

# 1. STUSB\_1\_3 Component

## 1. STUSB\_1\_3

Vendor	Library	Name	Version
st.com	Leon2	STUSB	1.3

## 2. SPIRIT address block STUSB\_MAP

Base address	Size	Address block	Description
0x0	0x1000	STUSB_BLOCK	

# STUSB\_BLOCK Register Summary

## 3. STUSB\_BLOCK register list

Offset	Register name	Description	Page
0x06	BCD_TYPEC_REV_LOW	BCD_TYPEC_REV_LOW register	0
0x07	BCD_TYPEC_REV_HIGH	BCD_TYPEC_REV_HIGH register	0
0x08	BCD_USBDPD_REV_LOW	BCD_USBDPD_REV_LOW register	0
0x09	BCD_USBDPD_REV_HIGH	BCD_USBDPD_REV_HIGH register	0
0x0A	DEVICE_CAPAB_HIGH	DEVICE_CAPAB_HIGH register	0
0x0B	ALERT_STATUS_1	ALERT_STATUS_1 register	0
0x0C	ALERT_STATUS_1_MASK	ALERT_STATUS_1_MASK register	0
0x0D	PORT_STATUS_0	PORT_STATUS_0 register	0
0x0E	PORT_STATUS_1	PORT_STATUS_1 register	0
0x0F	TYPEC_MONITORING_STATUS_0	TYPEC_MONITORING_STATUS_0 register	0
0x10	TYPEC_MONITORING_STATUS_1	TYPEC_MONITORING_STATUS_1 register	0
0x11	CC_STATUS	CC_STATUS register	0
0x12	CC_HW_FAULT_STATUS_0	CC_HW_FAULT_STATUS_0 register	0
0x13	CC_HW_FAULT_STATUS_1	CC_HW_FAULT_STATUS_1 register	0
0x16	PRT_STATUS	PRT_STATUS register	0
0x17	PHY_STATUS	PHY_STATUS register	0
0x18	reserved	reserved	
0x19	reserved	reserved	
0x1A	PD_COMMAND	PD_COMMAND register	0
0x1B	reserved	reserved	
0x1D	DEVICE_CTRL	DEVICE_CTRL register	0
0x1E	ANALOG_CNTRL	ANALOG_CNTRL register	0
0x1F	reserved	reserved	
0x20	MONITORING_CTRL_0	MONITORING_CTRL_0 register	0
0x21	MONITORING_CTRL_1	MONITORING_CTRL_1 register	0
0x22	MONITORING_CTRL_2	MONITORING_CTRL_2 register	0
0x23	RESET_CTRL	RESET_CTRL register	RESET_CTRL
0x24	POWER_ACCESSORY_CTRL	POWER_ACCESSORY_CTRL register	POWER_ACCESSORY_CTRL

0x25	VBUS_DISCHARGE_TIME_CTRL	VBUS_DISCHARGE_TIME_CTRL register	VBUS_0
0x26	VBUS_DISCHARGE_CTRL	VBUS_DISCHARGE_CTRL register	VBUS_0
0x27	VBUS_CTRL	VBUS_CTRL register	0
0x28	POWER_ROLE_CTRL	POWER_ROLE_CTRL register	POWER_ROLE_CTRL
0x29	PE_FSM	PE_FSM register	<b>Error! Reference source not found.</b>
0x2E	SPARE_BITS	SPARE_BITS register	0
0x2F	DEVICE_ID	DEVICE_ID register	0
0x30	reserved	reserved	
0x31	RX_HEADER_LOW	RX_HEADER_LOW register	0
0x32	RX_HEADER_HIGH	RX_HEADER_HIGH register	0
0x33	RX_DATA_OBJ1_0	RX_DATA_OBJ1_0 register	0
0x34	RX_DATA_OBJ1_1	RX_DATA_OBJ1_1 register	
0x35	RX_DATA_OBJ1_2	RX_DATA_OBJ1_2 register	
0x36	RX_DATA_OBJ1_3	RX_DATA_OBJ1_3 register	
0x37	RX_DATA_OBJ2_0	RX_DATA_OBJ2_0 register	0
0x38	RX_DATA_OBJ2_1	RX_DATA_OBJ2_1 register	
0x39	RX_DATA_OBJ2_2	RX_DATA_OBJ2_2 register	
0x3A	RX_DATA_OBJ2_3	RX_DATA_OBJ2_3 register	
0x3B	RX_DATA_OBJ3_0	RX_DATA_OBJ3_0 register	0
0x3C	RX_DATA_OBJ3_1	RX_DATA_OBJ3_1 register	
0x3D	RX_DATA_OBJ3_2	RX_DATA_OBJ3_2 register	
0x3E	RX_DATA_OBJ3_3	RX_DATA_OBJ3_3 register	
0x3F	RX_DATA_OBJ4_0	RX_DATA_OBJ4_0 register	0
0x40	RX_DATA_OBJ4_1	RX_DATA_OBJ4_1 register	
0x41	RX_DATA_OBJ4_2	RX_DATA_OBJ4_2 register	
0x42	RX_DATA_OBJ4_3	RX_DATA_OBJ4_3 register	
0x43	RX_DATA_OBJ5_0	RX_DATA_OBJ5_0 register	0
0x44	RX_DATA_OBJ5_1	RX_DATA_OBJ5_1 register	
0x45	RX_DATA_OBJ5_2	RX_DATA_OBJ5_2 register	
0x46	RX_DATA_OBJ5_3	RX_DATA_OBJ5_3 register	
0x47	RX_DATA_OBJ6_0	RX_DATA_OBJ6_0 register	0
0x48	RX_DATA_OBJ6_1	RX_DATA_OBJ6_1 register	
0x49	RX_DATA_OBJ6_2	RX_DATA_OBJ6_2 register	
0x4A	RX_DATA_OBJ6_3	RX_DATA_OBJ6_3 register	
0x4B	RX_DATA_OBJ7_0	RX_DATA_OBJ7_0 register	0
0x4C	RX_DATA_OBJ7_1	RX_DATA_OBJ7_1 register	
0x4D	RX_DATA_OBJ7_2	RX_DATA_OBJ7_2 register	
0x4E	RX_DATA_OBJ7_3	RX_DATA_OBJ7_3 register	
0x50 0x6F	reserved	reserved	
0x70	DPM_PDO_NUMB	DPM_PDO_NUMB register	0
0x71	DPM_SRC_PDO1_0	DPM_SRC_PDO1_0 register	0
0x72	DPM_SRC_PDO1_1	DPM_SRC_PDO1_1 register	
0x73	DPM_SRC_PDO1_2	DPM_SRC_PDO1_2 register	
0x74	DPM_SRC_PDO1_3	DPM_SRC_PDO1_3 register	

0x75	DPM_SRC_PDO2_0	DPM_SRC_PDO2_0 register	
0x76	DPM_SRC_PDO2_1	DPM_SRC_PDO2_1 register	
0x77	DPM_SRC_PDO2_2	DPM_SRC_PDO2_2 register	
0x78	DPM_SRC_PDO2_3	DPM_SRC_PDO2_3 register	
0x79	DPM_SRC_PDO3_0	DPM_SRC_PDO3_0 register	
0x7A	DPM_SRC_PDO3_1	DPM_SRC_PDO3_1 register	
0x7B	DPM_SRC_PDO3_2	DPM_SRC_PDO3_2 register	
0x7C	DPM_SRC_PDO3_3	DPM_SRC_PDO3_3 register	
0x7D	DPM_SRC_PDO4_0	DPM_SRC_PDO4_0 register	
0x7E	DPM_SRC_PDO4_1	DPM_SRC_PDO4_1 register	
0x7F	DPM_SRC_PDO4_2	DPM_SRC_PDO4_2 register	
0x80	DPM_SRC_PDO4_3	DPM_SRC_PDO4_3 register	
0x81	DPM_SRC_PDO5_0	DPM_SRC_PDO5_0 register	
0x82	DPM_SRC_PDO5_1	DPM_SRC_PDO5_1 register	
0x83	DPM_SRC_PDO5_2	DPM_SRC_PDO5_2 register	
0x84	DPM_SRC_PDO5_3	DPM_SRC_PDO5_3 register	
0x85 0x90	reserved	reserved	
0x91	DPM_REQ_RDO3_0	DPM_REQ_RDO3_0 register	<b>Error! Reference source not found.</b>
0x92	DPM_REQ_RDO3_1	DPM_REQ_RDO3_1 register	
0x93	DPM_REQ_RDO3_2	DPM_REQ_RDO3_2 register	
0x94	DPM_REQ_RDO3_3	DPM_REQ_RDO3_3 register	

## STUSB\_BLOCK register descriptions

### BCD\_TYPEC\_REV\_LOW

#### BCD\_TYPEC\_REV\_LOW register

7	6	5	4	3	2	1	0
BCD_TYPEC_REV_7_0							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x06

**Type:** R

**Reset:** 0x12

**Description:** BCD\_TYPEC\_REV\_LOW register

[7:0]	<b>BCD_TYPEC_REV_7_0:</b> Defined Type-C release supported by the device
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### BCD\_TYPEC\_REV\_HIGH

#### BCD\_TYPEC\_REV\_HIGH register

7	6	5	4	3	2	1	0
BCD_TYPEC_REV_15_8							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x07

**Type:** R

**Reset:** 0x00

**Description:** BCD\_TYPEC\_REV\_HIGH register

[7:0]	BCD_TYPEC_REV_15_8: Defined Type-C release supported by the device
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## BCD\_USBDPD\_REV\_LOW

### BCD\_USBDPD\_REV\_LOW register

7	6	5	4	3	2	1	0
BCD_USBDPD_REV_7_0							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x08

**Type:** R

**Reset:** 0x11

**Description:** BCD\_USBDPD\_REV\_LOW register

[7:0]	BCD_USBDPD_REV_7_0: Defined Power Delivery release supported by the device
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## BCD\_USBDPD\_REV\_HIGH

### BCD\_USBDPD\_REV\_HIGH register

7	6	5	4	3	2	1	0
BCD_USBDPD_REV_15_8							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x09

**Type:** R

**Reset:** 0x20

**Description:** BCD\_USBDPD\_REV\_HIGH register

[7:0]	BCD_USBDPD_REV_15_8: Defined Power Delivery release supported by the device
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## DEVICE\_CAPAB\_HIGH

### DEVICE\_CAPAB\_HIGH register

7	6	5	4	3	2	1	0
DEVICE_CAPAB_HIGH							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x0A

**Type:** R

**Reset:** 0x00

**Description:** DEVICE\_CAPAB\_HIGH register

[7:0]	DEVICE_CAPAB_HIGH: Not used
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## ALERT\_STATUS\_1

### ALERT\_STATUS\_1 register

7	6	5	4	3	2	1	0
HARD_RESET_ AL	PORT_STATUS_ _AL	TYPEC_MONIT ORING_STATU S_AL	CC_HW_FAUL T_STATUS_AL	RESERVED	RESERVED	PRT_STATUS_ _AL	PHY_STATUS_ _AL
RC	R	R	R	R	R	R	R

**Address:** STUSB\_BLOCKBaseAddress + 0x0B

**Type:** R

**Reset:** 0x30

**Description:** ALERT\_STATUS\_1 register

[7]	HARD_RESET_AL: TBD
[6]	PORT_STATUS_AL: TBD
[5]	TYPEC_MONITORING_STATUS_AL: TBD
[4]	CC_HW_FAULT_STATUS_AL: TBD
[1]	PRT_STATUS_AL: TBD
[0]	PHY_STATUS_AL: TBD

## ALERT\_STATUS\_1\_MASK

### ALERT\_STATUS\_1\_MASK register

7	6	5	4	3	2	1	0
HARD_RESET_AL_MASK	PORT_STATUS_AL_MASK	TYPEC_MONITORING_STATUS_MASK	CC_FAULT_STATUS_AL_MASK	RESERVED	RESERVED	PRT_STATUS_AL_MASK	PHY_STATUS_AL_MASK
R/W	R/W	R/W	R/W	R	R	R/W	R/W

**Address:** STUSB\_BLOCKBaseAddress + 0x0C

**Type:** R/W

**Reset:** 0xFF

**Description:** ALERT\_STATUS\_1\_MASK register

[7]	<b>HARD_RESET_AL_MASK</b> 0: (UNMASKED) Interrupt unmasked 1: (MASKED) Interrupt masked Initiated by FTP_ALERT_STATUS_1_MASK[7]
[6]	<b>PORT_STATUS_AL_MASK</b> 0: (UNMASKED) Interrupt unmasked 1: (MASKED) Interrupt masked Initiated by FTP_ALERT_STATUS_1_MASK[6]
[5]	<b>TYPEC_MONITORING_STATUS_MASK</b> 0: (UNMASKED) Interrupt unmasked 1: (MASKED) Interrupt masked Initiated by FTP_ALERT_STATUS_1_MASK[5]
[4]	<b>CC_FAULT_STATUS_AL_MASK</b> 0: (UNMASKED) Interrupt unmasked 1: (MASKED) Interrupt masked Initiated by FTP_ALERT_STATUS_1_MASK[4]
[1]	<b>PRT_STATUS_AL_MASK:</b> 0: (UNMASKED) Interrupt unmasked 1: (MASKED) Interrupt masked Initiated by FTP_ALERT_STATUS_1_MASK[1]
[0]	<b>PHY_STATUS_AL_MASK:</b> 0: (UNMASKED) Interrupt unmasked 1: (MASKED) Interrupt masked Initiated by FTP_ALERT_STATUS_1_MASK[0]

## PORT\_STATUS\_0

### PORT\_STATUS\_0 register

7	6	5	4	3	2	1	0
RESERVED							ATTACH_TRANS
R							RC

**Address:** STUSB\_BLOCKBaseAddress + 0x0D

**Type:** R

**Reset:** 0x00

**Description:** PORT\_STATUS\_0 register

[0]	<b>ATTACH_TRANS:</b> 1: Transition detected in Attached state
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## PORT\_STATUS\_1

### PORT\_STATUS\_1 register

7	6	5	4	3	2	1	0
ATTACHED_DEVICE			LOW_POWER_STANDBY	POWER_MODE	DATA_MODE	VCONN_MODE	ATTACH
R			R	R	R	R	R

**Address:** STUSB\_BLOCKBaseAddress + 0x0E

**Type:** RC

**Reset:** 0x00

**Description:** PORT\_STATUS\_1 register

[7:5]	<b>ATTACHED_DEVICE:</b> 000: (NONE_ATT) No device connected 001: (SNK_ATT) Sink device connected 010: (SRC_ATT) Source device connected 011: (DBG_ATT) Debug accessory device connected 100: (AUD_ATT) Audio accessory device connected 101: (POW_ACC_ATT) Powered accessory device connected Others: Do not use
[4]	<b>LOW_POWER_STANDBY:</b> 0: (LP_OFF) Device is operating in normal mode 1: (LP_ON) Device is operating in standby mode
[3]	<b>POWER_MODE:</b> 0: (POW_SNK) 1: (POW_SRC)
[2]	<b>DATA_MODE:</b> 0: (UFP) 1: (DFP)
[1]	<b>VCONN_MODE:</b> 0: (VCONN_OFF) VCONN is not supplied 1: (VCONN_ON) VCONN is supplied
[0]	<b>ATTACH:</b> 0: (UNATTACHED) 1: (ATTACHED)

## TYPEC\_MONITORING\_STATUS\_0

### TYPEC\_MONITORING\_STATUS\_0 register

7	6	5	4	3	2	1	0
PD_TYPEC_HAND_CHECK				VBUS_READY_TRANS	VBUS_VSAFE0V_TRANS	VBUS_VALID_TRANS	VCONN_VALID_TRANS
RC				RC	RC	RC	RC

**Address:** STUSB\_BLOCKBaseAddress + 0x0F

**Type:** R

**Reset:** 0x0F

**Description:** TYPEC\_MONITORING\_STATUS\_0 register

[7:4]	<p><b>PD_TYPEC_HAND_CHECK:</b> hand checking sent by Type C to Power Delivery to feedback requested action</p> <p>0000:cleared</p> <p>0001:PD_PR_SWAP_PS_RDY_ACK</p> <p>0010:PD_PR_SWAP_RP_ASSERT_ACK</p> <p>0011:PD_PR_SWAP_RD_ASSERT_ACK</p> <p>0100:PD_DR_SWAP_PORT_CHANGE_2_DFP_ACK</p> <p>0101:PD_DR_SWAP_PORT_CHANGE_2_UFP_ACK</p> <p>0110:PD_VCONN_SWAP_TURN_ON_VCONN_ACK</p> <p>0111:PD_VCONN_SWAP_TURN_OFF_VCONN_ACK</p> <p>1000:PD_HARD_RESET_COMPLETE_ACK</p> <p>1001:PD_HARD_RESET_TURN_OFF_VCONN_ACK</p> <p>1010:PD_HARD_RESET_PORT_CHANGE_2_DFP_ACK</p> <p>1011:PD_HARD_RESET_PORT_CHANGE_2_UFP_ACK</p> <p>1100:PD_PR_SWAP_SNK_VBUS_OFF_ACK</p> <p>1101:PD_PR_SWAP_SRC_VBUS_OFF_ACK</p> <p>1110:PD_HARD_RESET_RECEIVED_ACK</p> <p>1111:PD_HARD_RESET_SEND_ACK</p>
[3]	<p><b>VBUS_READY_TRANS:</b></p> <p>0: status cleared</p> <p>1: Transition detected on VBUS_READY bit</p>
[2]	<p><b>VBUS_VSAFE0V_TRANS:</b></p> <p>0: status cleared</p> <p>1: Transition detected on VBUS_VSAFE0V bit</p>
[1]	<p><b>VBUS_VALID_TRANS:</b></p> <p>0: status cleared</p> <p>1: Transition detected on VBUS_VALID bit</p>
[0]	<p><b>VCONN_VALID_TRANS:</b></p> <p>0: (NO_TRANS) Status cleared</p> <p>1: (TRANS_DETECTED) Transition detected on VCONN_VALID bit</p>

## TYPEC\_MONITORING\_STATUS\_1

### TYPEC\_MONITORING\_STATUS\_1 register

7	6	5	4	3	2	1	0
RESERVED				VBUS_READY	VBUS_VSAFE0V	VBUS_VALID	VCONN_VALID
R				R	R	R	R

**Address:** STUSB\_BLOCKBaseAddress + 0x10

**Type:** R

**Reset:** 0x0E

**Description:** TYPEC\_MONITORING\_STATUS\_1 register

[3]	<b>VBUS_READY:</b> 0: VBUS disconnected (Unpowered or vSafe0V) 1: VBUS connected (vSafe5V or negotiated power level)
[2]	<b>VBUS_VSAFE0V:</b> 0: VBUS is higher than 0.8V 1: VBUS is lower than 0.8V
[1]	<b>VBUS_VALID:</b> 0: VBUS is lower than 3.9V 1: VBUS is higher than 3.9V
[0]	<b>VCONN_VALID:</b> 0: VCONN is lower than 4.1V or 2.7V 1: VCONN is higher than 4.1V or 2.7V

## CC\_STATUS

### CC\_STATUS register

7	6	5	4	3	2	1	0
REVERSE	SNK_POWER_LEVEL		TYPEC_FSM_STATE				
R	R		R				

**Address:** STUSB\_BLOCKBaseAddress + 0x11

**Type:** R

**Reset:** 0x01

**Description:** CC\_STATUS register

[7]	<b>REVERSE:</b> Connection orientation, indicates CC pin used for PD communication 0: (STRAIGHT_CC1) 1: (TWISTED_CC2)
[6:5]	<b>SNK_POWER_LEVEL:</b> Note: This bit-field is valid only when POWER_MODE==POW_SNK 00: (CUR_DEFAULT) Rp standard current is connected 01: (CUR_1_5A) Rp 1.5A is connected 10: (CUR_3_0A) Rp 3.0A is connected 11: Reserved
[4:0]	<b>TYPEC_FSM_STATE:</b> Indicates Type-C FSM state 0000: (UNATTACHED_SNK) 0001: (ATTACHWAIT_SNK) 0010: (ATTACHED_SNK) 0011: (DEBUGACCESSORY_SNK) 00100: Reserved 00101: Reserved 00110: (SNK_2_SRC_PR_SWAP) Intermediate state during PR Swap from sink to source 00111: (TRYWAIT_SNK) 01000: (UNATTACHED_SRC) 01001: (ATTACHWAIT_SRC) 01010: (ATTACHED_SRC) 01011: (SRC_2_SNK_PR_SWAP) Intermediate state during PR Swap from source to sink



01100: (TRY_SRC)
01101: (UNATTACHED_ACCESSORY)
01110: (ATTACHWAIT_ACCESSORY)
01111: (AUDIOACCESSORY)
10000: (UNORIENTEDDEBUGACCESSORY_SRC)
10001: (POWERED_ACCESSORY)
10010: (UNSUPPORTED_ACCESSORY)
10011: (TYPEC_ERRORRECOVERY)
10100: (TRYDEBOUNCE_SNK) Intermediate state towards TRY_SNK state
10101: (TRY_SNK)
10110: Reserved
10111: (TRYWAIT_SRC)
11000: (UNATTACHEDWAIT_SRC) VCONN intermediate discharge state
11001: (ORIENTEDDEBUGACCESSORY_SRC)
11010: (SRC_2_SNK_PR_SWAP_RD) Intermediate state during PR Swap from source to sink

## CC\_HW\_FAULT\_STATUS\_0

### CC\_HW\_FAULT\_STATUS\_0 register

7	6	5	4	3	2	1	0
TH_145_STAT_US	RESERVED	VPU_OVP_FAULT_TRANS	VPU_VALID_TRANS	RESERVED	VCONN_SW_RVP_FAULT_TRANS	VCONN_SW_OCP_FAULT_TRANS	VCONN_SW_OVP_FAULT_TRANS
RC	R	RC	RC	R	RC	RC	RC

**Address:** STUSB\_BLOCKBaseAddress + 0x12

**Type:** R

**Reset:** 0x10

**Description:** CC\_HW\_FAULT\_STATUS\_0 register

[7]	TH_145_STATUS: TBD
[5]	VPU_OVP_FAULT_TRANS: change in CS_OVP status
[4]	VPU_VALID_TRANS: change in VPUvalidity status
[2]	VCONN_SW_RVP_FAULT_TRANS: TBD
[1]	VCONN_SW_OCP_FAULT_TRANS: TBD
[0]	VCONN_SW_OVP_FAULT_TRANS: TBD

## CC\_HW\_FAULT\_STATUS\_1

### CC\_HW\_FAULT\_STATUS\_1 register

7	6	5	4	3	2	1	0
VPU_OVP_FAULT	VPU_VALID	VCONN_SW_RVP_FAULT_CC1	VCONN_SW_RVP_FAULT_CC2	VCONN_SW_OCP_FAULT_CC1	VCONN_SW_OCP_FAULT_CC2	VCONN_SW_OVP_FAULT_CC1	VCONN_SW_OVP_FAULT_CC2
R	R	R	R	R	R	R	R

**Address:** STUSB\_BLOCKBaseAddress + 0x13

**Type:** R

**Reset:** 0x40

**Description:** CC\_HW\_FAULT\_STATUS\_1 register

[7]	VPU_OVP_FAULT
[6]	VPU_VALID
[5]	VCONN_SW_RVP_FAULT_CC1

[4]	VCONN_SW_RVP_FAULT_CC2
[3]	VCONN_SW_OCP_FAULT_CC1
[2]	VCONN_SW_OCP_FAULT_CC2
[1]	VCONN_SW_OVP_FAULT_CC1
[0]	VCONN_SW_OVP_FAULT_CC2

## PRT\_STATUS

### PRT\_STATUS register

7	6	5	4	3	2	1	0
PRL_TX_ERR	RESERVED	PRT_BIST_SENT	PRT_BIST_RECEIVED	PRL_MSG_SENT	PRL_MSG_RECEIVED	PRL_HW_RST_DONE	PRL_HW_RST_RECEIVED
RC	R	RC	RC	RC	RC	RC	RC

**Address:** STUSB\_BLOCKBaseAddress + 0x16

**Type:** R

**Reset:** 0x00

**Description:** PRT\_STATUS register

[7]	<b>PRL_TX_ERR:</b> 0: Cleared by I2C master 1: Interrupt for TX error on the Protocol Layer
[5]	<b>PRT_BIST_SENT:</b> TBD
[4]	<b>PRT_BIST_RECEIVED:</b> TBD
[3]	<b>PRL_MSG_SENT:</b> 0: Cleared by I2C master 1: Interrupt for message sent from the Protocol Layer when GoodCRC is received
[2]	<b>PRL_MSG_RECEIVED:</b> 0: Cleared by I2C master 1: Interrupt for Protocol Layer Message Received
[1]	<b>PRL_HW_RST_DONE:</b> 0: Cleared by I2C master 1: Interrupt for a PD hardware reset executed (hardware reset has to be completed to set the flag)
[0]	<b>PRL_HW_RST_RECEIVED:</b> 0: Cleared by I2C master 1: Interrupt for a PD hardware reset request coming from RX

## PHY\_STATUS

### PHY\_STATUS register

7	6	5	4	3	2	1	0
RX_MSG_STATUS			RESERVED	BUS_IDLE	TX_MSG_SUCC	TX_MSG_DISC	TX_MSG_FAIL
RC			R	RC	RC	RC	RC

**Address:** STUSB\_BLOCKBaseAddress + 0x17

**Type:** R

**Reset:** 0x00

**Description:** PHY\_STATUS register

[7:5]	<b>RX_MSG_STATUS:</b> TBD
[3]	<b>BUS_IDLE:</b> TBD

[2]	<b>TX_MSG_SUCC:</b> TBD
[1]	<b>TX_MSG_DISC:</b> TBD
[0]	<b>TX_MSG_FAIL:</b> TBD

## PD\_COMMAND

### PD\_COMMAND register

7	6	5	4	3	2	1	0
RESERVED	RESERVED	PD_CMD					
R	R	R/W					

**Address:** STUSB\_BLOCKBaseAddress + 0x1A

**Type:** R/W

**Reset:** 0x00

**Description:** PD\_COMMAND register

[5:0]	<b>PD_CMD:</b> TBD
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## DEVICE\_CTRL

### DEVICE\_CTRL register

7	6	5	4	3	2	1	0
PD_TOP_LAYER		PDO_READY	RDO_READY	VDM_READY	MSGID_CTRL	PHY_TX_RESET	RESERVED
R/W		W	R/W	R/W	R/W	W	R

**Address:** STUSB\_BLOCKBaseAddress + 0x1D

**Type:** R/W

**Reset:** 0x20

**Description:** DEVICE\_CTRL register

[7:6]	<b>PD_TOP_LAYER:</b> It is meaningful only is DEV_CUT[1:0] = TypeC + PD (STUSB46) 00: (PRL) PD top layer is hardware PRL (STUSB4620) 01: (PE) PD top layer is hardware PE (STUSB4610) Full SW control is needed 10: (DL) PD top layer is hardware DPM (STUSB46 with Partial Auto-Run=1) SW control is needed 11: (SDL) PD top layer is hardware DPM (STUSB46 with Full Auto-Run=1) Initialized by FTP_DEVICE_POWER_ROLE_CTRL[7:6]
[5]	<b>PDO_READY</b> Initialized by FTP_DEVICE_POWER_ROLE_CTRL[5]
[4]	<b>RDO_READY:</b> Initialized by FTP_DEVICE_POWER_ROLE_CTRL[4]
[3]	<b>VDM_READY:</b> Initialized by FTP_DEVICE_POWER_ROLE_CTRL[3]
[2]	<b>MSGID_CTRL:</b>
[1]	<b>PHY_TX_RESET:</b> 0: (NO_PHY_TX_RST) Do not reset transmitter of the physical layer 1: (PHY_TX_RST) Reset transmitter of the physical layer

## ANALOG\_CNTRL

### ANALOG\_CNTRL register

7	6	5	4	3	2	1	0
RESERVED				VCONN_ISEL_TH			
R				R/W			

**Address:** STUSB\_BLOCKBaseAddress + 0x1E

**Type:** R/W

**Reset:** 0x0

**Description:** ANALOG\_CNTRL register

[3:0]	<b>VCONN_ISEL_TH</b> Initialized by FTP_ANALOG_CNTRL[3:0]
-------	--

## MONITORING\_CTRL\_0

### MONITORING\_CTRL\_0 register

7	6	5	4	3	2	1	0
VCONN_MONI TOR	VCONN_UVLO _SEL	VBUS_RANGE _MONITORING _EN	VBUS_MONITO RING_EN	RESERVED			
R/W	R/W	R	R	R			

**Address:** STUSB\_BLOCKBaseAddress + 0x20

**Type:** R/W

**Reset:** 0xB0

**Description:** MONITORING\_CTRL\_0 register

[7]	<b>VCONN_MONITOR:</b> 0: (VCONN_MON_OFF) Off 1: (VCONN_MON_ON) Monitor On
[6]	<b>VCONN_UVLO_SEL:</b> 0: (UVLO_HIGH) Select high level UVLO threshold of 4.65 V 1: (UVLO_LOW) Select low level UVLO threshold of 2.65 V
[5]	<b>VBUS_RANGE_MONITORING_EN:</b> vbus monitoring
[4]	<b>VBUS_MONITORING_EN:</b> as soon as TypeC attached

## MONITORING\_CTRL\_1

### MONITORING\_CTRL\_1 register

7	6	5	4	3	2	1	0
VSEL_PDO							
R/W							

**Address:** STUSB\_BLOCKBaseAddress + 0x21

**Type:** R/W

**Reset:** 0x32

**Description:** MONITORING\_CTRL\_1 register

[7:0]	<b>VSEL_PDO:</b> monitor VBUS DAC VALUE
-------	---

## MONITORING\_CTRL\_2

### MONITORING\_CTRL\_2 register

7	6	5	4	3	2	1	0
VSHIFT_HIGH				VSHIFT_LOW			
R/W				R/W			

**Address:** STUSB\_BLOCKBaseAddress + 0x22

**Type:** R/W

**Reset:** 0xFF

**Description:** MONITORING\_CTRL\_2 register

[7:4]	<b>VSHIFT_HIGH:</b> shift register initialisation high level (set OVP level )
[3:0]	<b>VSHIFT_LOW:</b> shift register initialisation low level (set UVP level )

## RESET\_CTRL

### RESET\_CTRL register

7	6	5	4	3	2	1	0
RESERVED							RESET_SW_EN
R/W							R/W

**Address:** STUSB\_BLOCKBaseAddress + 0x23

**Type:** R/W

**Reset:** 0x00

**Description:** RESET\_CTRL register

[0]	<b>RESET_SW_EN:</b> Software reset 0: (SW_RESET_OFF) Software reset disabled 1: (SW_RESET_ON) Software reset enabled
-----	--

## POWER\_ACCESSORY\_CTRL

### POWER\_ACCESSORY\_CTRL register

7	6	5	4	3	2	1	0
RESERVED					ALT_MOD_FAIL	NOT_POW_ACC	POW_ACC_SUP
R/W					R/W	R/W	R/W

**Address:** STUSB\_BLOCKBaseAddress + 0x24

**Type:** R/W

**Reset:** 0x00

**Description:** POWER\_ACCESSORY\_CTRL register

[2]	<b>ALT_MOD_FAIL</b> 0: (ALT_MOD_ON) Alternate mode allowed 1: (ALT_MOD_FAIL) Alternate mode disabled – Used by Type-C FSM to go to UnSupported.Accessory
[1]	<b>NOT_POW_ACC</b> 0: (POW_ACC) Powered accessory present - Used by Type-C FSM to stay in Powered.Accessory state) 1: (NO_POW_ACC) Powered accessory not present – Used by Type-C FSM to go to Try.SNK state
[0]	<b>POW_ACC_SUP</b> 0: (POW_ACC_OFF) Powered accessory not supported - detection disabled in Type-C FSM 1: (POW_ACC_ON) Powered accessory supported - detection enabled in Type-C FSM

Initialized by FTP_PORT_ROLE_CNTRL[5]
---------------------------------------

## VBUS\_DISCHARGE\_TIME\_CTRL

### VBUS\_DISCHARGE\_TIME\_CTRL register

7	6	5	4	3	2	1	0
DISCHARGE_TIME_TO_0V				DISCHARGE_TIME_TRANSITION			
R/W				R/W			

**Address:** STUSB\_BLOCKBaseAddress + 0x25

**Type:** R/W

**Reset:** 0x0

**Description:** VBUS\_DISCHARGE\_TIME\_CTRL register

[7:4]	<b>DISCHARGE_TIME_TO_0V:</b> Discharge time from any contract to OV 800 ms is the default in standard Initialized by FTP_DISCHARGE_TIME_CTRL[7:4]
[3:0]	<b>DISCHARGE_TIME_TRANSITION:</b> Discharge time from any contract to next one the default in standard is 270ms Initialized by FTP_DISCHARGE_TIME_CTRL[3:0]

## VBUS\_DISCHARGE\_CTRL

### VBUS\_DISCHARGE\_CTRL register

7	6	5	4	3	2	1	0
VBUS_DISCHARGE_LEN	RESERVED						
R/W	R						

**Address:** STUSB\_BLOCKBaseAddress + 0x26

**Type:** R/W

**Reset:** 0x00

**Description:** VBUS\_DISCHARGE\_CTRL register

[7]	<b>VBUS_DISCHARGE_EN:</b> TBD
-----	-------------------------------

## VBUS\_CTRL

### VBUS\_CTRL register

7	6	5	4	3	2	1	0
RESERVED						SINK_VBUS_EN	SOURCE_VBUS_EN
R						R/W	R/W

**Address:** STUSB\_BLOCKBaseAddress + 0x27

**Type:** R/W

**Reset:** 0x00

**Description:** VBUS\_CTRL register

[1]	<b>SINK_VBUS_EN</b> 0: (VBUS_EN_SNK_FORCE_DIS) Disable the forced VBUS_EN_SNK pin assertion 1: (VBUS_EN_SNK_FORCE) Force the VBUS EN SNK pin assertion
-----	--

[0]	<b>SOURCE_VBUS_EN</b> 0: (VBUS_EN_SRC_FORCE_DIS) Disable the forced VBUS_EN_SRC pin assertion 1: (VBUS_EN_SRC_FORCE) Force the VBUS EN SRC pin assertion
-----	--

## POWER\_ROLE\_CTRL

### POWER\_ROLE\_CTRL register

7	6	5	4	3	2	1	0
RESERVED					POWER_ROLE		
R					R/W		

**Address:** STUSB\_BLOCKBaseAddress + 0x28

**Type:** R/W

**Reset:** 0x0

**Description:** POWER\_ROLE\_CTRL register

[2:0]	<b>POWER_ROLE:</b> 000: (SRC) Source 001: (SNK_ACC) Sink with Accessory Support 010: (SNK) Snk without Accessory Support 011: (DRP) DRP 100: (DRP_TRY_SRC) DRP with Accessory and Try.SRC support 101: (DRP_TRY_SNK) DRP with Accessory and Try.SNK support Others: Do not use Initialized by FTP_DEVICE_POWER_ROLE_CTRL[2:0]
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## PE\_FSM

### PE\_FSM register

7	6	5	4	3	2	1	0
PE_FSM_STATE							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x29

**Type:** R

**Reset:** 0x00

**Description:** PE\_FSM register

[7:0]	<b>PE_FSM_STATE:</b> Policy Engine Layer FSM state 000000: (PE_INIT) 000001: (PE_SOFT_RESET) 000010: (PE_HARD_RESET) 000011: (PE_SEND_SOFT_RESET) 000100: (PE_C_BIST) 000101: (PE_SRC_STARTUP) 000110: (PE_SRC_DISCOVERY) 000111: (PE_SRC_REQUEST_CAPABILITIES) 001000: (PE_SRC_SEND_CAPABILITIES) 001001: (PE_SRC_NEGOTIATE_CAPABILITIES) 001010: (PE_SRC_TRANSITION_SUPPLY) 001011: (PE_SRC_TSINK_TRANSACTION) 001100: (PE_SRC_TRANSITION_SUPPLY_2) 001101: (PE_SRC_DISABLED) 001110: (PE_SRC_READY) 001111: (PE_SRC_READY_SENDING) 010000: (PE_SRC_CAPABILITY_RESPONSE)
-------	---

010001: (PE\_SNK\_STARTUP)  
 010010: (PE\_SNK\_DISCOVERY)  
 010011: (PE\_SNK\_WAIT\_FOR\_CAPABILITIES)  
 010100: (PE\_SNK\_EVALUATE\_CAPABILITIES)  
 010101: (PE\_SNK\_SELECT\_CAPABILITIES)  
 010110: (PE\_SNK\_TRANSITION\_SINK)  
 010111: (PE\_SNK\_READY)  
 011000: (PE\_SNK\_READY\_SENDING)  
 011001: (PE\_DB\_CP\_CHECK\_FOR\_VBUS)  
 011010: (PE\_PRS\_EVALUATE\_PR\_SWAP)  
 011011: (PE\_PRS\_SEND\_PR\_SWAP)  
 011100: (PE\_PRS\_ACCEPT\_PR\_SWAP)  
 011101: (PE\_PRS\_SRC\_SNK\_TRANSITION\_TO\_OFF\_ST)  
 011110: (PE\_PRS\_SRC\_SNK\_TRANSITION\_TO\_OFF)  
 011111: (PE\_PRS\_SRC\_SNK\_SOURCE\_OFF)  
 100000: (PE\_PRS\_SNK\_SRC\_TRANSITION\_TO\_OFF)  
 100001: (PE\_PRS\_SNK\_SRC\_SOURCE\_ON)  
 100010: (PE\_PRS\_SNK\_SRC\_SOURCE\_ON\_2)  
 100011: (PE\_PRS\_ASSERT\_RD)  
 100100: (PE\_PRS\_ASSERT\_RP)  
 100101: (PE\_DRS\_EVALUATE\_DR\_SWAP)  
 100110: (PE\_DRS\_CHANGE\_TO\_DRP)  
 100111: (PE\_DRS\_REJECT\_DR\_SWAP)  
 101000: (PE\_DRS\_ACCEPT\_DR\_SWAP)  
 101001: (PE\_DRS\_WAIT\_CHANGE)  
 101010: (PE\_DRS\_SEND\_DR\_SWAP)  
 101011: (PE\_VCS\_DFP\_SEND\_SWAP)  
 101100: (PE\_VCS\_DFP\_SEND\_SWAP2)  
 101101: (PE\_VCS\_DFP\_SEND\_SWAP3)  
 101110: (PE\_VCS\_DFP\_WAIT\_FOR\_UFP\_VCONN)  
 101111: (PE\_VCS\_DFP\_TURN\_ON\_VCONN)  
 110000: (PE\_VCS\_DFP\_TURN\_OFF\_VCONN)  
 110001: (PE\_VCS\_DFP\_SEND\_PS\_RDY)  
 110010: (PE\_VCS\_UFP\_REJECT\_VCONN\_SWAP)  
 110011: (PE\_VCS\_UFP\_EVALUATE\_SWAP)  
 110100: (PE\_VCS\_UFP\_ACCEPT\_SWAP)  
 110101: (PE\_VCS\_UFP\_WAIT\_FOR\_DFP\_VCONN)  
 110110: (PE\_VCS\_UFP\_TURN\_ON\_VCONN)  
 110111: (PE\_VCS\_UFP\_TURN\_OFF\_VCONN)  
 111000: (PE\_VCS\_UFP\_SEND\_PS\_RDY)  
 111001: (PE\_HARD\_RESET\_SHUTDOWN)  
 111010: (PE\_HARD\_RESET\_RECOVERY)  
 111011: (PE\_ATTENTION\_RECEIVED)  
 111100: (PE\_UFP\_VDM\_GET\_VDM)  
 111101: (PE\_UFP\_VDM\_SEND\_VDM\_ACK)  
 111110: (PE\_UFP\_VDM\_SEND\_VDM\_NACK)  
 111111: (PE\_ERRORRECOVERY)

## SPARE\_BITS

### SPARE\_BITS register

7	6	5	4	3	2	1	0
---	---	---	---	---	---	---	---



NC	VDD_OVLO_DISABLE	RESET_BY_LDO_DISABLE	VBUS_HIGH_LOW_BYPASS	VBUS_EN_SNK_INV	VSAFE0V_SEL	VBUS_EN_MASK_DIS
R/W	R/W	R/W	R/W	R/W	R/W	R/W

**Address:** STUSB\_BLOCKBaseAddress + 0x2E

**Type:** R/W

**Reset:** 0x00

**Description:** SPARE\_BITS register

[7]	<b>NC</b> Initialized by FTP_SPARE[7]
[6]	<b>VDD_OVLO_DISABLE</b> Initialized by FTP_SPARE[6]
[5]	<b>RESET_BY_LDO_DISABLE</b> 0: (RST_BY_LDO_ON) Enable device reset by forcing VREG_1V2 to 1.8V or higher 1: (RST_BY_LDO_OFF) Disable device reset by forcing VREG_1V2 to 1.8V or higher Initialized by FTP_SPARE[5]
[4]	<b>VBUS_HIGH_LOW_BYPASS</b> Initialized by FTP_SPARE[4]
[3]	<b>VBUS_EN_SNK_INV</b> 0: (VBUS_EN_SNK_NOT_INV) VBUS_EN_SNK not inverted 1: (VBUS_EN_SNK_INV) VBUS_EN_SNK output inverted Initialized by FTP_SPARE[3]
[2:1]	<b>VSAFE0V_SEL</b> 00: (VSAFE0V_0_6) vsafe0V threshold=0.6V 01: (VSAFE0V_0_9) vsafe0V threshold=0.9V 10: (VSAFE0V_1_2) vsafe0V threshold=1.2V 11: (VSAFE0V_1_8) vsafe0V threshold=1.8V Initialized by FTP_SPARE[2:1]
[0]	<b>VBUS_EN_MASK_DIS</b> Initialized by FTP_SPARE[0]

## DEVICE\_ID

### DEVICE\_ID register

7	6	5	4	3	2	1	0
VB47_NOT_VB39	RESERVED		ID			DEV_CUT	
R	R		R			R	

**Address:** STUSB\_BLOCKBaseAddress + 0x2F

**Type:** R

**Reset:** 0x90

**Description:** DEVICE\_ID register

[7]	<b>VB47_NOT_VB39:</b> (Static, hardwired in analog part) 1: VB47 device 0: VB39 device <u>Note:</u> For verification purpose the reset value must be 1.
[4:2]	<b>ID:</b> 010: for Cut2.0 011: for Cut2.1 100: for Cut2.2
[1:0]	<b>DEV_CUT:</b> Initialized by FTP_DEVICE_CUT[7:6]

## RX\_HEADER\_LOW

### RX\_HEADER\_LOW register

7	6	5	4	3	2	1	0
RX_HEADER_7_0							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x31

**Type:** R

**Reset:** 0x00

**Description:** RX\_HEADER\_LOW register

[7:0]	RX_HEADER_7_0: TBD
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## RX\_HEADER\_HIGH

### RX\_HEADER\_HIGH register

7	6	5	4	3	2	1	0
RX_HEADER_15_8							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x32

**Type:** R

**Reset:** 0x00

**Description:** RX\_HEADER\_HIGH register

[7:0]	RX_HEADER_15_8: TBD
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## RX\_DATA\_OBJ1\_0

### RX\_DATA\_OBJ1\_0 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ1_0							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x33

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ1\_0 register

[7:0]	RX_DATA_OBJ1_0
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## RX\_DATA\_OBJ1\_1

### RX\_DATA\_OBJ1\_1 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ1_1							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x34

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ1\_1 register

[7:0]	RX_DATA_OBJ1_1
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## RX\_DATA\_OBJ1\_2

### RX\_DATA\_OBJ1\_2 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ1_2							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x35

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ1\_2 register

[7:0]	RX_DATA_OBJ1_2
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## RX\_DATA\_OBJ1\_3

### RX\_DATA\_OBJ1\_3 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ1_3							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x36

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ1\_3 register

[7:0]	RX_DATA_OBJ1_3
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## RX\_DATA\_OBJ2\_0

### RX\_DATA\_OBJ2\_0 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ2_0							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x37

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ2\_0 register

[7:0]	RX_DATA_OBJ2_0
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## RX\_DATA\_OBJ2\_1

### RX\_DATA\_OBJ2\_1 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ2_1							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x38

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ2\_1 register

[7:0]	RX_DATA_OBJ2_1
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## RX\_DATA\_OBJ2\_2

### RX\_DATA\_OBJ2\_2 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ2_2							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x39

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ2\_2 register

[7:0]	RX_DATA_OBJ2_2
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## RX\_DATA\_OBJ2\_3

### RX\_DATA\_OBJ2\_3 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ2_3							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x3A

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ2\_3 register

[7:0]	RX_DATA_OBJ2_3
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## RX\_DATA\_OBJ3\_0

### RX\_DATA\_OBJ3\_0 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ3_0							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x3B

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ3\_0 register

[7:0]	RX_DATA_OBJ3_0
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## RX\_DATA\_OBJ3\_1

### RX\_DATA\_OBJ3\_1 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ3_1							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x3C

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ3\_1 register

[7:0]	RX_DATA_OBJ3_1
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## RX\_DATA\_OBJ3\_2

### RX\_DATA\_OBJ3\_2 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ3_2							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x3D

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ3\_2 register

[7:0]	RX_DATA_OBJ3_2
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## RX\_DATA\_OBJ3\_3

### RX\_DATA\_OBJ3\_3 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ3_3							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x3E

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ3\_3 register

[7:0]	RX_DATA_OBJ3_3
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## RX\_DATA\_OBJ4\_0

### RX\_DATA\_OBJ4\_0 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ4_0							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x3F

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ4\_0 register

[7:0]	RX_DATA_OBJ4_0
-------	----------------

## RX\_DATA\_OBJ4\_1

### RX\_DATA\_OBJ4\_1 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ4_1							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x40

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ4\_1 register

[7:0]	RX_DATA_OBJ4_1
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## RX\_DATA\_OBJ4\_2

### RX\_DATA\_OBJ4\_2 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ4_2							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x41

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ4\_2 register

[7:0]	RX_DATA_OBJ4_2
-------	----------------

## RX\_DATA\_OBJ4\_3

### RX\_DATA\_OBJ4\_3 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ4_3							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x42

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ4\_3 register

[7:0]	RX_DATA_OBJ4_3
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## RX\_DATA\_OBJ5\_0

### RX\_DATA\_OBJ5\_0 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ5_0							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x43

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ5\_0 register

[7:0]	RX_DATA_OBJ5_0
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## RX\_DATA\_OBJ5\_1

### RX\_DATA\_OBJ5\_1 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ5_1							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x44

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ5\_1 register

[7:0]	RX_DATA_OBJ5_1
-------	----------------

## RX\_DATA\_OBJ5\_2

### RX\_DATA\_OBJ5\_2 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ5_2							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x45

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ5\_2 register

[7:0]	RX_DATA_OBJ5_2
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## RX\_DATA\_OBJ5\_3

### RX\_DATA\_OBJ5\_3 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ5_3							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x46

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ5\_3 register

[7:0]	RX_DATA_OBJ5_3
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## RX\_DATA\_OBJ6\_0

### RX\_DATA\_OBJ6\_0 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ6_0							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x47

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ6\_0 register

[7:0]	RX_DATA_OBJ6_0
-------	----------------

## RX\_DATA\_OBJ6\_1

### RX\_DATA\_OBJ6\_1 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ6_1							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x48

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ6\_1 register

[7:0]	RX_DATA_OBJ6_1
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## RX\_DATA\_OBJ6\_2

### RX\_DATA\_OBJ6\_2 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ6_2							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x49

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ6\_2 register

[7:0]	RX_DATA_OBJ6_2
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## RX\_DATA\_OBJ6\_3

### RX\_DATA\_OBJ6\_3 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ6_3							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x4A

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ6\_3 register

[7:0]	RX_DATA_OBJ6_3
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## RX\_DATA\_OBJ7\_0

### RX\_DATA\_OBJ7\_0 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ7_0							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x4B

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ7\_0 register

[7:0]	RX_DATA_OBJ7_0
-------	----------------

## RX\_DATA\_OBJ7\_1

### RX\_DATA\_OBJ7\_1 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ7_1							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x4C

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ7\_1 register



[7:0]	RX_DATA_OBJ7_1
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## RX\_DATA\_OBJ7\_2

### RX\_DATA\_OBJ7\_2 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ7_2							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x4D

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ7\_2 register

[7:0]	RX_DATA_OBJ7_2
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## RX\_DATA\_OBJ7\_3

### RX\_DATA\_OBJ7\_3 register

7	6	5	4	3	2	1	0
RX_DATA_OBJ7_3							
R							

**Address:** STUSB\_BLOCKBaseAddress + 0x4E

**Type:** R

**Reset:** 0x00

**Description:** RX\_DATA\_OBJ7\_3 register

[7:0]	RX_DATA_OBJ7_3
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## DPM\_PDO\_NUMB

### DPM\_PDO\_NUMB register

7	6	5	4	3	2	1	0
DPM_SRC_PDO_NUMB			RESERVED			DPM_SNK_PDO_NUMB	
R/W			R			R/W	

**Address:** STUSB\_BLOCKBaseAddress + 0x70

**Type:** R/W

**Reset:** 0x0

**Description:** DPM\_PDO\_NUMB register

[7:5]	<b>DPM_SRC_PDO_NUMB:</b> Initialized by SRC_PDO_FILL_0[7:6] + 0x2
[2:0]	<b>DPM_SNK_PDO_NUMB:</b> Initialized by SNK_PDO_FILL_0[6] + 0x2

## DPM\_SRC\_PDO1\_0

### DPM\_SRC\_PDO1\_0 register

7	6	5	4	3	2	1	0
DPM_SRC_PDO1_0							
R/W							

**Address:** STUSB\_BLOCKBaseAddress + 0x71

**Type:** R/W

**Reset:** 0x00

**Description:** DPM\_SRC\_PDO1\_0 register

[7:0]	DPM_SRC_PDO1_0
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## DPM\_SRC\_PDO1\_1

### DPM\_SRC\_PDO1\_1 register

7	6	5	4	3	2	1	0
DPM_SRC_PDO1_1							
R/W							

**Address:** STUSB\_BLOCKBaseAddress + 0x72

**Type:** R/W

**Reset:** 0x00

**Description:** DPM\_SRC\_PDO1\_1 register

[7:0]	DPM_SRC_PDO1_1
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## DPM\_SRC\_PDO1\_2

### DPM\_SRC\_PDO1\_2 register

7	6	5	4	3	2	1	0
DPM_SRC_PDO1_2							
R/W							

**Address:** STUSB\_BLOCKBaseAddress + 0x73

**Type:** R/W

**Reset:** 0x00

**Description:** DPM\_SRC\_PDO1\_2 register

[7:0]	DPM_SRC_PDO1_2: Initialized to 0b00xx0001 with xx = SRC_PDO_FILL_0[1:0]
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## DPM\_SRC\_PDO1\_3

### DPM\_SRC\_PDO1\_3 register

7	6	5	4	3	2	1	0
DPM_SRC_PDO1_3							
R/W							

**Address:** STUSB\_BLOCKBaseAddress + 0x74

**Type:** R/W

**Reset:** 0x00

**Description:** DPM\_SRC\_PDO1\_3 register

[7:0]	DPM_SRC_PDO1_3: Initialized to 0x08
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## DPM\_SRC\_PDO2\_0

### DPM\_SRC\_PDO2\_0 register

7	6	5	4	3	2	1	0
DPM_SRC_PDO2_0							
R/W							

**Address:** STUSB\_BLOCKBaseAddress + 0x75

**Type:** R/W

**Reset:** 0x00

**Description:** DPM\_SRC\_PDO2\_0 register

[7:0]	DPM_SRC_PDO2_0
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## DPM\_SRC\_PDO2\_1

### DPM\_SRC\_PDO2\_1 register

7	6	5	4	3	2	1	0
DPM_SRC_PDO2_1							
R/W							

**Address:** STUSB\_BLOCKBaseAddress + 0x76

**Type:** R/W

**Reset:** 0x00

**Description:** DPM\_SRC\_PDO2\_1 register

[7:0]	DPM_SRC_PDO2_1
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## DPM\_SRC\_PDO2\_2

### DPM\_SRC\_PDO2\_2 register

7	6	5	4	3	2	1	0
DPM_SRC_PDO2_2							
R/W							

**Address:** STUSB\_BLOCKBaseAddress + 0x77

**Type:** R/W

**Reset:** 0x00

**Description:** DPM\_SRC\_PDO2\_2 register

[7:0]	DPM_SRC_PDO2_2
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## DPM\_SRC\_PDO2\_3

### DPM\_SRC\_PDO2\_3 register

7	6	5	4	3	2	1	0
DPM_SRC_PDO2_3							
R/W							

**Address:** STUSB\_BLOCKBaseAddress + 0x78

**Type:** R/W

**Reset:** 0x00

**Description:** DPM\_SRC\_PDO2\_3 register

[7:0]	DPM_SRC_PDO2_3
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## DPM\_SRC\_PDO3\_0

### DPM\_SRC\_PDO3\_0 register

7	6	5	4	3	2	1	0
DPM_SRC_PDO3_0							
R/W							

**Address:** STUSB\_BLOCKBaseAddress + 0x79

**Type:** R/W

**Reset:** 0x00

**Description:** DPM\_SRC\_PDO3\_0 register

[7:0]	DPM_SRC_PDO3_0
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## DPM\_SRC\_PDO3\_1

### DPM\_SRC\_PDO3\_1 register

7	6	5	4	3	2	1	0
DPM_SRC_PDO3_1							
R/W							

**Address:** STUSB\_BLOCKBaseAddress + 0x7A

**Type:** R/W

**Reset:** 0x00

**Description:** DPM\_SRC\_PDO3\_1 register

[7:0]	DPM_SRC_PDO3_1
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## DPM\_SRC\_PDO3\_2

### DPM\_SRC\_PDO3\_2 register

7	6	5	4	3	2	1	0
DPM_SRC_PDO3_2							
R/W							

**Address:** STUSB\_BLOCKBaseAddress + 0x7B

**Type:** R/W

**Reset:** 0x00

**Description:** DPM\_SRC\_PDO3\_2 register

[7:0]	DPM_SRC_PDO3_2
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## DPM\_SRC\_PDO3\_3

### DPM\_SRC\_PDO3\_3 register

7	6	5	4	3	2	1	0
DPM_SRC_PDO3_3							
R/W							

**Address:** STUSB\_BLOCKBaseAddress + 0x7C

**Type:** R/W

**Reset:** 0x00

**Description:** DPM\_SRC\_PDO3\_3 register

[7:0]	DPM_SRC_PDO3_3
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## DPM\_SRC\_PDO4\_0

### DPM\_SRC\_PDO4\_0 register

7	6	5	4	3	2	1	0
DPM_SRC_PDO4_0							
R/W							

**Address:** STUSB\_BLOCKBaseAddress + 0x7D

**Type:** R/W

**Reset:** 0x00

**Description:** DPM\_SRC\_PDO4\_0 register

[7:0]	DPM_SRC_PDO4_0
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### DPM\_SRC\_PDO4\_1

#### DPM\_SRC\_PDO4\_1 register

7	6	5	4	3	2	1	0
DPM_SRC_PDO4_1							
R/W							

**Address:** STUSB\_BLOCKBaseAddress + 0x7E

**Type:** R/W

**Reset:** 0x00

**Description:** DPM\_SRC\_PDO4\_1 register

[7:0]	DPM_SRC_PDO4_1
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### DPM\_SRC\_PDO4\_2

#### DPM\_SRC\_PDO4\_2 register

7	6	5	4	3	2	1	0
DPM_SRC_PDO4_2							
R/W							

**Address:** STUSB\_BLOCKBaseAddress + 0x7F

**Type:** R/W

**Reset:** 0x00

**Description:** DPM\_SRC\_PDO4\_2 register

[7:0]	DPM_SRC_PDO4_2
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### DPM\_SRC\_PDO4\_3

#### DPM\_SRC\_PDO4\_3 register

7	6	5	4	3	2	1	0
DPM_SRC_PDO4_3							
R/W							

**Address:** STUSB\_BLOCKBaseAddress + 0x80

**Type:** R/W

**Reset:** 0x00

**Description:** DPM\_SRC\_PDO4\_3 register

[7:0]	DPM_SRC_PDO4_3
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### DPM\_SRC\_PDO5\_0

#### DPM\_SRC\_PDO5\_0 register

7	6	5	4	3	2	1	0
DPM_SRC_PDO5_0							
R/W							

**Address:** STUSB\_BLOCKBaseAddress + 0x81

**Type:** R/W

**Reset:** 0x00

**Description:** DPM\_SRC\_PDO5\_0 register

[7:0]	DPM_SRC_PDO5_0
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## DPM\_SRC\_PDO5\_1

### DPM\_SRC\_PDO5\_1 register

7	6	5	4	3	2	1	0
DPM_SRC_PDO5_1							
R/W							

**Address:** STUSB\_BLOCKBaseAddress + 0x82

**Type:** R/W

**Reset:** 0x00

**Description:** DPM\_SRC\_PDO5\_1 register

[7:0]	DPM_SRC_PDO5_1
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## DPM\_SRC\_PDO5\_2

### DPM\_SRC\_PDO5\_2 register

7	6	5	4	3	2	1	0
DPM_SRC_PDO5_2							
R/W							

**Address:** STUSB\_BLOCKBaseAddress + 0x83

**Type:** R/W

**Reset:** 0x00

**Description:** DPM\_SRC\_PDO5\_2 register

[7:0]	DPM_SRC_PDO5_2
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## DPM\_SRC\_PDO5\_3

### DPM\_SRC\_PDO5\_3 register

7	6	5	4	3	2	1	0
DPM_SRC_PDO5_3							
R/W							

**Address:** STUSB\_BLOCKBaseAddress + 0x84

**Type:** R/W

**Reset:** 0x00

**Description:** DPM\_SRC\_PDO5\_3 register

[7:0]	DPM_SRC_PDO5_3
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## DPM\_REQ\_RDO3\_0

### DPM\_REQ\_RDO3\_0 register

7	6	5	4	3	2	1	0
DPM_REQ_RDO3_0							
R/W							

**Address:** STUSB\_BLOCKBaseAddress + 0x91

**Type:** R/W

**Reset:** 0x00

**Description:** DPM\_REQ\_RDO3\_0 register

[7:0]	DPM_REQ_RDO3_0
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## DPM\_REQ\_RDO3\_1

### DPM\_REQ\_RDO3\_1 register

7	6	5	4	3	2	1	0
DPM_REQ_RDO3_1							
R/W							

**Address:** STUSB\_BLOCKBaseAddress + 0x92

**Type:** R/W

**Reset:** 0x00

**Description:** DPM\_REQ\_RDO3\_1 register

[7:0]	DPM_REQ_RDO3_1
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## DPM\_REQ\_RDO3\_2

### DPM\_REQ\_RDO3\_2 register

7	6	5	4	3	2	1	0
DPM_REQ_RDO3_2							
R/W							

**Address:** STUSB\_BLOCKBaseAddress + 0x93

**Type:** R/W

**Reset:** 0x00

**Description:** DPM\_REQ\_RDO3\_2 register

[7:0]	DPM_REQ_RDO3_2
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## DPM\_REQ\_RDO3\_3

### DPM\_REQ\_RDO3\_3 register

7	6	5	4	3	2	1	0
DPM_REQ_RDO3_3							
R/W							

**Address:** STUSB\_BLOCKBaseAddress + 0x94

**Type:** R/W

**Reset:** 0x00

**Description:** DPM\_REQ\_RDO3\_3 register

[7:0]	DPM_REQ_RDO3_3
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