

# faro\_can\_sdk\_demo\_j1708.c

This document build base on faro\_can\_sdk\_demo\_j1708.c function:

## -h --help description

command	Value(First)	Value(Second)
-h	N/A	N/A
<b>Description:</b> Showing functions list description		
<b>Syntax:</b> sudo ./bin/faro_can_sdk_demo_j1708 -p <UART Device> -h		
Example : sudo ./bin/faro_can_sdk_demo_j1708 -p /dev/ttyUSB0 -h		
Receive: functions list description		

## -s--scan port

Command	Value(First)	Value(Second)
-s	N/A	N/A
<b>Description :</b> Scan available Com Port in computer.		
Example : sudo ./bin/faro_can_sdk_demo_j1708 -p /dev/ttyUSB0 -s		
Receive: /dev/ttyUSB1 /dev/ttyUSB0		

## -p – open port

Command	Value(First)	Value(Second)
-p	Port name	N/A
<b>Description:</b> Set comport. Using Seliconlab comport, port name will be “ttyUSBx” <b>Syntax:</b> sudo ./bin/faro_can_sdk_demo_j1708 -p <UART Device> <UART Device> Seliconlab comport, port name will be “ttyUSBx”		
<b>Example</b> sudo ./bin/faro_can_sdk_demo_j1708 -p /dev/ttyUSB0		

## -d-- deinit time

Command	Value(First)	Value(Second)
-d	Program run time(seconds)	N/A
<b>Description:</b> Set Demo program running time. If not set this command, Demo program will be set default time in 30 seconds, when running time out, demo program will stop and exit automatically. If set value is -1, then demo program will not stop, until user using “ctrl-c”to manure stop demo program. <b>Syntax:</b> sudo ./bin/faro_can_sdk_demo_j1708 -p <UART Device> <DemoAP command> <deinit time> <b>&lt;DemoAP command&gt;</b> Set Demo Option: Value : according -h -- help description <b>&lt;deinit time&gt;</b> Set value for close demo function, unit second. Default value is 30 second. If set value -1, then demo program will not stop, until user using “ctrl-c”to manure stop demo Value : -1 ~ 65535		
<b>Example :</b>		

```
sudo ./bin/ faro_can_sdk_demo_j1708 -p /dev/ttyUSB0 -g -d 40
```

Receive:

Firmware version and thread will stop in 40 second.

## -g – get firmware version

Command	Value(First)	Value(Second)
-g	N/A	N/A
<b>Description :</b> Get module firmware version.		
<b>Syntax:</b> sudo ./bin/faro_can_sdk_demo_j1708 -p <UART Device> -g		
<b>Example :</b> sudo ./bin/faro_can_sdk_demo_j1708 -p /dev/ttyUSB0 -g		
<b>Receive:</b> fw_ver: 04.01.10.20.14		

## -b – reset module

Command	Value(First)	Value(Second)
-b	N/A	N/A
<b>Description:</b> Set module reset.		
<b>Syntax:</b> sudo ./bin/faro_can_sdk_demo_j1708 -p <UART Device> -b		
<b>Example :</b> sudo ./bin/faro_can_sdk_demo_j1708 -p /dev/ttyUSB0 -b		
<b>Receive :</b> Testing port = /dev/ttyUSB0, baudrate = B921600 ***** Adopting port = /dev/ttyUSB0, baudrate = B921600 reset module finish.		

## -m – mode active

Command	Value(First)	Value(Second)
-m	Can Port value	Mode active value
<b>Description:</b> Set can port mode active value. * If open J1708 and J1708_21 mode, command will ignore Can port value setting. * if open CAN2ADR_OBD2 and CAN2ADR_J1939, Port value need to set in port 1. <b>Syntax:</b> sudo ./bin/faro_can_sdk_demo_j1708 -p <UART Device> -m <port> <mode> <b>&lt;port&gt;</b> Set can port 0 : port 0 1 : port 1 <b>&lt;mode&gt;</b> Set module active mode 0 : Raw CAN 1 : OBD2 2 : J1939 3 : J1708_27byte 4 : CAN2ADR_OBD2 5 : CAN2ADR_J1939 8 : J1708_21 9 : J1708_21_OFF		
<b>Example :</b> sudo ./bin/faro_can_sdk_demo_j1708 -p /dev/ttyUSB0 -m 0 3 <b>Receive:</b> mode_active argument : 3 success.		

## -t – test cnt

Command	Value(First)	Value(Second)
-t	Set time value	N/A
<b>Description:</b> Set counter for test loop.		
<b>Syntax:</b> sudo ./bin/faro_can_sdk_demo_j1708 -p <UART Device> <DemoAP command> -t <count> <b>&lt;DemoAP command&gt;</b> Set Demo Option: Value : according -h -- help description <b>&lt;count&gt;</b> Set Demo or test loop count: Value : counter value		
<b>Example :</b> sudo ./bin/faro_can_sdk_demo_j1708 -p <UART Device> -g -t 10 <b>Receive:</b> get FW count = 1, can_fw_ver: 04.01.10.20.14 get FW count = 2, can_fw_ver: 04.01.10.20.14 get FW count = 3, can_fw_ver: 04.01.10.20.14 get FW count = 4, can_fw_ver: 04.01.10.20.14 get FW count = 5, can_fw_ver: 04.01.10.20.14 get FW count = 6, can_fw_ver: 04.01.10.20.14 get FW count = 7, can_fw_ver: 04.01.10.20.14 get FW count = 8, can_fw_ver: 04.01.10.20.14 get FW count = 9, can_fw_ver: 04.01.10.20.14 get FW count = 10, can_fw_ver: 04.01.10.20.14		

## -v-- SDK version

Command	Value(First)	Value(Second)
-v	N/A	N/A
<b>Description:</b> Get SDK version.		
<b>Syntax</b> sudo ./bin/faro_can_sdk_demo_j1708 -p <UART Device> -v		
<b>Example :</b> sudo ./bin/faro_can_sdk_demo_j1708 -p /dev/ttyUSB0 -v		
<b>Receive:</b> Version v5.0.2		

## -j – J1708 Demo

Command	Value(First)	Value(2 ~ 14)
-j	J1708 demo command	J1708 command setting parameters
<b>description:</b> Do J1708 Demo. Set command and parameter to run J1708 demo function.		
<b>Command -j 0 Description:</b> Read J1708 data.		
<b>Syntax:</b> sudo ./bin/faro_can_sdk_demo_j1708 -p <UART Device> -j 0		
<b>Command -j 0 Example :</b> sudo ./bin/faro_can_sdk_demo_j1708 -p /dev/ttyUSB0 -j 0		
<b>Receive :</b> cnt = 1;		
<b>Command -j 1 Description:</b> Write J1708 data function.		
<b>Syntax:</b> sudo ./bin/faro_can_sdk_demo_j1708 -p <UART Device> -j 1 <mid> <priority> <dlc> <4/19 data1> <4/19 data2> <4/19 data3> <4/19 data4> <3/19 data5>		

**<mid>**

Set J1708 data format MID:

Value 0x00 ~ 0xFF.

**<priority>**

Set J1708 data format priority:

Value 1 ~ 8.

**<dlc>**

Set J1708 data format data length code(DLC):

Value 0x00 ~ 0x13.

**<4/19 data1>**

Set J1708 data format data byte 0 ~ byte 3:

Ex : 0x01020304.

**<4/19 data2>**

Set J1708 data format data byte 4 ~ byte 7:

Ex : 0x05060708.

**<4/19 data3>**

Set J1708 data format data byte 8 ~ byte 11:

Ex : 0x090A0B0C.

**<4/19 data4>**

Set J1708 data format data byte 12 ~ byte 15:

Ex : 0x0D0E0F10.

**<3/19 data5>**

Set J1708 data format data byte 16 ~ byte 18:

Ex : 0x111213FF.

Command -j 1 Example :

```
sudo ./bin/faro_can_sdk_demo_j1708 -p /dev/ttyUSB0 -j 1 0x82 0x01 0x13 0x01020304  
0x05060708 0x090A0B0C 0x0D0E0F10 0x111213FF
```

Receive:

```
cnt = 1;
```

**Command -j 2 Description:**

Write J1708 filter config function.

**Syntax:**

```
sudo ./bin/faro_can_sdk_demo_j1708 -p <UART Device> -j 2 <type> <mid>
```

**<type>**

Set J1708 filter command:

0x01 : set filter.

0xFF : reset filter.

**<mid>**

Set J1708 data format MID:

Value 0x00 ~ 0xFF.

Command -j 2 Example:

```
sudo ./bin/faro_can_sdk_demo_j1708 -p /dev/ttyUSB0 -j 2 0x01 0x82
```

Receive

J1708 filter config

**Command -j 3 Description:**

Get J1708 filter count.

**Syntax:**

```
sudo ./bin/faro_can_sdk_demo_j1708 -p <UART Device> -j 3
```

Command -j 3 Example:

```
sudo ./bin/faro_can_sdk_demo_j1708 -p /dev/ttyUSB0 -j 3
```

Receive

J1708 filter count = 1

**Command -j 4 Description:**

Get J1708 filter.

**Syntax:**

```
sudo ./bin/faro_can_sdk_demo_j1708 -p /dev/ttyUSB0 -j 4
```

Command -j 4 Example:

```
# sudo ./bin/faro_can_sdk_demo_j1708 -p /dev/ttyUSB0 -j 4
```

Receive

J1708 filter count = 1

filter[0] = 0x00000082



## -q – quiet mode

Command	Value(First)	Value(Second)
-q	N/A	N/A
<b>Description :</b> Set DemoAP no receive any data <b>syntax:</b> sudo ./bin/faro_can_sdk_demo_j1708 -p <UART Device> -q		
Example: sudo ./bin/faro_can_sdk_demo_j1708 -p /dev/ttyUSB0 -j 0 -q Receive: N/A		