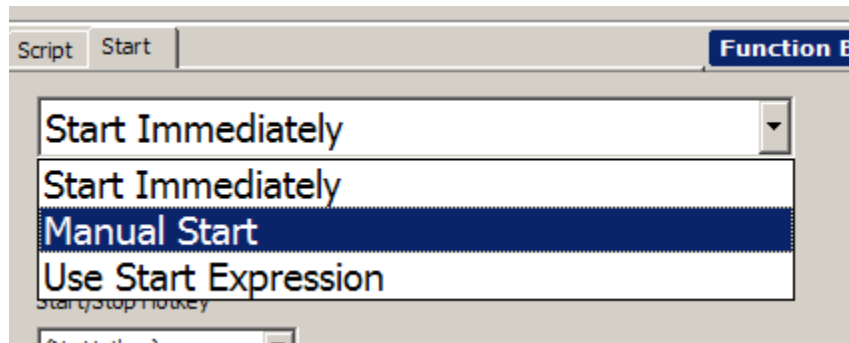
Tools Scripting and Automation Run

- Function Blocks
- Application Signals
- Text API Terminal
- Java
- Test Recorder
- Test Controller

Script
Capture
Playback

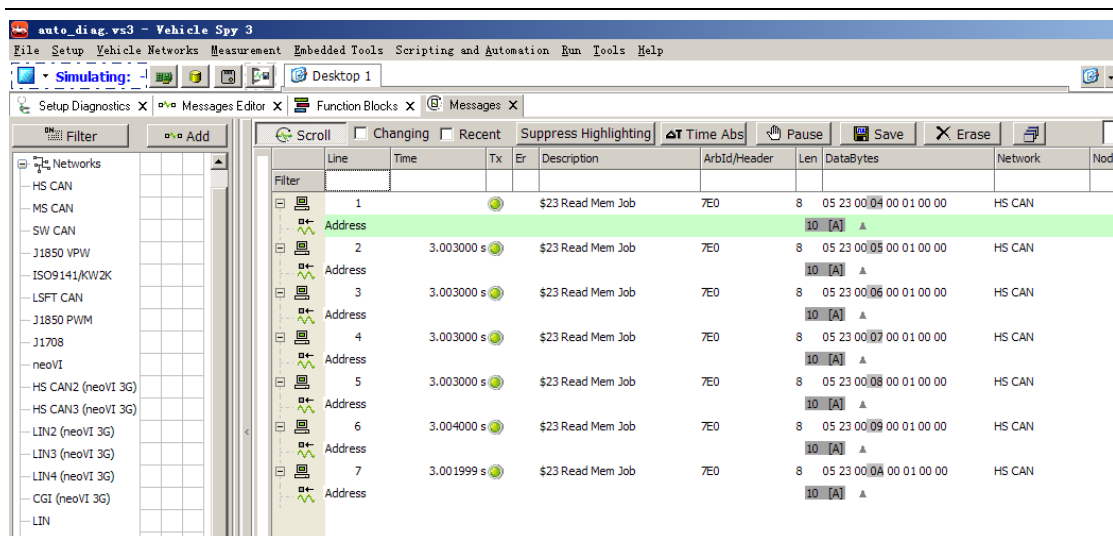


选择开始条件 为手动控制:



开始和停止按钮。

运行结果, 每隔 3 秒发送一个 \$23 诊断命令, 其中的 Address 是程序控制的。



对于 ECU 返回的响应,也可以去解析,在 Receive 中定义 Signal, 方法和在 TX 中定义 Signal 一样。在 Receive 中, Arb ID, B1 – B8 里填的是 ECU 返回的响应的报文的特征, 比如 7E0 诊断指令的响应必定是 7E8,那么可以把 7E8 填入 ArbID.

又比如, 某些响应的第一字节 B1 必定是 45, 也可以填进去作为特征。

填好特征以后, Message view 中遇到满足特征条件的接收到的消息就按照其定义的 Signal 来解析。

