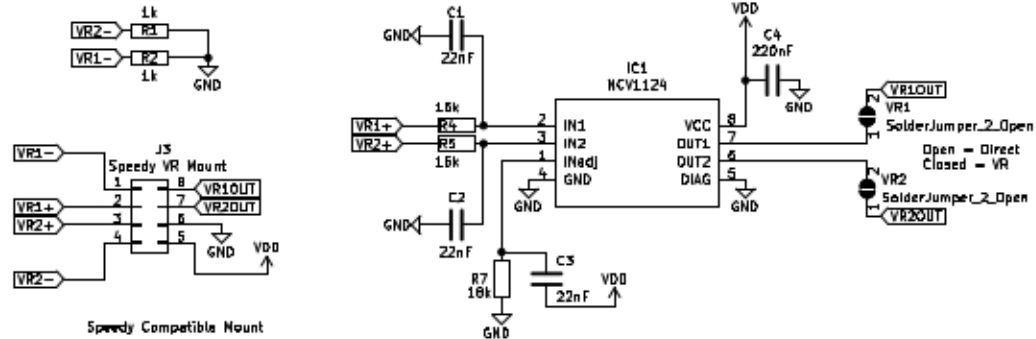Duel VR Conditioner based on the NCV1124
Designed to be compatible with standard Speeduino compatible VR-Conditioner Mount

Setup Tips:
Close solder jumper for one or both inputs with connected VR sensor.
You must leave jumper open if input is connected to square wave signal (hall sensor) as the conditioner cannot pass this signal.
Although recommended VR- is not required for conditioning. If not connected it must be tied to engine ground.

VR2- R1 1k
VR1- R2
       1k
       GND

J3
Speedy VR Mount
VR1-
VR1+
VR2+

VR1OUT
VR2OUT
GND VDD

Speedy Compatible Mount

C1 22nF GND

VR1+ R4 1.6k
VR2+ R5
       1.6k

C2 22nF GND

R7 10k   C3 22nF VDD

GND

IC1
NCV1124
2 IN1   VCC   8
3 IN2   OUT1   7
1 INadj OUT2 6
4 GND   DIAG 5

VDD
C4 220nF
GND

VR1OUT
VR1
SolderJumper_2_Open

Open = Direct
Closed = VR

VR2
SolderJumper_2_Open
VR2OUT

GND

DetonationEMS.com

If you are happy with DetonationEMS, Speeduino Compatible
devices, Firmware and/or Software please consider sponsoring
Josh so he can advance his efforts.

https://github.com/sponsors/noisymime

github.com/DetonationEMS
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Sheet: /
File: Duel VR.kicad_sch
Title: Duel VRConditioner
Size: A4 | Date: 2022-11-17 | Rev: B
KiCad E.D.A. kicad (6.0.9) | Id: 1/1