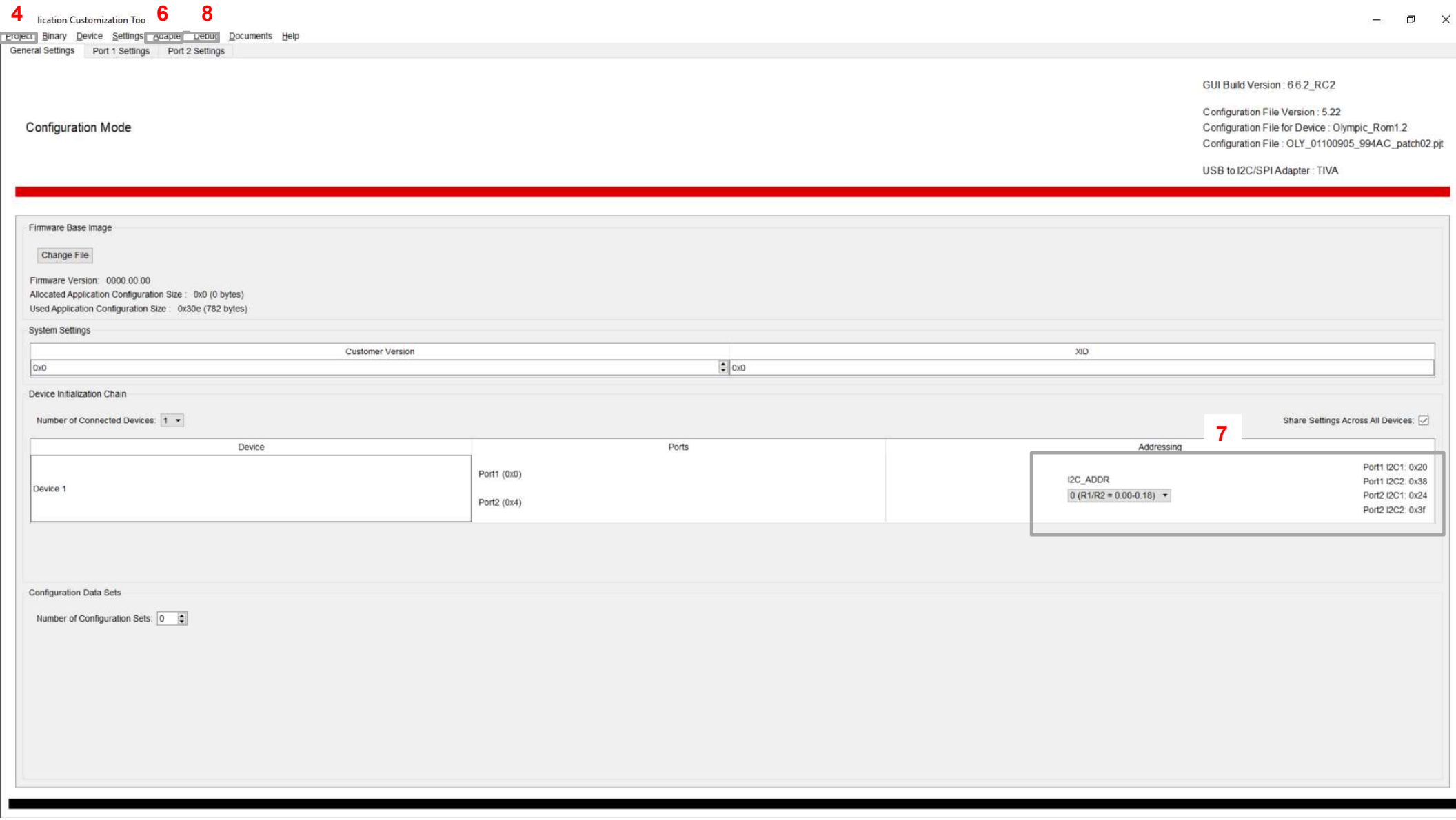
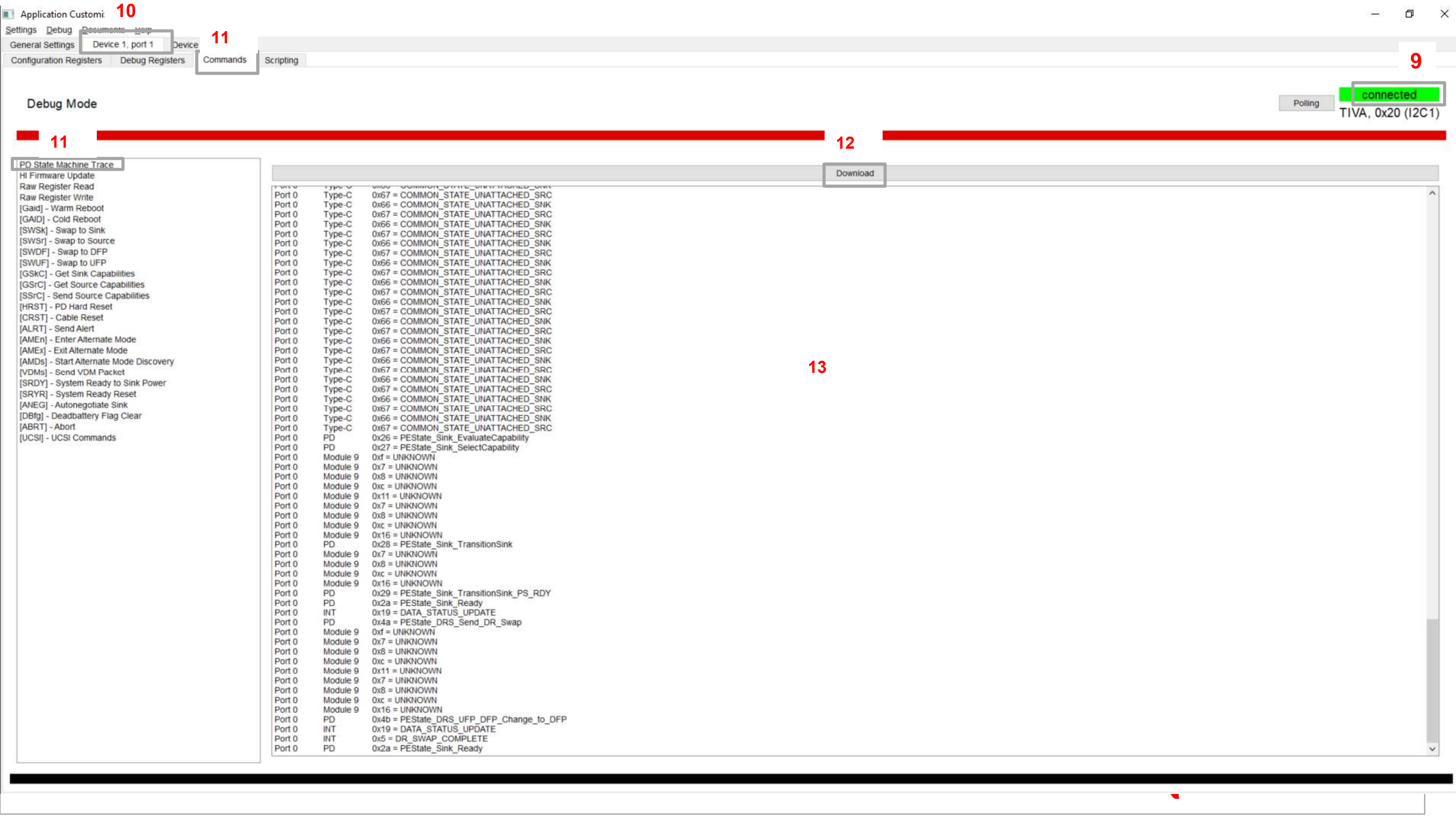
PD State Machine Capturing Steps

1. Install the Application customization (GUI)
2. Connect I2C2bus (SCL, SDA and GND) of PD IC to debugging board mentioned in previous slides
3. Open the GUI
4. Click project-> load project
5. Choose the project file that is currently using on board
6. Click adapter and choose the right adapter
7. Choose the correct I2C address
8. Click Debug->choose “Debug mode”
9. After showing “connected”
10. Select the port that you are going to capture the state machine
11. Select Commands tab and click “PD State Machine Trace”
12. When issue is reproduced, click “Download”
13. Once it is downloaded, please right click on the window and click “select all”
14. Copy and paste to NotePad and send it to FAE


4
lication Customization Too
6
8
Project
Binary
Device
Settings
Adapter
Debug
Documents
Help
General Settings
Port 1 Settings
Port 2 Settings
GUI Build Version : 6.6.2_RC2
Configuration File Version : 5.22
Configuration File for Device : Olympic_Rom1.2
Configuration File : OLY_01100905_994AC_patch02.pjt
USB to I2C/SPI Adapter : TIVA
Configuration Mode
Firmware Base Image
Change File
Firmware Version: 0000.00.00
Allocated Application Configuration Size : 0x0 (0 bytes)
Used Application Configuration Size : 0x30e (782 bytes)
System Settings
Customer Version
XID
0x0
0x0
Device Initialization Chain
Number of Connected Devices: 1
Share Settings Across All Devices:
7
Device
Ports
Addressing
Device 1
Port1 (0x0)
Port2 (0x4)
I2C_ADDR
0 (R1/R2 = 0.00-0.18)
Port1 I2C1: 0x20
Port1 I2C2: 0x38
Port2 I2C1: 0x24
Port2 I2C2: 0x3f
Configuration Data Sets
Number of Configuration Sets: 0


Application Customi
10
Settings
Debug
Documents
Help
General Settings
Device 1, port 1
Device
11
Configuration Registers
Debug Registers
Commands
Scripting
9
Debug Mode
Polling
connected
TIVA, 0x20 (I2C1)
11
12
PD State Machine Trace
HI Firmware Update
Raw Register Read
Raw Register Write
[Gaid] - Warm Reboot
[GAID] - Cold Reboot
[SWSk] - Swap to Sink
[SWSr] - Swap to Source
[SWDF] - Swap to DFP
[SWUF] - Swap to UFP
[GSkC] - Get Sink Capabilities
[GSrC] - Get Source Capabilities
[SSrC] - Send Source Capabilities
[HRST] - PD Hard Reset
[CRST] - Cable Reset
[ALRT] - Send Alert
[AMEn] - Enter Alternate Mode
[AMEx] - Exit Alternate Mode
[AMDs] - Start Alternate Mode Discovery
[VDMs] - Send VDM Packet
[SRDY] - System Ready to Sink Power
[SRYR] - System Ready Reset
[ANEG] - Autonegotiate Sink
[DBfg] - Deadbattery Flag Clear
[ABRT] - Abort
[UCSI] - UCSI Commands
Download
13
Port 0 Type-C 0x67 = COMMON_STATE_UNATTACHED_SRC
Port 0 Type-C 0x66 = COMMON_STATE_UNATTACHED_SNK
Port 0 Type-C 0x67 = COMMON_STATE_UNATTACHED_SRC
Port 0 Type-C 0x66 = COMMON_STATE_UNATTACHED_SNK
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Port 0 Type-C 0x66 = COMMON_STATE_UNATTACHED_SNK
Port 0 Type-C 0x67 = COMMON_STATE_UNATTACHED_SRC
Port 0 Type-C 0x66 = COMMON_STATE_UNATTACHED_SNK
Port 0 Type-C 0x67 = COMMON_STATE_UNATTACHED_SRC
Port 0 PD 0x26 = PEState_Sink_EvaluateCapability
Port 0 PD 0x27 = PEState_Sink_SelectCapability
Port 0 Module 9 0xf = UNKNOWN
Port 0 Module 9 0x7 = UNKNOWN
Port 0 Module 9 0x8 = UNKNOWN
Port 0 Module 9 0xc = UNKNOWN
Port 0 Module 9 0x11 = UNKNOWN
Port 0 Module 9 0x7 = UNKNOWN
Port 0 Module 9 0x8 = UNKNOWN
Port 0 Module 9 0xc = UNKNOWN
Port 0 Module 9 0x16 = UNKNOWN
Port 0 PD 0x28 = PEState_Sink_TransitionSink
Port 0 Module 9 0x7 = UNKNOWN
Port 0 Module 9 0x8 = UNKNOWN
Port 0 Module 9 0xc = UNKNOWN
Port 0 Module 9 0x16 = UNKNOWN
Port 0 PD 0x29 = PEState_Sink_TransitionSink_PS_RDY
Port 0 PD 0x2a = PEState_Sink_Ready
Port 0 INT 0x19 = DATA_STATUS_UPDATE
Port 0 PD 0x4a = PEState_DRS_Send_DR_Swap
Port 0 Module 9 0xf = UNKNOWN
Port 0 Module 9 0x7 = UNKNOWN
Port 0 Module 9 0x8 = UNKNOWN
Port 0 Module 9 0xc = UNKNOWN
Port 0 Module 9 0x11 = UNKNOWN
Port 0 Module 9 0x7 = UNKNOWN
Port 0 Module 9 0x8 = UNKNOWN
Port 0 Module 9 0xc = UNKNOWN
Port 0 Module 9 0x16 = UNKNOWN
Port 0 PD 0x4b = PEState_DRS_UFP_DFP_Change_to_DFP
Port 0 INT 0x19 = DATA_STATUS_UPDATE
Port 0 INT 0x5 = DR_SWAP_COMPLETE
Port 0 PD 0x2a = PEState_Sink_Ready