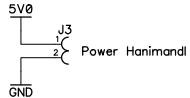
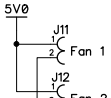


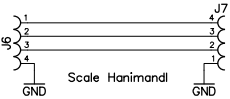
The MP1584 does not provide enough power if you want to power the HaniMandel via the turntable. If you want that, you have to chose a better DCDC converter.



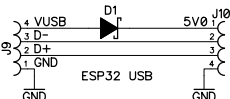
Optional: If the HaniMandel is not to be powered by the power supply from the turntable.



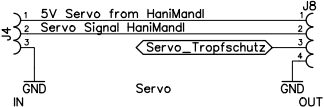
Optional: It is only needed if the stepper motor or the TMC2209 gets too hot.



Direct connection from the scale on the turntable to the input of the scale on the HaniMandel.



Optional: Can be omitted if the module is connected directly to the USB of the computer for flashing.



Optional connection for TFT Display 320x240 (SPI mode)			
ESP32		TFT Display	
GND	14/38	GND	
V3V	1	VCC	
SPI_CLK/G18	30	SCL	
SPI_MOSI/G23	37	SDA	
G14	12	RES	
G17	28	DC	
SPI_CS/G5	29	CS	

TMC2209 Microstep resolution						
uStep	MS1	MS2	R1	R2	R3	R4
1/8	GND	GND		X	X	
1/32	GND	V3V	X		X	
1/64	V3V	GND		X		X
1/16	V3V	V3V	X	X		

Important! If you use separate supplies for the turntable and HaniMandel, make sure that GND from the turntable and HaniMandel is connected somewhere.