

Qwiic Twist Register Map

Byte Number	HEX	Register Name	Type	Read/Write	Power On Reset	Description
0	0x00	id	byte	Read Only	0x5C	Unique Identifier
1	0x01	status	byte	R/W	0x00	Status of the Qwiic Twist. 3:0 = buttonPressed(3), buttonClicked(2), buttonInterrupt(1), encoderInterrupt(0),
2	0x02	firmware_MSB	unsigned int16	Read Only	0x0100	The current firmware version.
3	0x03	firmware_LSB				
4	0x04	interruptEnable	byte	R/W	NVM/User Set	Set the bit to 1 to enable the interrupt for the button or encoder. buttonInterruptEnable(1), encoderInterruptEnable(0). Default is 0x03.
5	0x05	encoderCount_MSB	int16	R/W	0x0000	Value between 32767 and -32768 indicating the number of ticks the user has twisted the knob. 24 ticks per rotation.
6	0x06	encoderCount_LSB				
7	0x07	encoderDifference_MSB	int16	R/W	0x0000	Value between 32767 and -32768 indicating the number of ticks the user has twisted the knob since last movement. Must be cleared after each reading.
8	0x08	encoderDifference_LSB				
9	0x09	timeSinceLastMovement_MSB	unsigned int16	R/W	NVM/User Set	Value between 0 and 65535 indicating the number of milliseconds since last movement. Must be cleared after each reading.
10	0x0A	timeSinceLastMovement_LSB				
11	0x0B	timeSinceLastButton_MSB	unsigned int16	R/W	NVM/User Set	Value between 0 and 65535 indicating the number of milliseconds since last press/release event. Must be cleared after each reading.
12	0x0C	timeSinceLastButton_LSB				
13	0x0D	ledBrightnessRed	byte	R/W	NVM/User Set	Value between 0 and 255 representing the brightness of the red LED. Default is 255.
14	0x0E	ledBrightnessGreen	byte	R/W	NVM/User Set	Value between 0 and 255 representing the brightness of the green LED. Default is 255.
15	0x0F	ledBrightnessBlue	byte	R/W	NVM/User Set	Value between 0 and 255 representing the brightness of the blue LED. Default is 255.
16	0x10	ledConnectRed_MSB	int16	R/W	NVM/User Set	Value between 255 and -255 indicating the amount to change the red LED brightness with each tick movement of the encoder. Default is 0.
17	0x11	ledConnectRed_LSB				
18	0x12	ledConnectGreen_MSB	int16	R/W	NVM/User Set	Value between 255 and -255 indicating the amount to change the green LED brightness with each tick movement of the encoder. Default is 0.
19	0x13	ledConnectGreen_LSB				
20	0x14	ledConnectBlue_MSB				Value between 255 and -255 indicating the amount to change the green LED brightness with each tick

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21	0x15	ledConnectBlue_LSB	int16	R/W	NVM/User Set	Change the green LED brightness with each turn movement of the encoder. Default is 0.
22	0x16	turnInterruptTimeout_MSB	unsigned int16	R/W	NVM/User Set	Value between 0 and 65535 indicating the number of milliseconds that must elapse after the last knob movement before the movement interrupt activates. Default is 250ms.
23	0x17	turnInterruptTimeout_LSB				
24	0x18	i2cAddress	byte	R/W	NVM/User Set	Value between 0x08 and 0x77 (inclusive) that is the address of this Qwiic Twist. Overridden if ADR jumper is closed (address becomes 0x3E). Default address is 0x3F.