M5Stack Unit 8Encoder I2C Protocol

V2 (FW Version)
2024/5/22

REG MAP (Addr:0x41)		0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	note
Counter Value	0x00 R/W	Cnt0-byte0	Cnt0-byte1	Cnt0-byte2	Cnt0-byte3	Cnt1-byte0	Cnt1-byte1	Cnt1-byte2	Cnt1-byte3	Cnt2-byte0	Cnt2-byte1	Cnt2-byte2	Cnt2-byte3	Cnt3-byte0	Cnt3-byte1	Cnt3-byte2	Cnt3-byte3	**Cnt:** -2147483648-2147483647 (will be reset after set reg 0x40)
	0x10 R/W	Cnt4-byte0	Cnt4-byte1	Cnt4-byte2	Cnt4-byte3	Cnt5-byte0	Cnt5-byte1	Cnt5-byte2	Cnt5-byte3	Cnt6-byte0	Cnt6-byte1	Cnt6-byte2	Cnt6-byte3	Cnt7-byte0	Cnt7-byte1	Cnt7-byte2	Cnt7-byte3	
Increment Value	0x20 R	Inc0-byte0	Inc0-byte1	Inc0-byte2	Inc0-byte3	Inc1-byte0	Inc1-byte1	Inc1-byte2	Inc1-byte3	Inc2-byte0	Inc2-byte1	Inc2-byte2	Inc2-byte3	Inc3-byte0	Inc3-byte1	Inc3-byte2	Inc3-byte3	**Inc:** -2147483648-2147483647 (will be reset after get)
	0x30 R	Inc4-byte0	Inc4-byte1	Inc4-byte2	Inc4-byte3	Inc5-byte0	Inc5-byte1	Inc5-byte2	Inc5-byte3	Inc6-byte0	Inc6-byte1	Inc6-byte2	Inc6-byte3	Inc7-byte0	Inc7-byte1	Inc7-byte2	Inc7-byte3	
Counter Reset	0x40 W	Cnt0-RST	Cnt1-RST	Cnt2-RST	Cnt3-RST	Cnt4-RST	Cnt5-RST	Cnt6-RST	Cnt7-RST									**RST:** write 1 to reset counter
Button Value	0x50 R	BNT0	BNT1	BNT2	BNT3	BNT4	BNT5	BNT6	BNT7									**BNT:** 0~1
Button TOGGLE COUNT	0x50 R/W									BNT0 TOGGLE	BNT1 TOGGLE	BNT2 TOGGLE	BNT3 TOGGLE	BNT4 TOGGLE	BNT5 TOGGLE	BNT6 TOGGLE	BNT7 TOGGLE	**Button toggle counting, reset to zero after reading**
Switch& Encoder change flag&One Byte Button register	0x60 R	SW value	Encoder change flag	One Byte Button register														**SW Value:** 0~1 **Encoder change flag(0:not change, 1:changed):** **bit0: channel 0** **bit1: channel 1** **bit2: channel 2** **bit3: channel 3** **bit4: channel 4** **bit5: channel 5** **bit6: channel 6** **bit7: channel 7** **reset to zero after reading** **One Button register(0:press, 1:no press):** **bit0: button 0** **bit1: button 1** **bit2: button 2** **bit3: button 3** **bit4: button 4** **bit5: button 5** **bit6: button 6** **bit7: button 7**
RGB	0x70 R/W	LED0-R	LED0-G	LED0-B	LED1-R	LED1-G	LED1-B	LED2-R	LED2-G	LED2-B	LED3-R	LED3-G	LED3-B	LED4-R	LED4-G	LED4-B	LED5-R	**R/G/B:** 0~255
	0x80 R/W	LED5-G	LED5-B	LED6-R	LED6-G	LED6-B	LED7-R	LED7-G	LED7-B	LED8-R	LED8-G	LED8-B						
Firmware Version	0xF0 R															Version		**Version:** firmware version number
I2C Address	0xF0 R/W																Address	**Address:** 1~127