

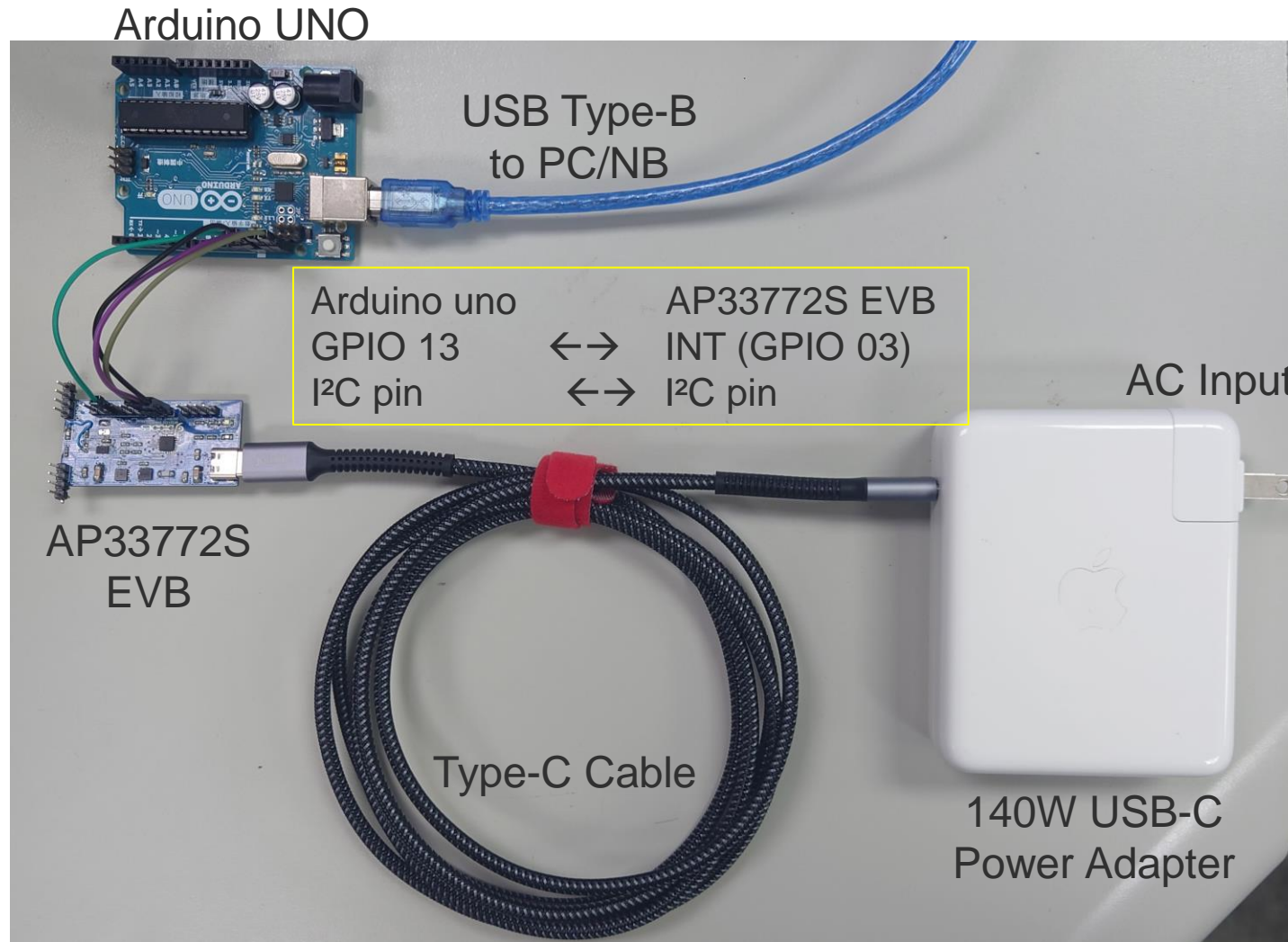
I²C Master Sample Code Introduction for AP33772S

Charging PL

2023/10/11



- 1. Hardware Environment**
- 2. Sample Code List & Function Description**
- 3. Functional Test Cases for Sample Code**

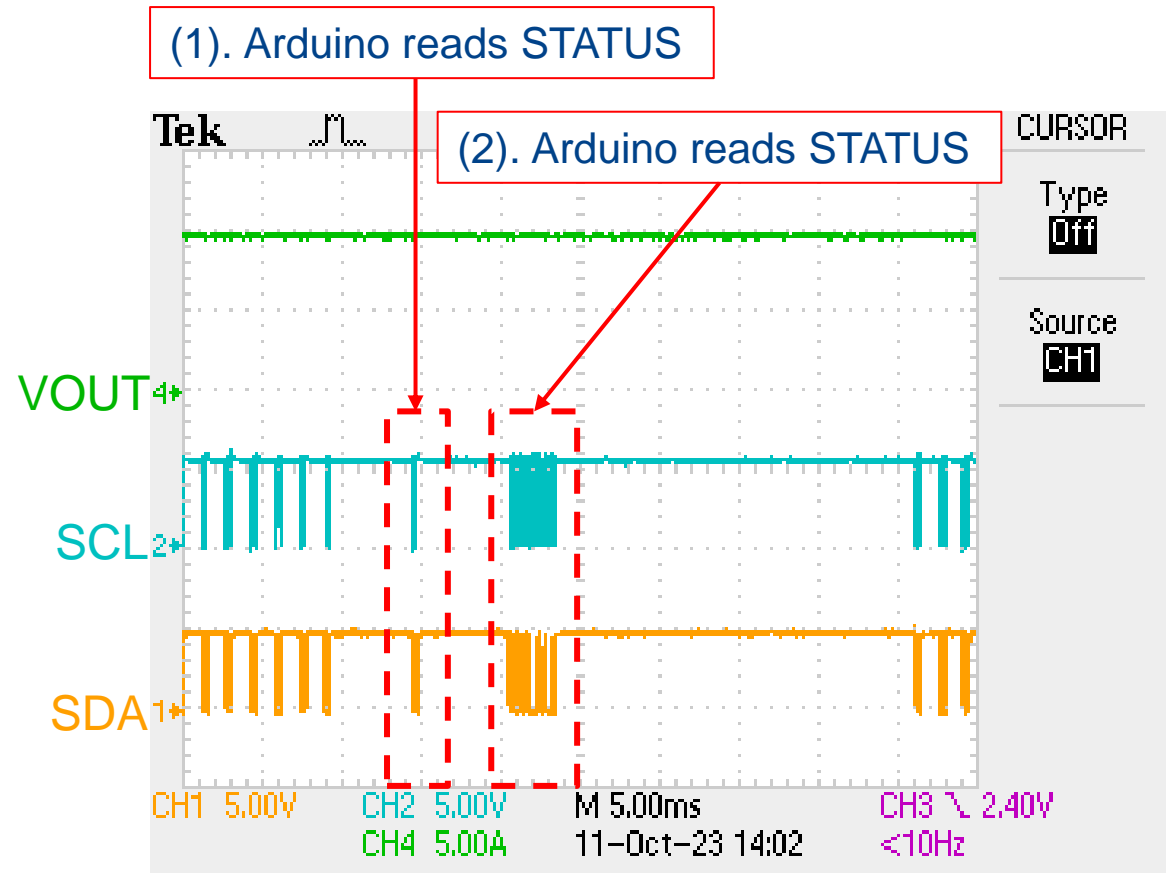


Sample Code List & Function Description

Name	Sample Codes	Description
PDO Query	AP33772S_PDO_Query	Queries all PDO information
PDO Send	AP33772S_PDO_Send	Reports all PDO information Sends out PDO request specified by user
PDO Switch	AP33772S_PDO_Switch	Report all PDO information Switch voltages PDO 1 and PDO2 processing
State Query	AP33772S_State_Query	Reports voltage, current, and temperature information
Startup Configuration	AP33772S_Startup_Configuration	Startup Set Configuration (0x02, 0x04, 0x05, 0x16 - 0x1C)

Functional Test Cases: PDO Query

```
COM9
p
STATUS Read bytes in HEX: 01
Startup Settings
STATUS Read bytes in HEX: 06
STATUS Read bytes in HEX: 00 (1)
Get PD Source Power Capabilities:
SRC_SPR_PDO1: Fixed PDO: 5000mV 3.00A ~ 3.24A
SRC_SPR_PDO2: Fixed PDO: 9000mV 3.00A ~ 3.24A
SRC_SPR_PDO3: Fixed PDO: 15000mV 3.00A ~ 3.24A
SRC_SPR_PDO4: Fixed PDO: 20000mV 5.00A ~ (More than)
SRC_EPR_PDO8: Fixed PDO: 28000mV 5.00A ~ (More than)
SRC_EPR_PDO9: AVS PDO: 15000mV~28000mV 5.00A ~ (More than) (2)
```



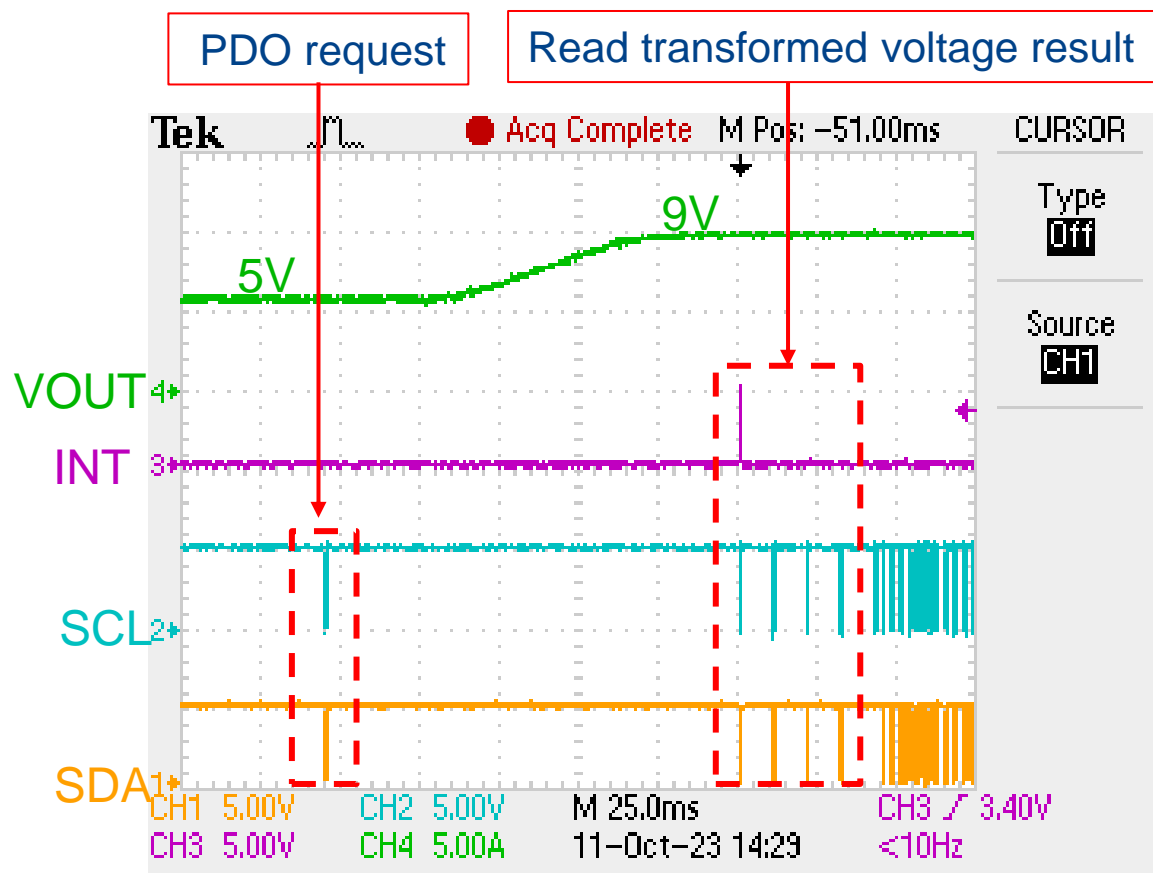
Functional Test Cases: PDO Send (Fixed)

```
COM9
r
STATUS Read bytes in HEX: 00
Get PD Source Power Capabilities:
SRC_SPR_PDO1: Fixed PDO: 5000mV 3.00A ~ 3.24A
SRC_SPR_PDO2: Fixed PDO: 9000mV 3.00A ~ 3.24A
SRC_SPR_PDO3: Fixed PDO: 15000mV 3.00A ~ 3.24A
SRC_SPR_PDO4: Fixed PDO: 20000mV 5.00A ~ (More than)
SRC_EPR_PDO8: Fixed PDO: 28000mV 5.00A ~ (More than)
SRC_EPR_PDO9: AVS PDO: 15000mV~28000mV 5.00A ~ (More than)
Enter PDO ID:
You entered PDO ID: 1
Operating Current Select:
0: 1.00A
1: 1.25A
2: 1.50A
3: 1.75A
4: 2.00A
5: 2.25A
6: 2.50A
7: 2.75A
8: 3.00A
9: 3.25A
10: 3.50A
11: 3.75A
12: 4.00A
13: 4.25A
14: 4.50A
15: 5.00A
You entered current: 8
SRC_SPR_PDO1 : status=0x02 RESPONSE=Success V=5120mV I=72mA T=0°C
```

Enter 'r'

Enter PDO ID

Enter Operating Current



Functional Test Cases: PDO Send (AVS)

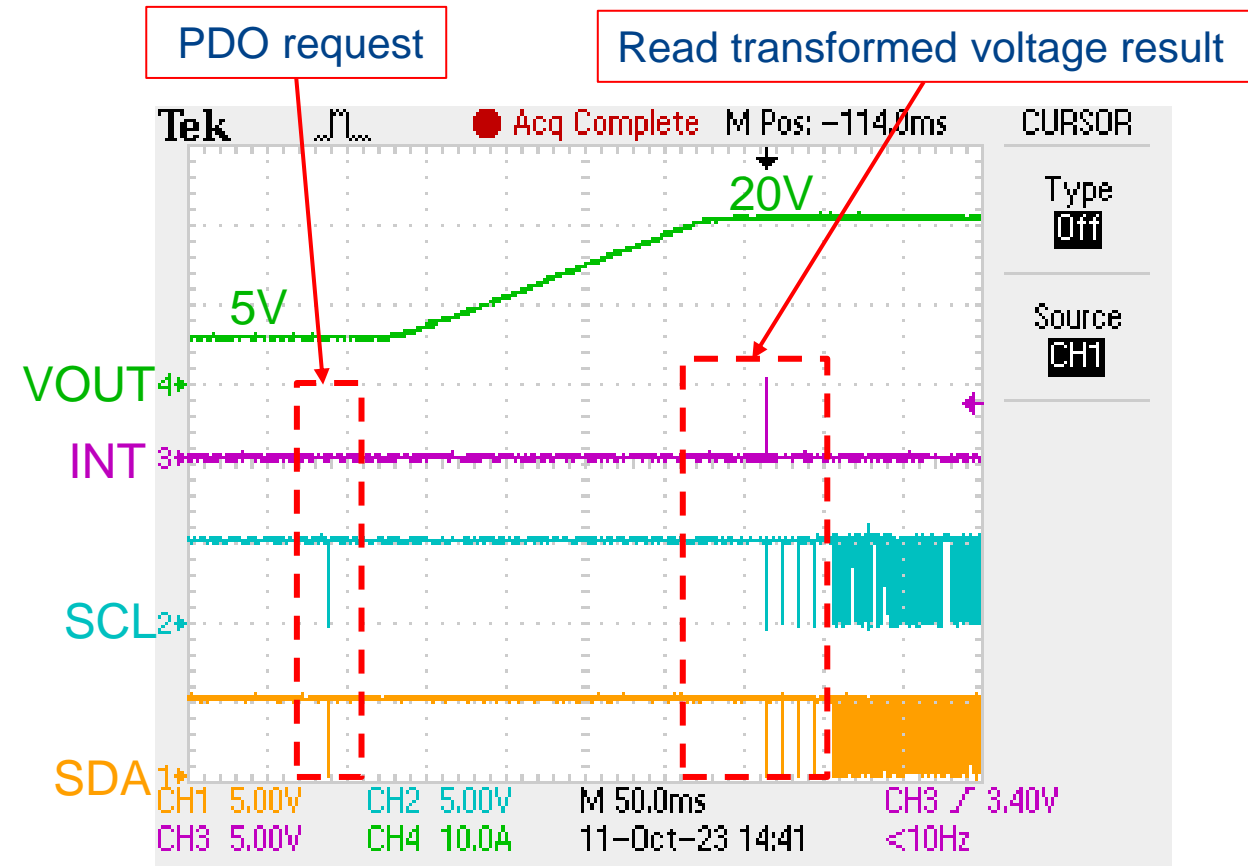
```
COM9
Enter 'r'
STATUS Read bytes in HEX: 00
Get PD Source Power Capabilities:
SRC_SPR_PDO1: Fixed PDO: 5000mV 3.00A ~ 3.24A
SRC_SPR_PDO2: Fixed PDO: 9000mV 3.00A ~ 3.24A
SRC_SPR_PDO3: Fixed PDO: 15000mV 3.00A ~ 3.24A
SRC_SPR_PDO4: Fixed PDO: 20000mV 5.00A ~ (More than)
SRC_EPR_PDO8: Fixed PDO: 28000mV 5.00A ~ (More than)
SRC_EPR_PDO9: AVS PDO: 15000mV~28000mV 5.00A ~ (More than)
Enter PDO ID:
You entered PDO ID: 9
Enter voltage(mV) for APDO:
You entered voltage: 20000 mV
Operating Current Select:
0: 1.00A
1: 1.25A
2: 1.50A
3: 1.75A
4: 2.00A
5: 2.25A
6: 2.50A
7: 2.75A
8: 3.00A
9: 3.25A
10: 3.50A
11: 3.75A
12: 4.00A
13: 4.25A
14: 4.50A
15: 5.00A
You entered current: 15
SRC_EPR_PDO9 : status=0x02 RESPONSE=Success V=19840mV I=72mA T=0°C
```

Enter 'r'

Enter PDO ID

Enter Voltage

Enter Operating Current



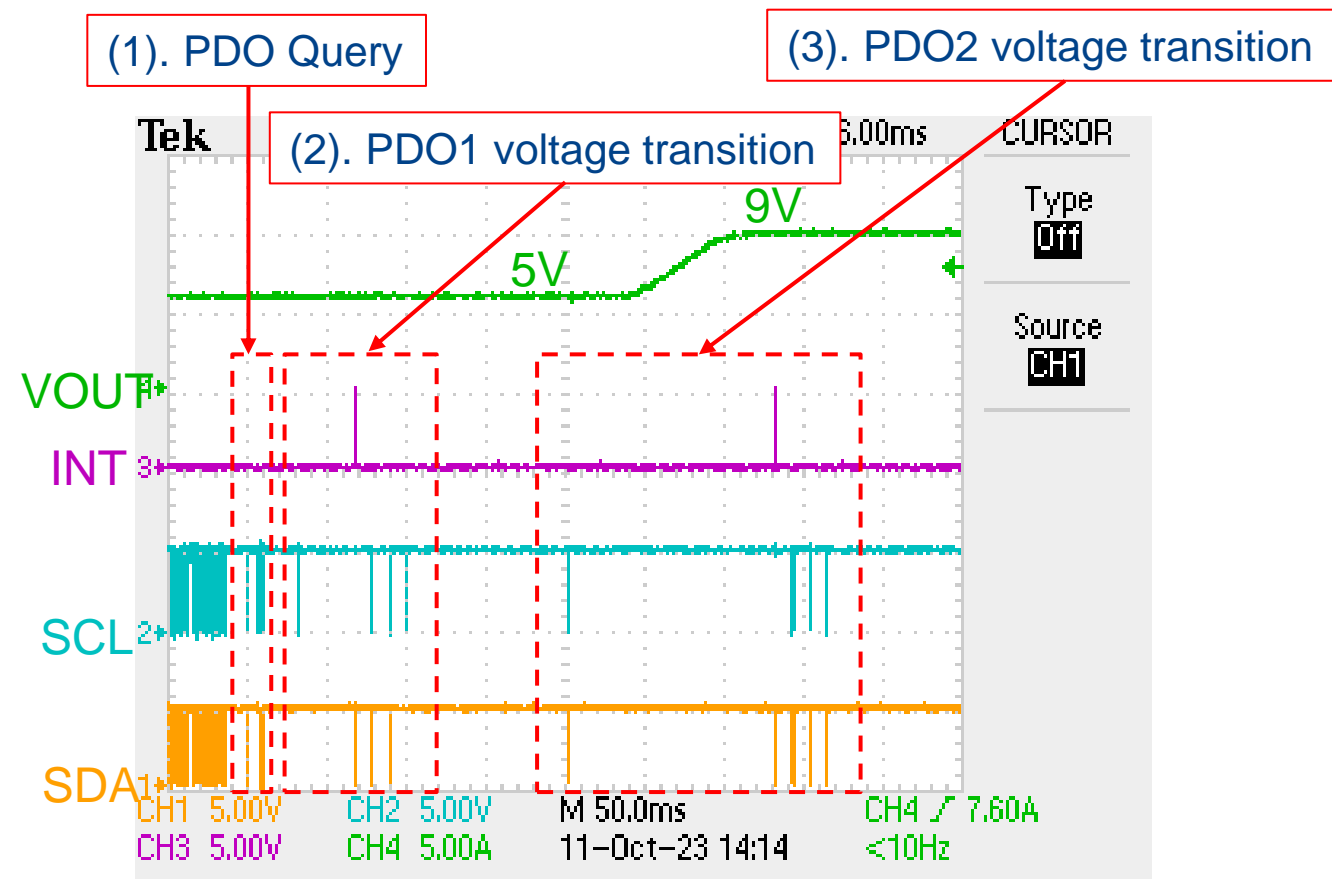
PDO request

Read transformed voltage result

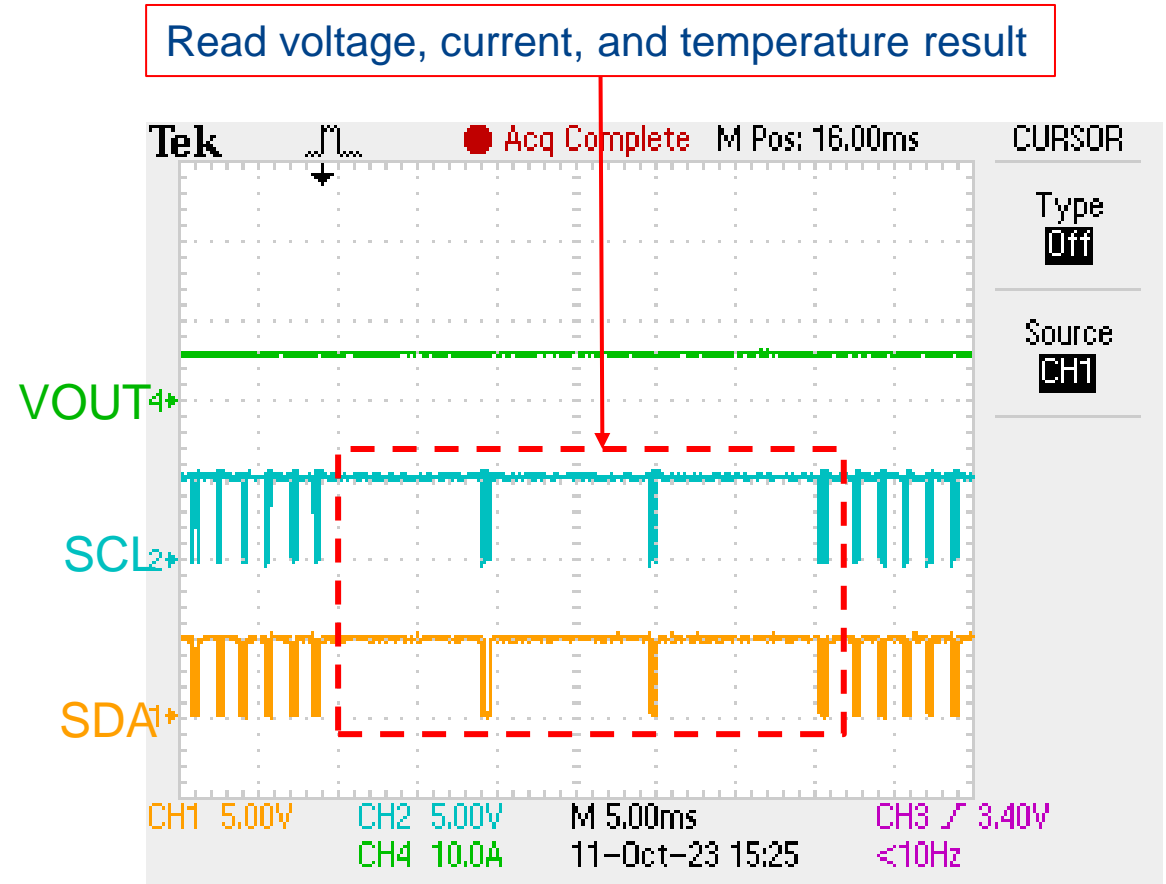
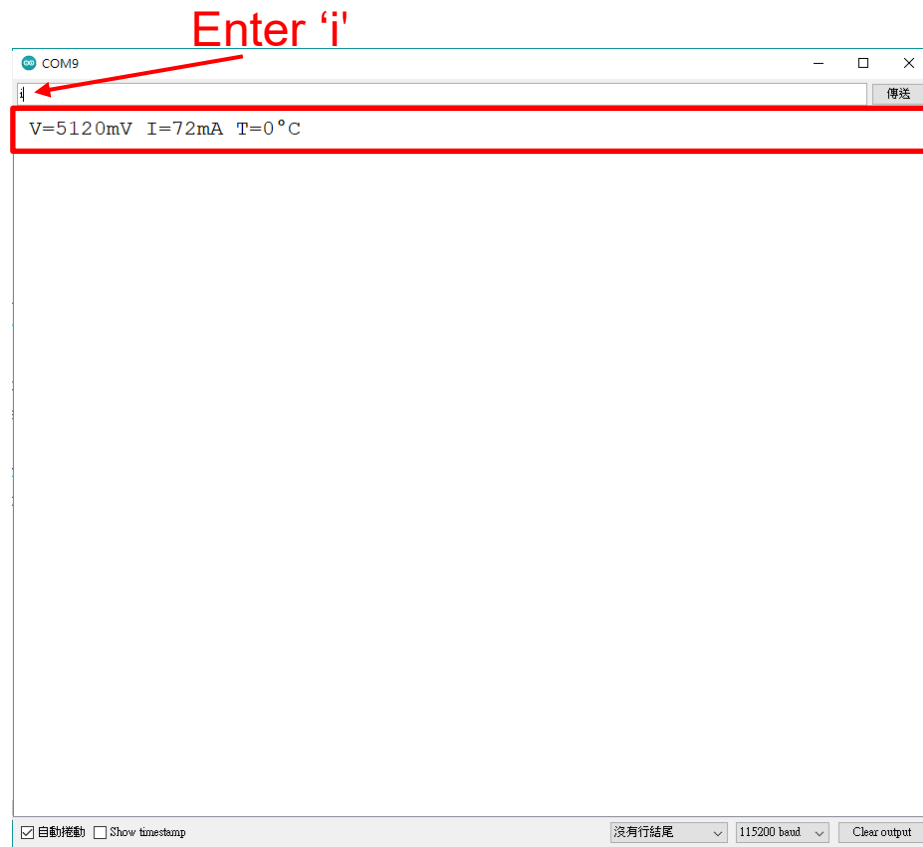
Functional Test Cases: PDO Switch

Enter 't'

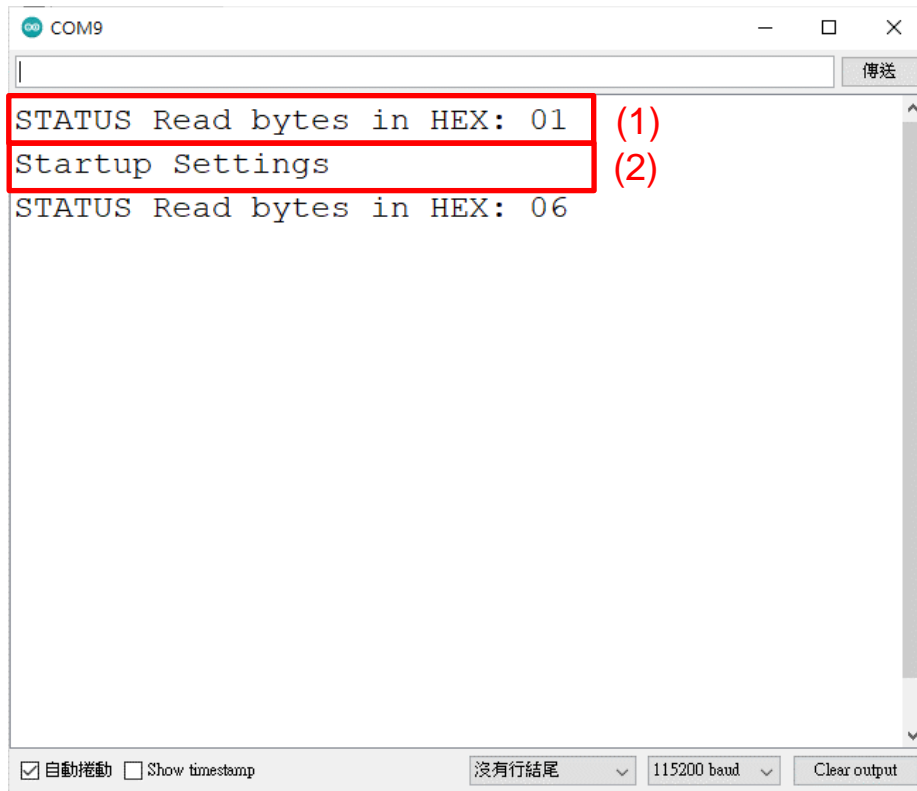
```
COM9
t
STATUS Read bytes in HEX: 01
Startup Settings
STATUS Read bytes in HEX: 06
STATUS Read bytes in HEX: 00
Get PD Source Power Capabilities:
SRC_SPR_PDO1: Fixed PDO: 5000mV 3.00A ~ 3.24A
SRC_SPR_PDO2: Fixed PDO: 9000mV 3.00A ~ 3.24A
SRC_SPR_PDO3: Fixed PDO: 15000mV 3.00A ~ 3.24A
SRC_SPR_PDO4: Fixed PDO: 20000mV 5.00A ~ (More than)
SRC_EPR_PDO8: Fixed PDO: 28000mV 5.00A ~ (More than)
SRC_EPR_PDO9: AVS PDO: 15000mV~28000mV 5.00A ~ (More than)
SRC_SPR_PDO1: Status=0x02 V=5120mV I=72mA T=0°C
SRC_SPR_PDO2: Status=0x02 V=9120mV I=72mA T=0°C
```



Functional Test Cases: State Query



Functional Test Cases: Startup Configuration



(1).After Source Attach Sink, Arduino reads STATUS (STARTED=1).

(2).Write Startup Configuration Parameters

