1. STUSB1602_1_3 Component

1. STUSB_1_3

Vendor	Library	Name	Version
st.com	Leon2	STUSB1602A	1.3

STUSB_BLOCK Register Summary

2. STUSB_BLOCK register list

Offset	Register name	Description	Page
0x0B	ALERT_STATUS	ALERT_STATUS register	0
0x0C	ALERT_STATUS_MASK	ALERT_STATUS_MASK register	0
0x0D	CC_DETECTION_STATUS_TRANS	CC_DETECTION_STATUS_TRANS register	**Error! Reference source not found.**
0x0E	CC_DETECTION_STATUS	CC_DETECTION_STATUS	**Error! Reference source not found.**
0x0F	TYPE_C_HANDSHAKE and MONITORING_STATUS_TRANS	TYPE_C_HANDSHAKE and MONITORING_STATUS_TRANS	**Error! Reference source not found.**
0x10	MONITORING_STATUS	MONITORING_STATUS register	**Error! Reference source not found.**
0x11	CC_CONNECTION_STATUS	CC_CONNECTION_STATUS	**Error! Reference source not found.**
0x12	HW_FAULT_STATUS_TRANS	HW_FAULT_STATUS_TRANS register	**Error! Reference source not found.**
0x13	HW_FAULT_STATUS	HW_FAULT_STATUS register	**Error! Reference source not found.**
0x16	reserved	-	
0x17	reserved	-	
0x18	CC_CAPABILITY_CTRL	CC_CAPABILITY_CTRL	0
0x19	reserved	-	
0x1A	reserved	-	
0x1B	reserved	-	
0x1C	reserved	-	
0x1D	reserved	-	
0x1E	CC_VCONN_SWITCH_CTRL	CC_VCONN_SWITCH_CTRL register	**Error! Reference source not found.**
0x1F	TYPE_C_CTRL	TYPE_C_CTRL register	0
0x20	MONITORING_CTRL	MONITORING_CTRL register	0
0x21	VBUS_SELECT	VBUS_SELECT register	**Error! Reference source not found.**
0x22	VBUS_RANGE_MONITORING_CT	VBUS_RANGE_MONITORING_CTRL	**Error! Reference source not found.**

	RL	register	
0x23	RESET_CTRL	RESET_CTRL register	RESET_CTRL
0x24	CC_POWERED_ACCESSORY_CTRL	CC_POWERED_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_ENABLE_STATUS	VBUS_ENABLE_STATUS register	**Error! Reference source not found.**
0x28	CC_POWER_MODE_CTRL	CC_POWER_MODE_CTRL register	POWER_ROLE_CTRL
0x2E	VBUS_MONITORING_CTRL	VBUS_MONITORING_CTRL register	VBUS_MONITORING_CTRL
0x2F	DEVICE_CUT	DEVICE_CUT register	DEVICE_CUT

STUSB_BLOCK register descriptions

ALERT_STATUS

ALERT_STATUS register

7	6	5	4	3	2	1	0
HARD_RESET_AL	PORT_STATUS_AL	TYPEC_MONITORING_STATUS_AL	CC_HW_FAULT_STATUS_AL	RESERVED	RESERVED	RESERVED	RESERVED
RC	R	R	R	R	R	R	R

Address: STUSB_BLOCKBaseAddress + 0x0B

Type: R

Reset: 0x30

Description: ALERT_STATUS register

[6]	**PORT_STATUS_AL**: TBD
[5]	**TYPEC_MONITORING_STATUS_AL**: TBD
[4]	**CC_HW_FAULT_STATUS_AL**: TBD

ALERT_STATUS_MASK

ALERT_STATUS_MASK register

7	6	5	4	3	2	1	0
RESERVED	PORT_STATUS_AL_MASK	TYPEC_MONITORING_STATUS_MASK	CC_FAULT_STATUS_AL_MASK	RESERVED	RESERVED	RESERVED	RESERVED
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_MASK register

[7]	RESERVED Initiated by FTP_ALERT_STATUS_MASK[7]
[6]	**PORT_STATUS_AL_MASK** 0: (UNMASKED) Interrupt unmasked 1: (MASKED) Interrupt masked Initiated by FTP_ALERT_STATUS_MASK[6]
[5]	**TYPEC_MONITORING_STATUS_MASK** 0: (UNMASKED) Interrupt unmasked 1: (MASKED) Interrupt masked Initiated by FTP_ALERT_STATUS_MASK[5]
[4]	**CC_FAULT_STATUS_AL_MASK** 0: (UNMASKED) Interrupt unmasked 1: (MASKED) Interrupt masked

	Initiated by FTP_ALERT_STATUS_MASK[4]
[1]	RESERVED Initiated by FTP_ALERT_STATUS_MASK[1]
[0]	RESERVED Initiated by FTP_ALERT_STATUS_MASK[0]

CC_DETECTION_STATUS_TRANS

CC_DETECTION_STATUS_TRANS register

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

Address: STUSB_BLOCKBaseAddress + 0x0D

Type: R

Reset: 0x00

Description: CC_DETECTION_STATUS_TRANS register

[0]	**ATTACH_TRANS**: 1: Transition detected in Attached state

CC_DETECTION_STATUS

CC_DETECTION_STATUS 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: CC_DETECTION_STATUS register

[7:5]	**ATTACHED_DEVICE**: 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]	**LOW_POWER_STANDBY**: 0: (LP_OFF) Device is operating in normal mode 1: (LP_ON) Device is operating in standby mode
[3]	**POWER_MODE**: 0: (POW_SNK) 1: (POW_SRC)

[2]	**DATA_MODE**: 0: (UFP) 1: (DFP)
[1]	**VCONN_MODE**: 0: (VCONN_OFF) VCONN is not supplied 1: (VCONN_ON) VCONN is supplied
[0]	**ATTACH**: 0: (UNATTACHED) 1: (ATTACHED)

TYPE_C_HANDSHAKE and MONITORING_STATUS_TRANS

TYPE_C_HANDSHAKE and MONITORING_STATUS_TRANS 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: TYPE_C_HANDSHAKE and MONITORING_STATUS_TRANS register

[7:4]	**PD_TYPEC_HAND_CHECK**: hand checking sent by Type C to Power Delivery to feedback requested action 0000:cleared 0001:PD_PR_SWAP_PS_RDY_ACK 0010:PD_PR_SWAP_RP_ASSERT_ACK 0011:PD_PR_SWAP_RD_ASSERT_ACK 0100:PD_DR_SWAP_PORT_CHANGE_2_DFP_ACK 0101:PD_DR_SWAP_PORT_CHANGE_2_UFP_ACK 0110:PD_VCONN_SWAP_TURN_ON_VCONN_ACK 0111:PD_VCONN_SWAP_TURN_OFF_VCONN_ACK 1000:PD_HARD_RESET_COMPLETE_ACK 1001:PD_HARD_RESET_TURN_OFF_VCONN_ACK 1010:PD_HARD_RESET_PORT_CHANGE_2_DFP_ACK 1011:PD_HARD_RESET_PORT_CHANGE_2_UFP_ACK 1100:PD_PR_SWAP_SNK_VBUS_OFF_ACK 1101:PD_PR_SWAP_SRC_VBUS_OFF_ACK 1110:PD_HARD_RESET_RECEIVED_ACK 1111:PD_HARD_RESET_SEND_ACK
[3]	**VBUS_READY_TRANS**: 0: status cleared 1: Transition detected on VBUS_READY bit
[2]	**VBUS_VSAFE0V_TRANS**: 0: status cleared

	1: Transition detected on VBUS_VSAFE0V bit
[1]	**VBUS_VALID_TRANS**: 0: status cleared 1: Transition detected on VBUS_VALID bit
[0]	**VCONN_VALID_TRANS**: 0: (NO_TRANS) Status cleared 1: (TRANS_DETECTED) Transition detected on VCONN_VALID bit

MONITORING_STATUS

MONITORING_STATUS 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: MONITORING_STATUS register

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

CC_CONNECTION_STATUS

CC_CONNECTION_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_CONNECTION_STATUS register

[7]	**REVERSE**: Connection orientation, indicates CC pin used for PD communication 0: (STRAIGHT_CC1) 1: (TWISTED_CC2)
[6:5]	**SNK_POWER_LEVEL**: 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]	**TYPEC_FSM_STATE**: Indicates Type-C FSM state 00000: (UNATTACHED_SNK) 00001: (ATTACHWAIT_SNK) 00010: (ATTACHED_SNK) 00011: (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

HW_FAULT_STATUS_TRANS

HW_FAULT_STATUS_TRANS register

7	6	5	4	3	2	1	0
TH_145_STATUS	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: HW_FAULT_STATUS_TRANS register

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

HW_FAULT_STATUS

HW_FAULT_STATUS 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: HW_FAULT_STATUS 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**

PD_ROLE_CTRL

PD_ROLE_CTRL register

7	6	5	4	3	2	1	0
RP_VALUE		SNK_DISCONNECT_MODE	VCONN_DISCH_EN	DR_SWAP_EN	PR_SWAP_EN	VCONN_SWAP_EN	VCONN_EN
R/W		R/W	R/W	R/W	R/W	R/W	R/W

Address: STUSB_BLOCKBaseAddress + 0x18

Type: R/W

Reset: 0x0

Description: PD_ROLE_CTRL register

[7:6]	**RP_VALUE**: 00: (DEFAULT) Default USB Current 01: (1_5A) 1.5A USB Type-C Current 10: (3_0A) 3.0A USB Type-C Current 11: (DO_NOT_USE) Initialized by FTP_PORT_ROLE_CNTRL[7:6]
[5]	**SNK_DISCONNECT_MODE**: 0: (VBUS_OR_SRC) Condition to exit from Attached.SNK to UnAttached.SNK is VBUS or SRC removed 1: (VBUS) Condition to exit from Attached.SNK to UnAttached.SNK is VBUS removed Initialized by FTP_ANALOG_CNTRL[7]
[4]	**VCONN_DISCH_EN**: 0: (VCONN_DISCH_OFF) VCONN discharge disabled when in Source power role 1: (VCONN_DISCH_ON) VCONN discharge enabled for 250ms when in Source power role Initialized by FTP_PORT_ROLE_CNTRL[4]
[3]	**DR_SWAP_EN**: 0: (DR_SWAP_OFF) Data role swap capability is disabled; 1: (DR_SWAP_ON) Data role swap capability is enabled for Source, Sink and DRP. Initialized by FTP_PORT_ROLE_CNTRL[3]
[2]	**PR_SWAP_EN**: 0: (PR_SWAP_OFF) Power role swap capability is disabled; 1: (PR_SWAP_ON) Power role swap capability is enabled for Source, Sink and DRP. Initialized by FTP_PORT_ROLE_CNTRL[2]
[1]	**VCONN_SWAP_EN**: 0: (VCONN_SWAP_OFF) VCONN swap capability is disabled; 1: (VCONN_SWAP_ON) VCONN swap capability is enabled for Source, Sink and DRP. Initialized by FTP_PORT_ROLE_CNTRL[1]
[0]	**VCONN_EN**: 0: (VCONN_OFF) VCONN supply capability disabled 1: (VCONN_ON) VCONN supply capability enabled Initialized by FTP_PORT_ROLE_CNTRL[0]

CC_VCONN_SWITCH_CTRL

CC_VCONN_SWITCH_CTRL 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: CC_VCONN_SWITCH_CTRL register

[3:0]	**VCONN_ISEL_TH**

	Initialized by FTP_ANALOG_CNTRL[3:0]

TYPEC_CTRL

TYPEC_CTRL register

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

Address: STUSB_BLOCKBaseAddress + 0x1F

Type: R/W

Reset: 0x0

Description: TYPEC_CTRL register

[7:4]	**TYPEC_CTRL**: 0000: (NO_COMMAND) 0001: (HARD_RESET_COMPLETE_REQ) 0010: (HARD_RESET_TURN_OFF_VCONN_REQ) 0011: (HARD_RESET_PORT_CHANGE_2_DFP_REQ) 0100: (HARD_RESET_PORT_CHANGE_2_UFP_REQ) 0101: (PR_SWAP_SNK_VBUS_OFF_REQ) 0110: (PR_SWAP_SRC_VBUS_OFF_REQ) 0111: (PR_SWAP_RP_ASSERT_REQ) 1000: (PR_SWAP_RD_ASSERT_REQ) 1001: (DR_SWAP_PORT_CHANGE_2_DFP_REQ) 1010: (DR_SWAP_PORT_CHANGE_2_UFP_REQ) 1011: (VCONN_SWAP_TURN_ON_VCONN_REQ) 1100: (VCONN_SWAP_TURN_OFF_VCONN_REQ) 1101: (I2C_PR_SWAP_PS_RDY_REQ) 1110: (HARD_RESET_RECEIVED_REQ) 1111: (HARD_RESET_SEND_REQ)

MONITORING_CTRL

MONITORING_CTRL register

7	6	5	4	3	2	1	0
VCONN_MONITOR	VCONN_UVLO_SEL	VBUS_RANGE_MONITORING_EN	VBUS_MONITORING_EN	RESERVED			
R/W	R/W	R	R	R			

Address: STUSB_BLOCKBaseAddress + 0x20

Type: R/W

Reset: 0xB0

Description: MONITORING_CTRL register

[7]	**VCONN_MONITOR**: 0: (VCONN_MON_OFF) Off

	1: (VCONN_MON_ON) Monitor On
[6]	**VCONN_UVLO_SEL**: 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]	**VBUS_RANGE_MONITORING_EN**: vbus monitoring
[4]	**VBUS_MONITORING_EN**: as soon as TypeC attached

VBUS_SELECT

VBUS_SELECT register

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

Address: STUSB_BLOCKBaseAddress + 0x21

Type: R/W

Reset: 0x32

Description: VBUS_SELECT register

[7:0]	**VSEL_PDO**: monitor VBUS DAC VALUE

VBUS_RANGE_MONITORING_CTRL

VBUS_RANGE_MONITORING_CTRL 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: VBUS_RANGE_MONITORING_CTRL register

[7:4]	**VSHIFT_HIGH**: shift register initialisation high level (set OVP level)
[3:0]	**VSHIFT_LOW**: 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]	**RESET_SW_EN**: Software reset 0: (SW_RESET_OFF) Software reset disabled 1: (SW_RESET_ON) Software reset enabled

CC_POWERED_ACCESSORY_CTRL

CC_POWERED_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: CC_POWERED_ACCESSORY_CTRL register

[2]	**ALT_MOD_FAIL** 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]	**NOT_POW_ACC** 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]	**POW_ACC_SUP** 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]	**DISCHARGE_TIME_TO_0V**: Discharge time from any contract to OV 800 ms is the default in standard Initialized by FTP_DISCHARGE_TIME_CTRL[7:4]
[3:0]	**DISCHARGE_TIME_TRANSITION**: 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_EN	RESERVED						
R/W	R						

Address: STUSB_BLOCKBaseAddress + 0x26

Type: R/W

Reset: 0x00

Description: VBUS_DISCHARGE_CTRL register

[7]	**VBUS_DISCHARGE_EN**: TBD

VBUS_ENABLE_STATUS

VBUS_ENABLE_STATUS register

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

Address: STUSB_BLOCKBaseAddress + 0x27

Type: R

Reset: 0x00

Description: VBUS_ENABLE_STATUS register

[1]	**SINK_VBUS_EN** 0: (VBUS_EN_SNK_DIS) VBUS_EN_SNK pin assertion Disabled 1: (VBUS_EN_SNK_) VBUS EN SNK pin assertion Enabled
[0]	**SOURCE_VBUS_EN** 0: (VBUS_EN_SRC_DIS) VBUS_EN_SRC pin assertion Disabled 1: (VBUS_EN_SRC) VBUS EN SRC pin assertion Enabled

POWER_ROLE_CTRL

POWER_ROLE_CTRL register

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

Address: STUSB_BLOCKBaseAddress + 0x28

Type: R/W

Reset: 0x0

Description: POWER_ROLE_CTRL register

[2:0]	**POWER_ROLE**: 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]

VBUS_MONITORING_CTRL

VBUS_MONITORING_CTRL 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: VBUS_MONITORING_CTRL register

[7]	**Reserved** Initialized by FTP_SPARE[7]
[6]	**VDD_OVLO_DISABLE** Initialized by FTP_SPARE[6]
[5]	**RESET_BY_LDO_DISABLE** 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]	**VBUS_HIGH_LOW_BYPASS** Initialized by FTP_SPARE[4]
[3]	**VBUS_EN_SNK_INV** 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]	**VSAFE0V_SEL** 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]	**VBUS_EN_MASK_DIS** 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]	Reserved
[4:2]	**ID**: 010: for Cut1.0 011: for Cut1.2 100: for Cut1.3
[1:0]	**DEV_CUT**: STUSB_IDENTIFICATION 00: 1600 01:reserved 10 : 1602 11:Reserved