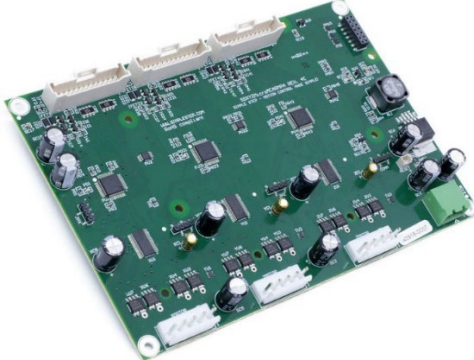
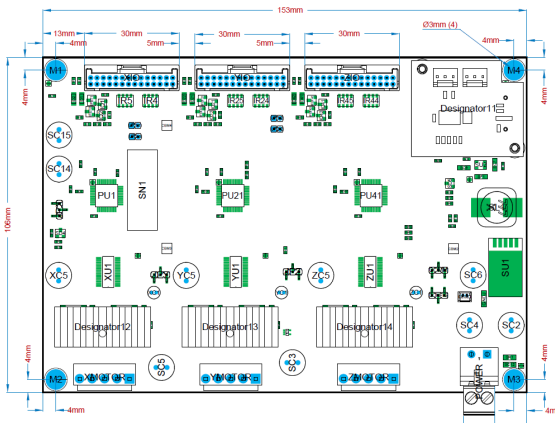


# Triple Axis Microstepping Controller (SSXYZMicroMC-6x) (Medium Current)



**Communication board not Included**

**Dimensions:**



**6.04" x 4.18" x 0.8"**  
**153.416mm x 106.172mm x 20.00mm**

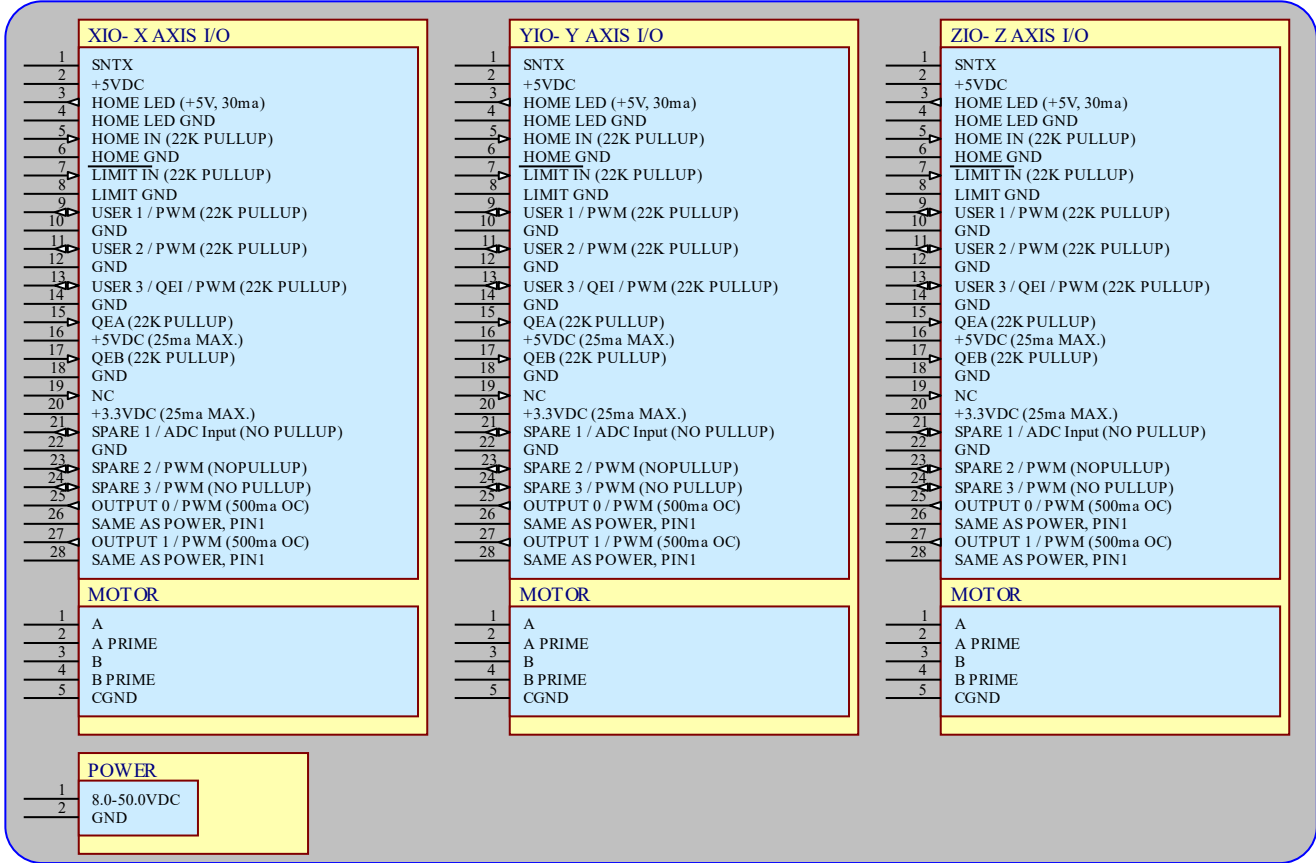
## Specifications

	Minimum	Maximum
RoHS Compliant	Yes	
Total Motor Axis/Board:	3	
Motor Driver Type (per axis):	Bipolar Stepper Driver	
Motor Driver Stepping Range (per axis):	Full, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/128, 1/256	
Motor Stepping Speeds (per axis):	1 sps	5,999,633 sps
Motor Idle Power Modes (per axis):	OFF to Maximum Power Setting	
Maximum Current Control Setting (per axis):	Software Controlled Single 8 bit DAC	
Driver Phase Short Circuit Protection:	Yes	
Driver Thermal Shutdown Protection:	Yes	
Driver Junction Temperature (Thermal Shutdown):	-	+165 degrees C (+329 degrees F)
Motor Current Limits (per axis)		
Running:	0.100 amps/phase	4.00 amps/phase
Idle:	0.00 amps/phase	To maximum setting
Operating Voltages:	8.0VDC	50.0VDC
Ambient Temperature Range		
Operating:	0 degrees C (32 degrees F)	+70 degrees C (158 degrees F)
Storage:	-40 degrees C (-40 degrees F)	+125 degrees C (257 degrees F)
Maximum Controller Boards on One (1) Serial Line	16 (up to 255 if 2-digit address is used)	
Communications:	Communications boards sold separately	
Communication Baud rates:	9600, 19200, 38400, 57600 ( <b>default</b> ), 115200, 230400, 460800	
Home Sensor Input (per axis):	Infrared (Current Limited to 25ma) Sensor Input or direct drive 5VDC	
Limit Sensor Input (per axis):	Microswitch type Input (Normally Open)	
Dedicated User Input Lines (per axis):	3-Inputs with on board 10K pull-ups, 0-5.0VDC Input, 0-3.3VDC Output 3-Inputs with no pull-ups, 0-3.3VDC Input/Output	
Dedicated User Output Lines (per axis):	2 – Open collector MOSFET 0.5 amp - 0VDC to Board operating voltage with diode clamp	
Outputs (each):	2 - Open Collector MOSFET and 5 - TTL 0 to 3.3VDC PWM's	
PWM Outputs (per axis):	2 - Open Collector MOSFET and 5 - TTL 0 to 3.3VDC PWM's	
ADC Inputs (per axis):	1 - (SPARE 1) 0 to 3.3VDC, 12-bit ADC	
Quadrature Encoder Interface (per axis):	Yes (Single ended only)	
Quadrature Encoder Maximum Frequency (per axis):	1.5MHz	
Quadrature Encoder Modes (per axis):	x1, x2 and x4	
Quadrature Encoder scaling (per axis):	Double Precision Floating Point	

# Triple Axis Microstepping Controller (SSXYZMicroMC-6x)

## (Medium Current)

SSXYZMicroMC-6x



Connector Name	Connector Type	Mating Connector P/N
POWER	Phoenix Contact	1754449
XIO, YIO, ZIO	Molex iGrid	501646-2800
XMOTOR, YMOTOR, ZMOTOR	JST Sales	VHR-5N



**For more information or to place an order, please go to our website at [www.simplestep.com](http://www.simplestep.com)**

The specifications in this publication are believed to be accurate and reliable. However, it is the responsibility of the product user to determine the suitability of any Simple Step® product for a specific application. While defective products will be replaced without charge if promptly returned, no liability is assumed beyond such replacement. Simple Step® - Motion Control made Simple!®

12 West Owassa Turnpike, Newton, NJ 07860 USA Phone: 973-948-2938 Email: [Sales@simplestep.com](mailto:Sales@simplestep.com)