

## Transmitted Sink Capabilities

### Transmit Sink Capabilities ( 0x33 )

#### Sink PDO Count

Field	Value
Number of Sink PDOs	2

#### Sink PDO 1

Field	Value
Operating Current	0.9 A
Voltage	5 V
Peak Current	100%
Fast Role Swap required USB Type-C Current	Fast Swap not Supported
Higher Capability	<input checked="" type="checkbox"/>
Supply Type	Fixed Sink
Maximum Operating Current	1.5 A
Minimum Operating Current	0.9 A
Ask For Max	<input checked="" type="checkbox"/>

#### Sink PDO 2

Field	Value
Operating Current	2 A
Voltage	5 V
Peak Current	100%
Supply Type	Fixed Sink
Maximum Operating Current	3 A
Minimum Operating Current	2 A
Ask For Max	<input checked="" type="checkbox"/>

**I'm using a simple USB-Power-supply with 5V/3000mA and 9V/2000mA**

## See the transmitted source capabilities below

#	Status	SOP	Message	Msg...	Data R...	Power Role	Obj C...	Rev	Durat...	Delta...	Vbus(...	Data	Start Ti...	End Tim...	
1		VBUS_UP	SOP	C_RSVD0	0	UFP	SNK	0	v1	0		4,062	0x0	3279738	3279738
2	OK	SOP	SOURCE_CAPABILITIES	0	DFP	SRC	2	v3	759	149,933	5,257	0x21A1 0xA01912C 0x2D0C8	3429671	3430430	
3	OK	SOP	SOURCE_CAPABILITIES	0	DFP	SRC	2	v3	758	981	5,248	0x21A1 0xA01912C 0x2D0C8	3431411	3432169	
4	OK	SOP	SOURCE_CAPABILITIES	0	DFP	SRC	2	v3	758	982	5,248	0x21A1 0xA01912C 0x2D0C8	3433151	3433909	
5	OK	SOP	SOURCE_CAPABILITIES	1	DFP	SRC	2	v3	758	143,046	5,257	0x23A1 0xA01912C 0x2D0C8	3576955	3577713	
6	OK	SOP	SOURCE_CAPABILITIES	1	DFP	SRC	2	v3	758	984	5,248	0x23A1 0xA01912C 0x2D0C8	3578697	3579455	
7	OK	SOP	SOURCE_CAPABILITIES	1	DFP	SRC	2	v3	758	985	5,248	0x23A1 0xA01912C 0x2D0C8	3580440	3581198	
8	OK	SOP	SOURCE_CAPABILITIES	2	DFP	SRC	2	v3	757	143,020	5,257	0x25A1 0xA01912C 0x2D0C8	3724218	3724975	
9	OK	SOP	GOODCRC	2	UFP	SNK	0	v2	504	42	5,231	0x441	3725017	3725521	
10	OK	SOP	REQUEST	0	UFP	SNK	1	v3	636	4,099	5,257	0x1082 0x13825896	3729620	3730256	
11	OK	SOP	GOODCRC	0	DFP	SRC	0	v1	496	115	5,248	0x121	3730371	3730867	
12	OK	SOP	ACCEPT	3	DFP	SRC	0	v3	496	1,205	5,248	0x7A3	3732072	3732568	
13	OK	SOP	GOODCRC	3	UFP	SNK	0	v2	497	52	5,222	0x641	3732620	3733117	
14	OK	SOP	PS_RDY	4	DFP	SRC	0	v3	496	29,395	5,257	0x9A6	3762512	3763008	
15	OK	SOP	GOODCRC	4	UFP	SNK	0	v2	504	35	5,240	0x841	3763043	3763547	

Graphical

☒ CC1 ☒ CC2 ☒ VBUS ☒ AMP

X Scale: 100ms/div Y: 5589u X: 3777025m ΔY: 0 ΔX: 0

StartTime: 3724218 EndTime: 3724975

Name	Value
✓ MESSAGE HEADER REVISION 3 SOP	0x25a1
Extended	No
Data objects	2
Message id	2
Power role	SRC
Specification revision	v3
Data role	DFP
Message type	SOURCE_CAPABILITIES
✓ FIXED 5V SOURCE PDO REVISION 3-> 5000 mV, 3000 mA	0xa01912c
Supply	FIXED_SUPPLY
Dual role power	No
USB suspend support	No
Unconstrained power	Yes
USB communications capable	No
Dual role data	Yes
Unchunked support	No
EPR mode capable	No
Reserved	0x0
Peak current	PEAK_EQ_IOC
Voltage in 50mV units	0xf4 (5000 mV)
Maximum current in 10mA units	0x12c (3000 mA)
✓ FIXED SUPPLY PDO - SOURCE -> 9000 mV, 2000 mA	0x2d0c8
Supply	FIXED_SUPPLY
Reserved	0x0
Peak current	PEAK_EQ_IOC
Voltage in 50mV units	0xb4 (9000 mV)
Maximum current in 10mA units	0xc8 (2000 mA)

As the PD analyzer shows, the TPS65987D is only requesting 5V/ 1500mA (PDO0) and not 5V/3000mA (PDO1)

#	Status	SOP	Message	Msg...	Data R...	Power Role	Obj C...	Rev	Durat...	Delta...	Vbus(...	Data	Start Ti...	End Tim...
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15	OK	SOP	GOODCRC	4	UFP	SNK	0	v2	504	35	5,240	0x841	3763043	3763547

Graphical

Details

Name	Value
MESSAGE HEADER REVISION 3 SOP	0x1082
Extended	No
Data objects	1
Message id	0
Power role	SNK
Specification revision	v3
Data role	UFP
Message type	REQUEST
FIXED VARIABLE RDO REVISION 3	0x13825896
EPR PDO requested	No
Object position	1
GiveBack flag	No
Capability mismatch	No
USB communications capable	Yes
No USB suspend	Yes
Unchunked extended messages supported	Yes
EPR mode capable	No
Reserved	0x0
Operating current in 10mA units	0x96 (1500 mA)
Maximum operating current in 10mA units	0x96 (1500 mA)