

## **GRL-USB-PD Compliance Test Solution**

### **DUT Information**

**Manufacturer** : <DUT MANUFACTURER>  
**Model** : <DUT MODEL NUMBER>  
**Serial No.** : <DUT SERIAL NUMBER>

### **Test Information**

**Test Lab** : <TEST LAB>  
**Test Engineer** : <TEST ENGINEER>  
**Remarks** : <REMARKS>  
**Date** : 5\_10\_2018 9\_59\_29 AM

### **Environment Information**

Parameter	Value
GRL USB-PD Software Version	1.2.9.6
GRL USB-PD Firmware Version	V1.2.9.0
Noise Board Version	Gen1 Calibrated
RX voltage Value	-0.0511 V
Noise RX Calibration	PASS
Scope Info	TCPIP0::127.0.0.1::inst0::INSTR
Scope IDN	KEYSIGHT TECHNOLOGIES,MSOS254A,MY54240115,06.10.01001
E-Load Info	GPIB0::5::INSTR
Eload IDN	Agilent Technologies,N3301A,0,A.00.08

# GRL-USB-PD Compliance Test Solution

Parameter	Value
App Mode	Compliance mode
Signal Source	LIVE
CC Line	CH1
Vbus	CH2
Iload	CH3
Trigger Channel	CH4
Tx Mask	True
Rx Mask	False
RX mask Power selection	Neutral Power
Noise Floor Selection	False
Noise Floor Value	250(mV)
Ref Voltage Auto Find	True
Ref Voltage Type	ABSOLUTE
Ref Voltage	0.5625 V
Ref Voltage Hysteresis	0.2 V
Delay Before Acquisition	3 sec
Delay before message capture	4 sec
Eye Diagram bit count	2640 bits
Trigger On	AnyMessage
Device Type	DRP
Is UUT Tethered	False
Cable IR drop Imp(R)	0.14043
External VCONN supply(3V)	Not Selected

**Device Info Capabilities**

Parameter	Vender Info File	Get Capabilities
UUT_Device_Type	DRP	
Vendor_Name	Other World Computing	Other World Computing
Product_Name		
Version_Info		
TID	0x0	0x0
Type_C	NONE	NONE
PD_Specification_Revision	Revision 2.0	Revision 2.0
SOP_Capable	YES	NONE
SOP_P_Capable	NO	NONE
SOP_PP_Capable	NO	NONE
SOP_P_Debug_Capable	NO	NONE
SOP_PP_Debug_Capable	NO	NONE
USB_Comms_Capable	YES	YES
DR_Swap_To_DFP_Supported	YES	NONE
DR_Swap_To_UFP_Supported	YES	NONE
Externally_Powered	YES	YES
VCONN_Swap_To_On_Supported	YES	NONE
VCONN_Swap_To_Off_Supported	YES	NONE
Responds_To_Discov	YES	NONE
Attempts_Discov	YES	NONE
Accepts_PR_Swap_As_Src	NO	NONE
Accepts_PR_Swap_As_Snk	NO	NONE
Requests_PR_Swap_As_Src	NO	NONE
Requests_PR_Swap_As_Snk	NO	NONE
XID	0	
Structured_VDM_Version	V1.0	V1.0
Data_Capable_as_USB_Host	YES	YES
Data_Capable_as_USB_Device	YES	YES
Product_Type		Peripheral
Modal_Operation_Supported	YES	YES
USB_VID	0x1E91	0x1E91

# GRL-USB-PD Compliance Test Solution

Parameter	Vender Info File	Get Capabilities
PID	0xA4AA	0xA4AA
bcdDevice	0x0451	0x451
SVIDs Min	1	1
SVIDs Max	2	2
SVID Fixed	NO	-
SVID1SOP	8087	8087
SVID1Modes Min	1	1
SVID1Modes Max	1	1
SVID1Modes Fixed	YES	-
SVID1Mode1 Enter Mode	YES	YES
SVID2SOP	FF01	FF01
SVID2Modes Min	1	1
SVID2Modes Max	1	1
SVID2Modes Fixed	YES	-
SVID2Mode1 Enter Mode	YES	NONE
PD_Power_as_Source	(85000 mW)	
Rp Value	3A	
USB Suspend may be cleared	YES	YES
Send Ping	NO	NONE
No of Source PDOs	4	
Supply Type #1	Fixed	Fixed
Peak Current #1	0x0(A)	0x0(A)
Voltage #1	0x64(5V)	0x64(5V)
Max Current #1	0x12C(3A)	0x12C(3A)
Supply Type #2	Fixed	Fixed
Peak Current #2	0x0(A)	0x0(A)
Voltage #2	0xB4(9V)	0xB4(9V)
Max Current #2	0x12C(3A)	0x12C(3A)
Supply Type #3	Fixed	Fixed
Peak Current #3	0x0(A)	0x0(A)
Voltage #3	0x12C(15V)	0x12C(15V)
Max Current #3	0x12C(3A)	0x12C(3A)
Supply Type #4	Fixed	Fixed
Peak Current #4	0x0(A)	0x0(A)

# GRL-USB-PD Compliance Test Solution

Parameter	Vender Info File	Get Capabilities
Voltage #4	0x190(20V)	0x190(20V)
Max Current #4	0x1A9(4.25A)	0x1A9(4.25A)
PD_Power_as_Sink	(500 mW)	
No_USB_Suspend_May_Be_Set	NO	NO
GiveBack_May_Be_Set	NO	NO
Higher_Capability_Set	NO	NO
Num_Snk_PDOs	1	
Supply Type #1	Fixed	Fixed
Voltage #1	0x64(5V)	0x64(5V)
OP Current #1	0x0(A)	0x0(A)

**USB-IF High Level Mapping Summary:**

SI No	Test Category	Test Group Description	Test Result
1	PROT_PRIMARY	Protocol Specific Primary	FAIL

**COMPLIANCE\_TEST Result**

SI No	Test ID	Test Name	Test Result
1	TDA.2.2.9	BMC-PROT-GSC-REC	FAIL
		PT_3_12_12_BMC_PROT_GSC_REC_Get_SrcCap >> No Hard reset message received from DUT or incomplete message capture, Verify the protocol capture and confirm the failure	FAIL

