

HUSB238

REGISTER INFORMATION

REV. 1.1

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REGISTERS

The HUSB238 has registers to store source capabilities, PD status and configure functions. The registers are accessed by I²C interface through SDA and SCL pins. The I²C slave address of the HUSB238 is 0x08.

Table 1 is the summary of the registers.

Table 1. Register Summary

Address	Register Name	Default
0x00	PD_STATUS0	0x00
0x01	PD_STATUS1	0x00
0x02	SRC_PDO_5V	0x00
0x03	SRC_PDO_9V	0x00
0x04	SRC_PDO_12V	0x00
0x05	SRC_PDO_15V	0x00
0x06	SRC_PDO_18V	0x00
0x07	SRC_PDO_20V	0x00
0x08	SRC_PDO	0x00
0x09	GO_COMMAND	0x00

PD_STATUS0

Table 2. PD_STATUS0 (0x00)

Bits	Field Name	Type	Description	Reset
[7:4]	PD_SRC_VOLTAGE	R	The voltage information when an explicit contract is established. 0000 = Unattached 0001 = PD 5V 0010 = PD 9V 0011 = PD 12V 0100 = PD 15V 0101 = PD 18V 0110 = PD 20V Others = Reserved	0000
[3:0]	PD_SRC_CURRENT	R	The current information when an explicit contract is established. 0000 = 0.5A 0001 = 0.7A 0010 = 1A 0011 = 1.25A 0100 = 1.5A 0101 = 1.75A 0110 = 2A 0111 = 2.25A 1000 = 2.5A 1001 = 2.75A 1010 = 3A 1011 = 3.25A 1100 = 3.5A 1101 = 4A 1110 = 4.5A 1111 = 5A	0000

PD_STATUS1

Table 3. PD_STATUS1 (0x01)

Bits	Field Name	Type	Description	Reset
7	CC_DIR	R	0 = CC1 is connected to CC line or unattached mode 1 = CC2 is connected to CC line	0
6	ATTACH	R	0 = HUSB238 is in unattached mode 1 = HUSB238 is in modes other than unattached mode	0
[5:3]	PD_RESPONSE	R	000 = No response 001 = Success 011 = Invalid command or argument 100 = Command not supported 101 = Transaction fail. No GoodCRC is received after sending Others = Reserved	000
2	5V_VOLTAGE	R	Voltage information of 5V contract 0 = Others 1 = 5V	0
[1:0]	5V_CURRENT	R	Current information of 5V contract 00 = Default current 01 = 1.5A 10 = 2.4A 11 = 3A	00

SRC_PDO_5V

Table 4. SRC_PDO_5V (0x02)

Bits	Field Name	Type	Description	Reset
7	SRC_5V_DETECT	R	0 = Not detected 1 = Detected	0
[6:4]	RESERVED	R	Reserved	000
[3:0]	SRC_5V_CURRENT	R	0000 = 0.5A 0001 = 0.7A 0010 = 1A 0011 = 1.25A 0100 = 1.5A 0101 = 1.75A 0110 = 2A 0111 = 2.25A 1000 = 2.50A 1001 = 2.75A 1010 = 3A 1011 = 3.25A 1100 = 3.5A 1101 = 4A 1110 = 4.5A 1111 = 5A	0000

SRC_PDO_9V**Table 5. SRC_PDO_9V (0x03)**

Bits	Field Name	Type	Description	Reset
7	SRC_9V_DETECT	R	0 = Not detected 1 = Detected	0
[6:4]	RESERVED	R	Reserved	000
[3:0]	SRC_9V_CURRENT	R	0000 = 0.5A 0001 = 0.7A 0010 = 1A 0011 = 1.25A 0100 = 1.5A 0101 = 1.75A 0110 = 2A 0111 = 2.25A 1000 = 2.50A 1001 = 2.75A 1010 = 3A 1011 = 3.25A 1100 = 3.5A 1101 = 4A 1110 = 4.5A 1111 = 5A	0000

SRC_PDO_12V**Table 6. SRC_PDO_12V (0x04)**

Bits	Field Name	Type	Description	Reset
7	SRC_12V_DETECT	R	0 = Not detected 1 = Detected	0
[6:4]	RESERVED	R	Reserved	000
[3:0]	SRC_12V_CURRENT	R	0000 = 0.5A 0001 = 0.7A 0010 = 1A 0011 = 1.25A 0100 = 1.5A 0101 = 1.75A 0110 = 2A 0111 = 2.25A 1000 = 2.50A 1001 = 2.75A 1010 = 3A 1011 = 3.25A 1100 = 3.5A 1101 = 4A 1110 = 4.5A 1111 = 5A	0000

SRC_PDO_15V

Table 7. SRC_PDO_15V (0x05)

Bits	Field Name	Type	Description	Reset
7	SRC_15V_DETECT	R	0 = Not detected 1 = Detected	0
[6:4]	RESERVED	R	Reserved	000
[3:0]	SRC_15V_CURRENT	R	0000 = 0.5A 0001 = 0.7A 0010 = 1A 0011 = 1.25A 0100 = 1.5A 0101 = 1.75A 0110 = 2A 0111 = 2.25A 1000 = 2.50A 1001 = 2.75A 1010 = 3A 1011 = 3.25A 1100 = 3.5A 1101 = 4A 1110 = 4.5A 1111 = 5A	0000

SRC_PDO_18V

Table 8. SRC_PDO_18V (0x06)

Bits	Field Name	Type	Description	Reset
7	SRC_18V_DETECT	R	0 = Not detected 1 = Detected	0
[6:4]	RESERVED	R	Reserved	000
[3:0]	SRC_18V_CURRENT	R	0000 = 0.5A 0001 = 0.7A 0010 = 1A 0011 = 1.25A 0100 = 1.5A 0101 = 1.75A 0110 = 2A 0111 = 2.25A 1000 = 2.50A 1001 = 2.75A 1010 = 3A 1011 = 3.25A 1100 = 3.5A 1101 = 4A 1110 = 4.5A 1111 = 5A	0000

SRC_PDO_20V**Table 9. SRC_PDO_20V (0x07)**

Bits	Field Name	Type	Description	Reset
7	SRC_20V_DETECT	R	0 = Not detected 1 = Detected	0
[6:4]	RESERVED	R	Reserved	000
[3:0]	SRC_20V_CURRENT	R	0000 = 0.5A 0001 = 0.7A 0010 = 1A 0011 = 1.25A 0100 = 1.5A 0101 = 1.75A 0110 = 2A 0111 = 2.25A 1000 = 2.50A 1001 = 2.75A 1010 = 3A 1011 = 3.25A 1100 = 3.5A 1101 = 4A 1110 = 4.5A 1111 = 5A	0000

SRC_PDO**Table 10. SRC_PDO (0x08)**

Bits	Field Name	Type	Description	Reset
[7:4]	PDO_SELECT	RW	0000 = Not selected 0001 = SRC_PDO_5V 0010 = SRC_PDO_9V 0011 = SRC_PDO_12V 1000 = SRC_PDO_15V 1001 = SRC_PDO_18V 1010 = SRC_PDO_20V Others = Reserved	0000
[3:0]	RESERVED	R	Reserved	0000

GO_COMMAND**Table 11. GO_COMMAND (0x09)**

Bits	Field Name	Type	Description	Reset
[7:5]	RESERVED	R	Reserved	000
[4:0]	COMMAND_FUNC	RW	00001 = Requests the PDO set by PDO_SELECT 00100 = Send out Get_SRC_Cap command 10000 = Send out hard reset command Others = Reserved	00000

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