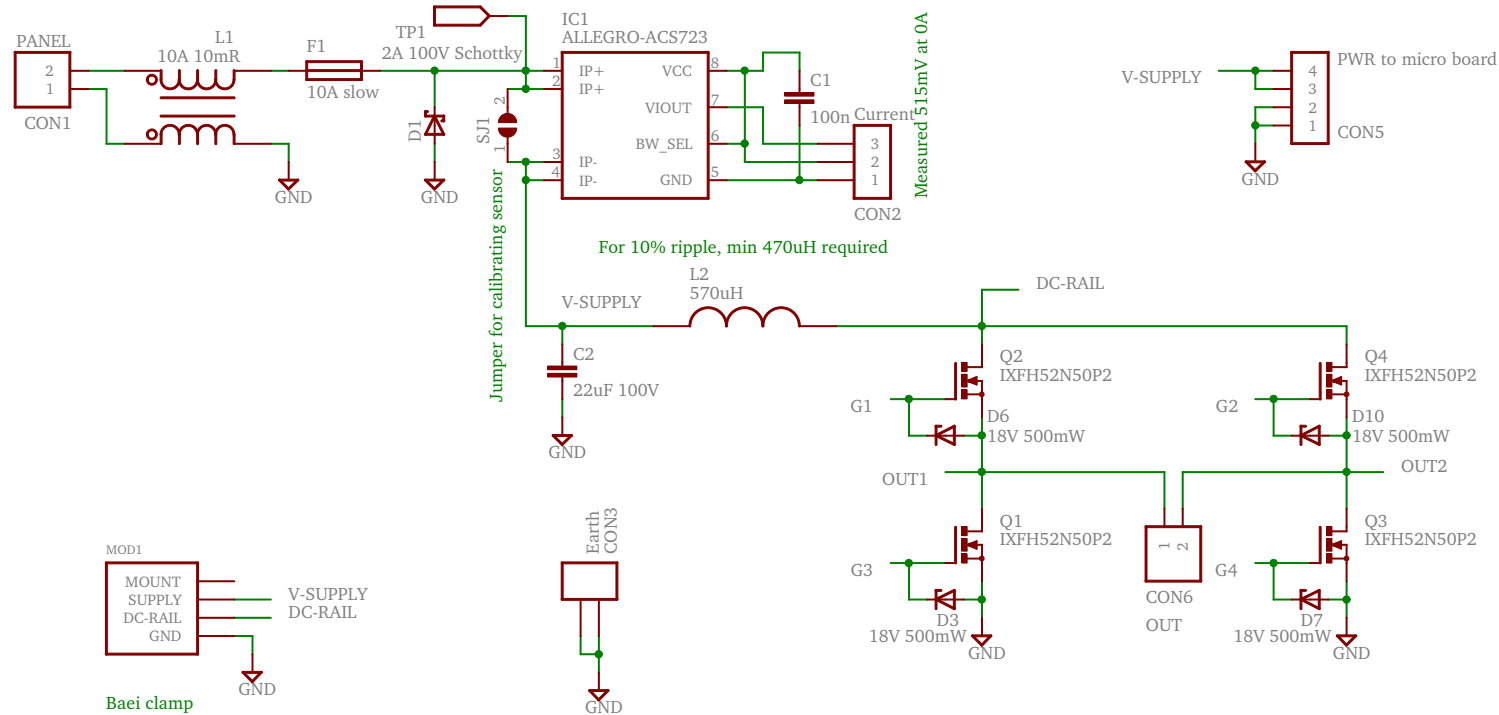


Bridge N-MOSFET, IXYS IXFH52N50P2, Digikey #IXFH52N50P2-ND  
 Bridge connector, Phoenix MKDS 5/ 2-6,35 500V 32A, Digikey #277-1269-ND  
 Input connector, Phoenix MKDS 5 HV/ 2-9,52 300V 30A, Digikey #277-5951-ND  
 570uH max 14A, West Coast Magnetics part #305-11V  
 22uF 100V cap, Epcos B32524Q1226K, Digikey #495-4104-ND  
 10A 10mR 170R common mode choke, Laird CM2545X171B-10, Digikey #240-2485-ND  
 Fuse holder, 0031.8201 500V 10A, Digikey #486-1258-ND  
 Fuse holder cover with removal support, 0853.0576, Digikey #486-2021-ND  
 10A M205 slow fuse, Bel Fuse Inc 5ST 10-R, Digikey #507-1256-ND  
 Current sensor, Allegro ACS723 LLCTR-10AU-T, Digikey #620-1643-1-ND

For input, influence, or ideas, special thanks to:

Mohammadjavad Baei  
 Matt Fox  
 Daniel Jury  
 Andrew Laphorn  
 Bart Wenmeckers  
 Ian Williamson



Physical spacing of transistors could be 2.54mm further apart  
Presently have to cut thermal pads down to fit!

Current fed isolated PWM full bridge DC-DC boost converter

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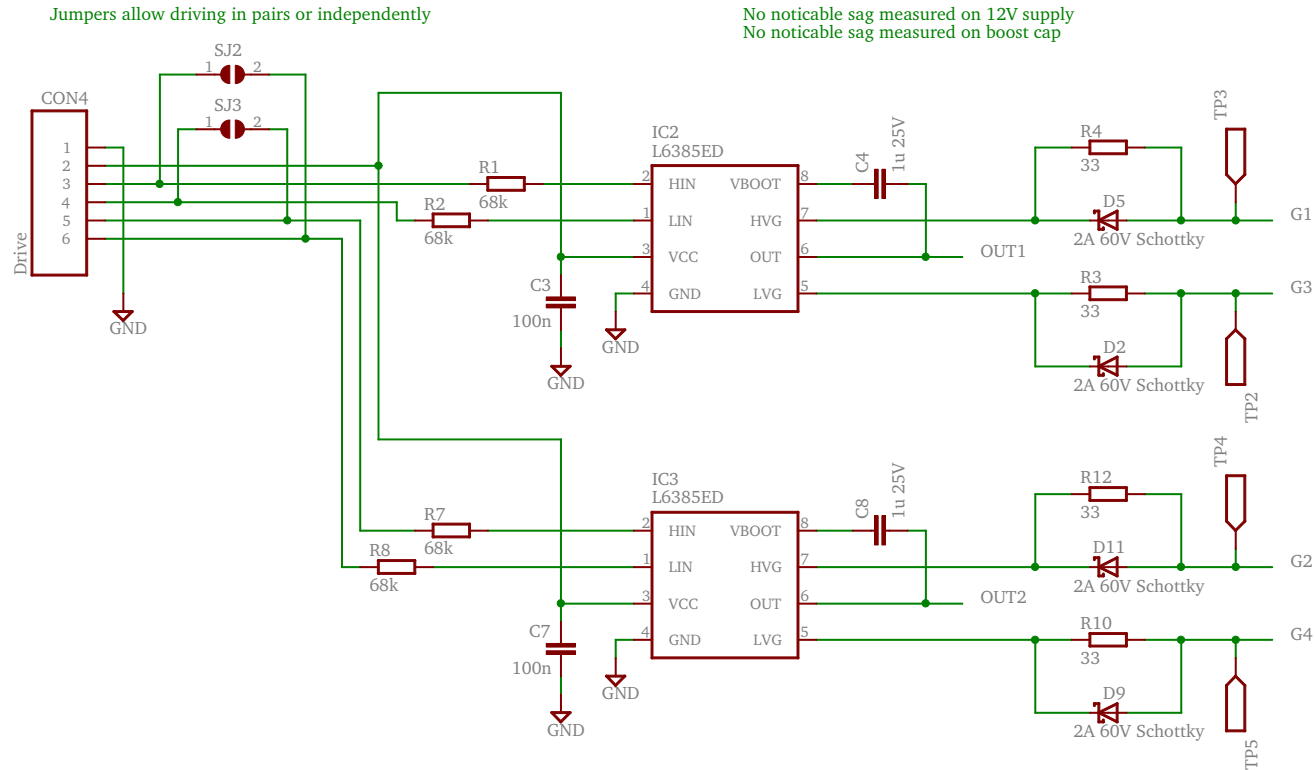
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 Design by Martin van den Nieuwelaar, martin@gadgets.co.nz

1A 400V fast recovery diode, UF4004GP-TP DO41, Digikey #UF4004GP-TPMSCT-ND  
 L6385E high low driver, STMicroelectronics L6385ED013TR 400mA source max, Digikey #497-6214-1-ND  
 Schottky diode 2A 60V, B260-13-F, Digikey #B260-FDICT-ND

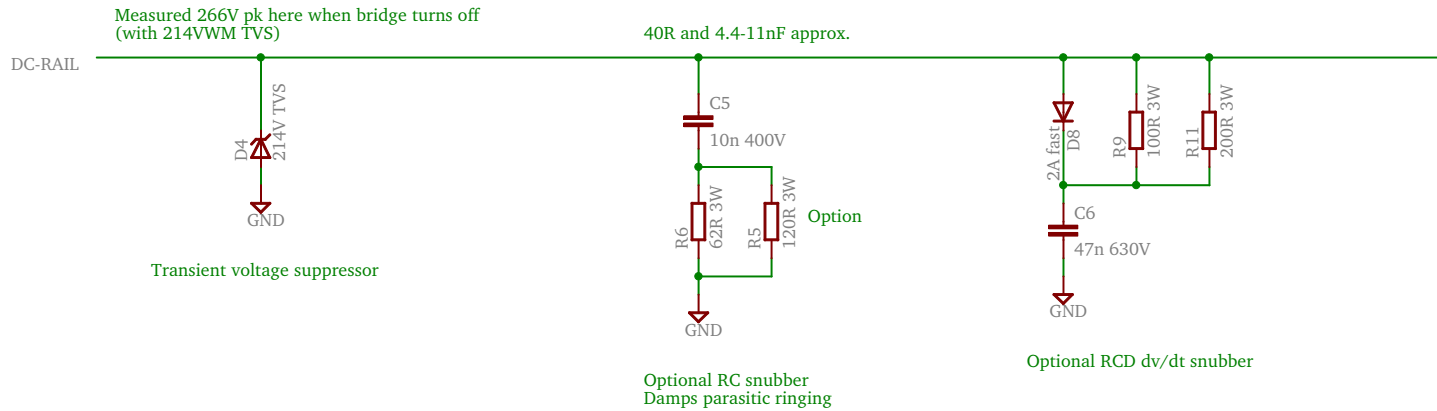
Texas Instruments LM5100 or LM5101 is an alternative driver option (SOIC8, bootstrap in-built)  
 Micrel MIC4100/1 is an alternative driver option (SOIC8, bootstrap inbuilt)



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TVS diode 214V, Littelfuse 1.5KE series 1.5KE250A, Digikey #1.5KE250ALFCT-ND  
 2A fast recovery diode, HER208G-TP 1kV DO15 trr=75ns, Digikey #HER208G-TPMSCT-ND  
 10n 400V high dv/dt capacitor, Kemet R75MD2100AA40J, Digikey #399-5900-ND  
 47n 630V high dv/dt capacitor, Kemet R75PI2470AA30J, Digikey #399-9682-ND  
 62R 3W metal oxide film resistor, Panasonic ERG-3SJ620 5% axial, Digikey #P62W-3BK-ND  
 100R 3W metal oxide film resistor, Panasonic ERG-3SJ101 5% axial, Digikey #P100W-3BK-ND  
 120R 3W metal oxide film resistor, Panasonic ERG-3SJ121 5% axial, Digikey #P120W-3BK-ND  
 200R 3W metal oxide film resistor, Panasonic ERG-3SJ201 5% axial, Digikey #P200W-3BK-ND



Optional snubber and clamp circuits

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