

Hardkernel

Sheet: /
File: motor_fix.kicad_sch

Title: DC Motor driver

Size: A4
Date: 20250403

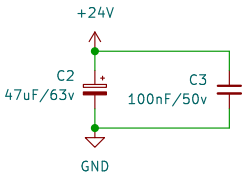
KiCad E.D.A. 9.0.1

Rev: 20250403

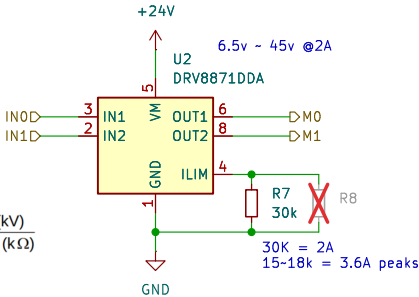
Id: 1/3

<https://www.ti.com/kr/lit/gpn/drv8871>

IN1	IN2	OUT1	OUT2	DESCRIPTION
0	0	High-Z	High-Z	Coast; H-bridge disabled to High-Z (sleep entered after 1 ms)
0	1	L	H	Reverse (Current OUT2 → OUT1)
1	0	H	L	Forward (Current OUT1 → OUT2)
1	1	L	L	Brake; low-side slow decay



$$I_{TRIP} \text{ (A)} = \frac{V_{ILIM} \text{ (kV)}}{R_{ILIM} \text{ (k}\Omega\text{)}} = \frac{64 \text{ (kV)}}{R_{ILIM} \text{ (k}\Omega\text{)}}$$



Sheet: /motor_ch0/
File: driver.kicad_sch

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Date:

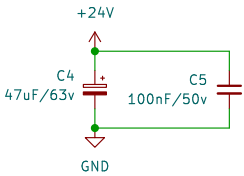
KiCad E.D.A. 9.0.1

Rev:

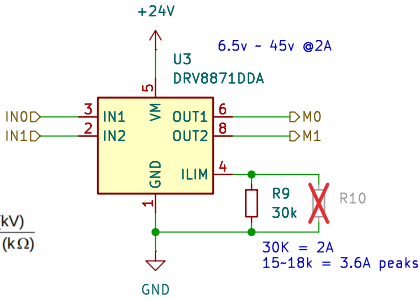
Id: 2/3

<https://www.ti.com/kr/lit/gpn/drv8871>

IN1	IN2	OUT1	OUT2	DESCRIPTION
0	0	High-Z	High-Z	Coast; H-bridge disabled to High-Z (sleep entered after 1 ms)
0	1	L	H	Reverse (Current OUT2 → OUT1)
1	0	H	L	Forward (Current OUT1 → OUT2)
1	1	L	L	Brake; low-side slow decay



$$I_{TRIP} \text{ (A)} = \frac{V_{ILIM} \text{ (kV)}}{R_{ILIM} \text{ (k}\Omega\text{)}} = \frac{64 \text{ (kV)}}{R_{ILIM} \text{ (k}\Omega\text{)}}$$



Sheet: /motor_ch1/
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Date:

KiCad E.D.A. 9.0.1

Rev:

Id: 3/3