

VM functional minimum = 4.5 V
 VM recommended = 24 V
 VM functional maximum = 33 V
 VM absolute maximum = 35 V

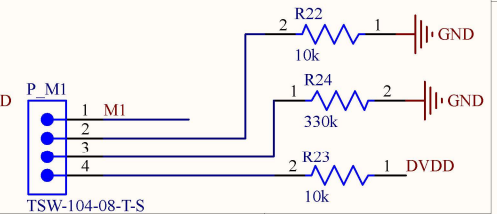
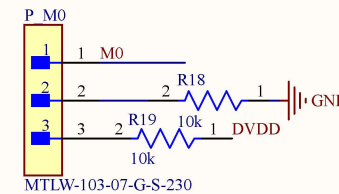
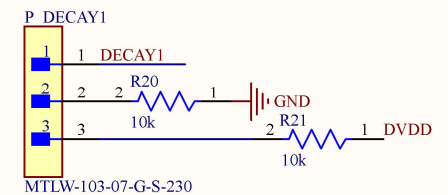
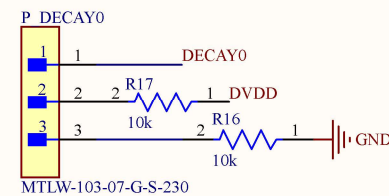
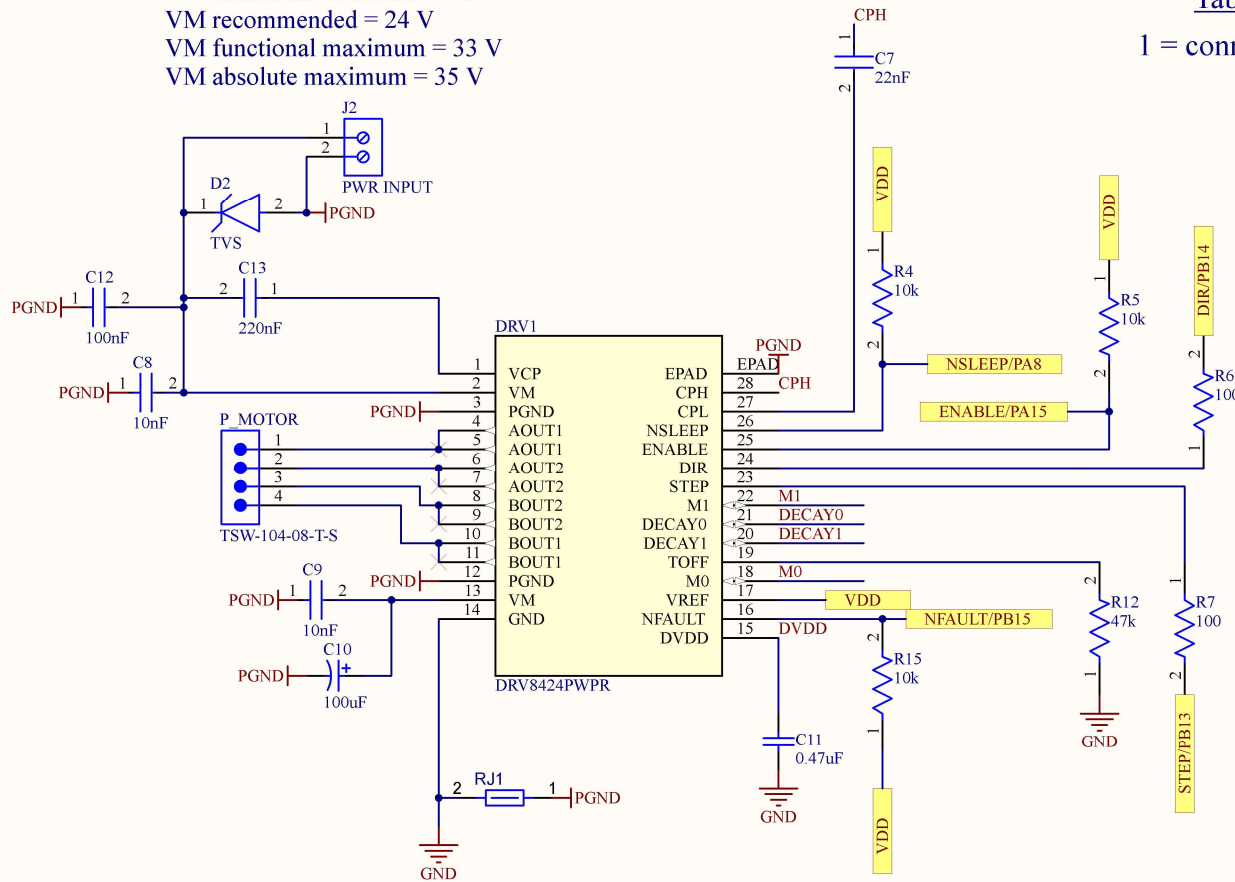
Tables 7-3 and 7-7 were taken from the DRV8424 datasheet
 1 = connect to DVDD, 0 = connect to GND, Hi-Z = unconnected


Table 7-3. Microstepping Indexer Settings

MODE0	MODE1	STEP MODE
0	0	Full step (2-phase excitation) with 100% current
0	330kΩ to GND	Full step (2-phase excitation) with 71% current
1	0	Non-circular 1/2 step
Hi-Z	0	1/2 step
0	1	1/4 step
1	1	1/8 step
Hi-Z	1	1/16 step
0	Hi-Z	1/32 step
Hi-Z	330kΩ to GND	1/64 step
Hi-Z	Hi-Z	1/128 step
1	Hi-Z	1/256 step

Table 7-7. Decay Mode Settings

DECAY0	DECAY1	INCREASING STEPS	DECREASING STEPS
0	0	Smart tune Dynamic Decay	Smart tune Dynamic Decay
0	1	Smart tune Ripple Control	Smart tune Ripple Control
1	0	Mixed decay: 30% fast	Mixed decay: 30% fast
1	1	Slow decay	Mixed decay: 30% fast
Hi-Z	0	Mixed decay: 60% fast	Mixed decay: 60% fast
Hi-Z	1	Slow decay	Slow decay



Module: H17R0	Title: H17R0_Frontend.SchDoc		 HEXABITZ www.hexabitz.com
Description: 2.5A Stepper Motor Driver		Revision: 1 Size: Letter	
Date: 11/20/2025	Time: 8:47:55 PM	Sheet 2 of 3	