

M5Stack Unit Roller485 I2C Protocol											Registers marked in red, parameters can be saved to flash					V1 (FW Version)			
REG MAP (Addr:0x64)		0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	note	
Motor configuration & Motor parameters	Motor Config	0x00 W/R	Output	Mode									Motor Over Range Protection			Button switching mode enable	Motor Stall Protection	Output 0: Motor off 1: Motor on Mode 1: Speed Mode 2: Position Mode 3: Current Mode 4: Encoder Mode Button switching mode enable: 0: Off; 1: Press and hold for 5S to switch modes in running mode. Motor Stall Protection: 0: Disable 1: Enable Motor Position Over Range Protection: 0: Disable 1: Enable	
	Remove protection	0x00 W											Release stall protection					Write 1 to remove protection	
	Motor Status	0x00 R												Motor Status	Motor Error Code			Motor Status: 0: Standby; 1: Running; 2: Error Motor Error Code: 1: Overvoltage 2: Jam 4: Over Range	
	MotorID	0x10 W/R	MotorID																0-255
	485 BPS	0x10 W/R		BPS															BPS: 0,115200bps; 1,19200bps; 2,9600bps;
	RGB Brightness	0x10 W/R			RGB Brightness														RGB Brightness: 0-100
Speed Control	Setting Speed X100 Int	0x40 W/R	Speed Setting-byte0	Speed Setting-byte1	Speed Setting-byte2	Speed Setting-byte3												Speed Setting = Speed Setting-byte0 + Speed Setting-byte1 * 256 + Speed Setting-byte2 * 65536 + Speed Setting-byte3 * 16777216 Actual Speed Setting = Speed Setting/100 Range: -210000000-210000000	
	Max Current X100 Int	0x50 W/R	Max Current-byte0	Max Current-byte1	Max Current-byte2	Max Current-byte3												Max Current = Max Current-byte0 + Max Current-byte1 * 256 + Max Current-byte2 * 65536 + Max Current-byte3 * 16777216 Actual Max Current = Max Current/100 Range: -120000-120000	
	Speed Readback X100 Int	0x60 R	Speed Readback-byte0	Speed Readback-byte1	Speed Readback-byte2	Speed Readback-byte3												Speed Readback = Speed Readback-byte0 + Speed Readback-byte1 * 256 + Speed Readback-byte2 * 65536 + Speed Readback-byte3 * 16777216 Actual Speed Readback = Speed Readback/100	
	Speed PID Int	0x70 W/R	P-X100000-byte0	P-X100000-byte1	P-X100000-byte2	P-X100000-byte3	I-X1000000-byte0	I-X1000000-byte1	I-X1000000-byte2	I-X1000000-byte3	D-X100000-byte0	D-X100000-byte1	D-X100000-byte2	D-X100000-byte3				P/I/D: PID = PID-byte0 + PID-byte1 * 256 + PID-byte2 * 65536 + PID-byte3 * 16777216 For example: P=1, P setting value=1*100000=100000	
Position Control	Position Setting X100 Int	0x80 W/R	Position Setting-byte0	Position Setting-byte1	Position Setting-byte2	Position Setting-byte3												Position Setting = Position Setting-byte0 + Position Setting-byte1 * 256 + Position Setting-byte2 * 65536 + Position Setting-byte3 * 16777216 Actual Position Setting = Position Setting/100 Range: -210000000-210000000	
	Max Current X100 Int	0x20 W/R	Max Current-byte0	Max Current-byte1	Max Current-byte2	Max Current-byte3												Max Current = Max Current-byte0 + Max Current-byte1 * 256 + Max Current-byte2 * 65536 + Max Current-byte3 * 16777216 Actual Max Current = Max Current/100 Range: -120000-120000	
	Position Readback X100 Int	0x90 R	Position Readback-byte0	Position Readback-byte1	Position Readback-byte2	Position Readback-byte3												Position Readback = Position Readback-byte0 + Position Readback-byte1 * 256 + Position Readback-byte2 * 65536 + Position Readback-byte3 * 16777216 Actual Position Readback = Position Readback/100	
	Position PID Int	0xA0 W/R	P-X100000-byte0	P-X100000-byte1	P-X100000-byte2	P-X100000-byte3	I-X1000000-byte0	I-X1000000-byte1	I-X1000000-byte2	I-X1000000-byte3	D-X100000-byte0	D-X100000-byte1	D-X100000-byte2	D-X100000-byte3				P/I/D: PID = PID-byte0 + PID-byte1 * 256 + PID-byte2 * 65536 + PID-byte3 * 16777216 For example: P=1, P setting value=1*100000=100000	

Current Control	Current Setting X100 Int	0x80 W/R	Current Setting-byte0	Current Setting-byte1	Current Setting-byte2	Current Setting-byte3									Current Setting = Current Setting-byte0 + Current Setting-byte1 * 256 + Current Setting-byte2 * 65536 + Current Setting-byte3 * 16777216 Actual Current Setting = Current Setting/100 Range: -120000-120000
	Current Readback X100 Int	0xC0 R	Current Readback-byte0	Current Readback-byte1	Current Readback-byte2	Current Readback-byte3									Current Readback = Current Readback-byte0 + Current Readback-byte1 * 256 + Current Readback-byte2 * 65536 + Current Readback-byte3 * 16777216 Actual Current Readback = Current Readback/100
System	RGB	0x30 W/R	RGB-B	RGB-G	RGB-R	RGB Mode									RGB Mode: 0, Sys-default 1, User-define
	VIN X100 Int	0x30 R					VIN X100-byte0	VIN X100-byte1	VIN X100-byte2	VIN X100-byte3					VIN X100 = VIN X100-byte0 + VIN X100-byte1 * 256 + VIN X100-byte2 * 65536 + VIN X100-byte3 * 16777216 Actual VIN = VIN X100/100
	Temp Int	0x30 R					Temp-byte0	Temp-byte1	Temp-byte2	Temp-byte3					Temp = Temp-byte0 + Temp-byte1 * 256 + Temp-byte2 * 65536 + Temp-byte3 * 16777216
	Encoder Counter	0x30 W/R									Encoder Counter-byte0	Encoder Counter-byte1	Encoder Counter-byte2	Encoder Counter-byte3	Encoder Counter = Encoder Counter-byte0 + Encoder Counter-byte1 * 256 + Encoder Counter-byte2 * 65536 + Encoder Counter-byte3 * 16777216
	Flash Writeback	0xF0 W	Flash Writeback											Write 1 save to flash	
	Firmware Version	0xF0 R											Version	Version: firmware version number	
I2C Address (Can be save to flash)	0xF0 R/W											Address	Address: 1-127		