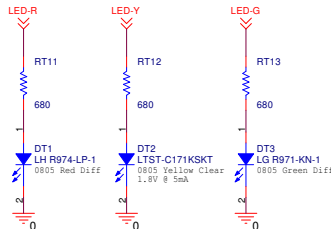
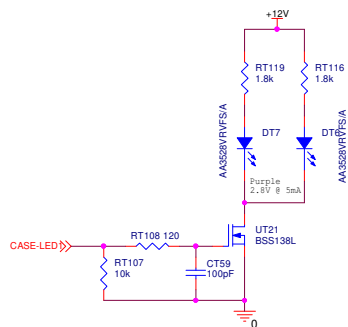
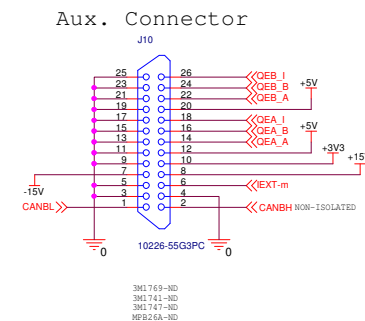
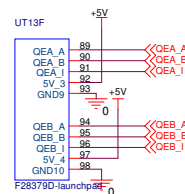
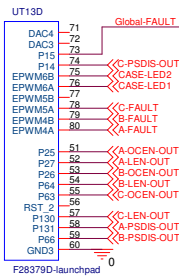
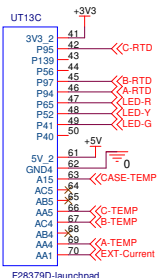


F28379D ADC sampling Cap = 14.5pF

Launchpad connector TLW-110-05-T-D, PPTC031LFBN-RC, and PPTC051LFBN-RC



Standard

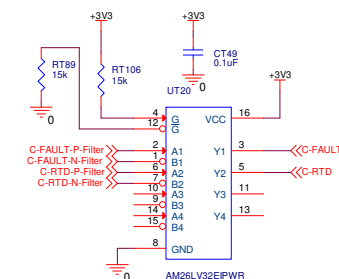
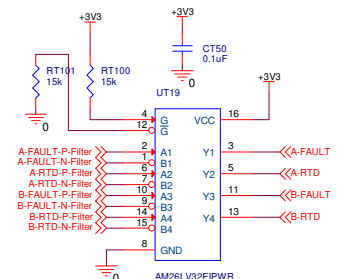
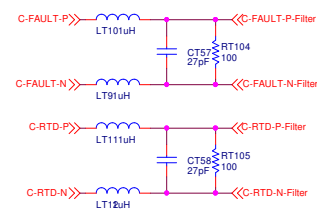
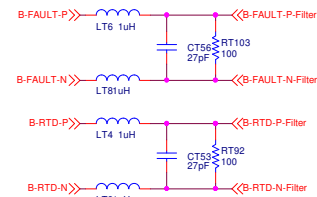
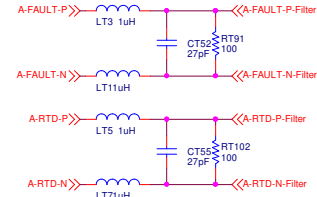
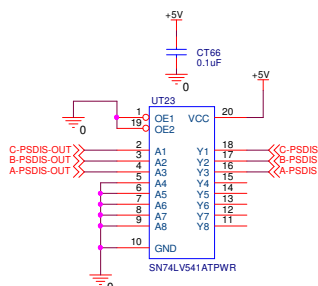
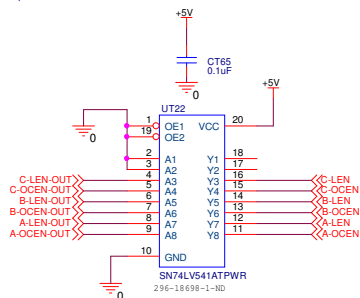
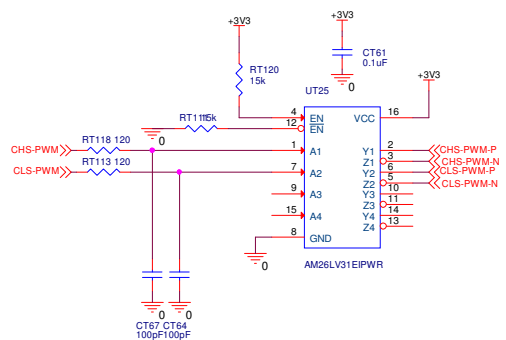
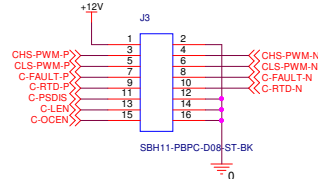
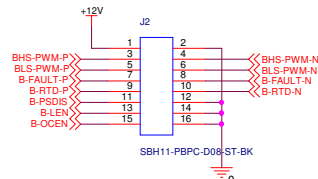
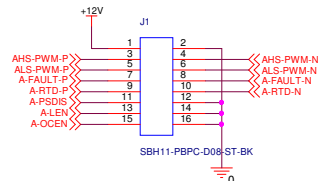
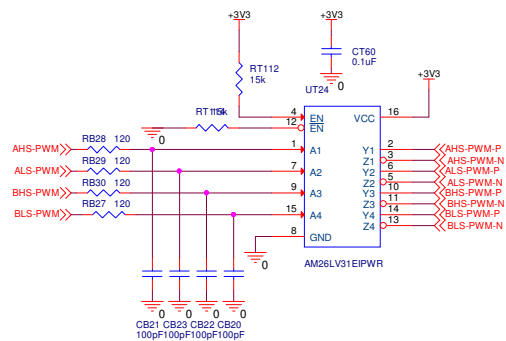


Title LAUNCHPAD

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Standard

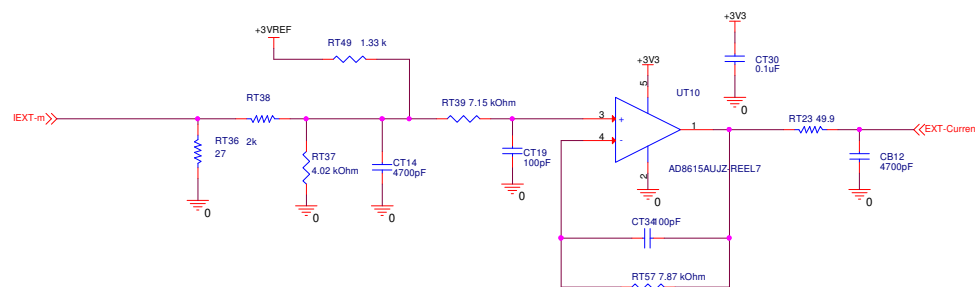
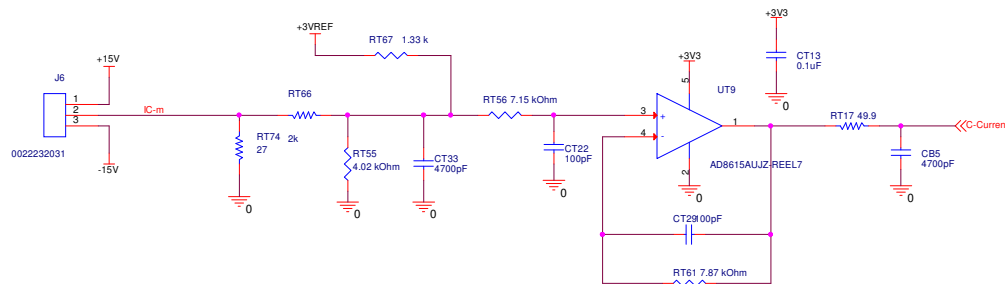
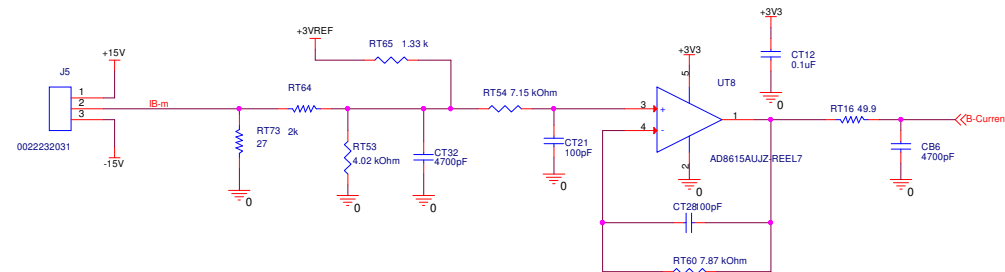
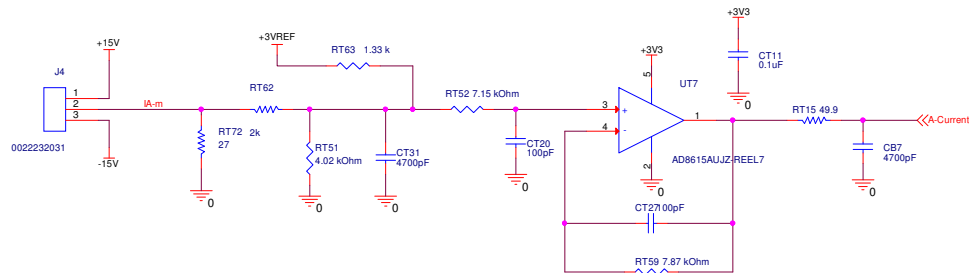


Title Gate Driver Interface

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$$R_{m,max} = N_s * (U_{cmin} - 0.5V) / I_p - R_{s,max} - 1.1$$

$$N_s = 5000$$

$$R_{s,max} = 52.8$$

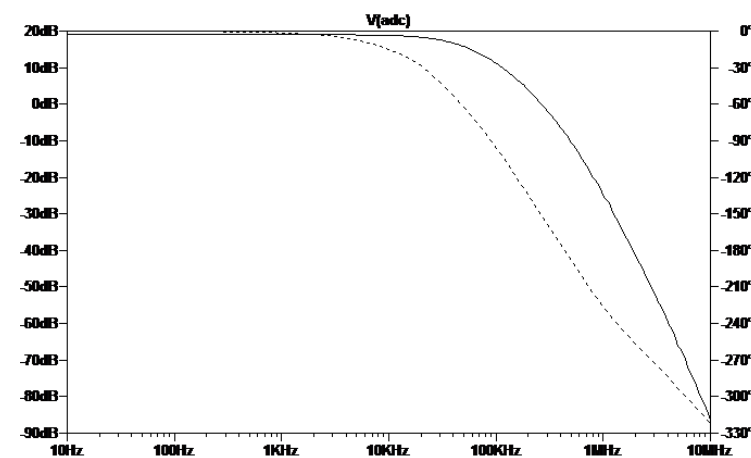
$$U_{cmin} = 14.25$$

$$R_{m,max} = 5000 * (14.25 - 0.5V) / 800 - 52.8 - 1.1 = 32\text{ohms}$$

$$I_{s,max} = \pm 160\text{mA}$$

$$P_{rm,max} = .16^2 * 30 = 0.768\text{ W}$$

F28379D ADC sampling Cap = 14.5pF



Standard

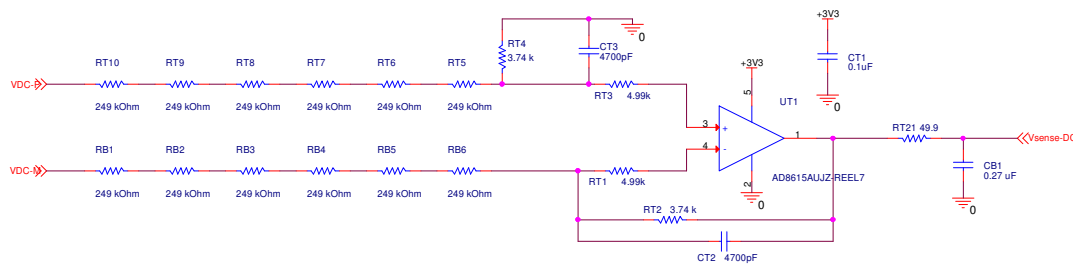
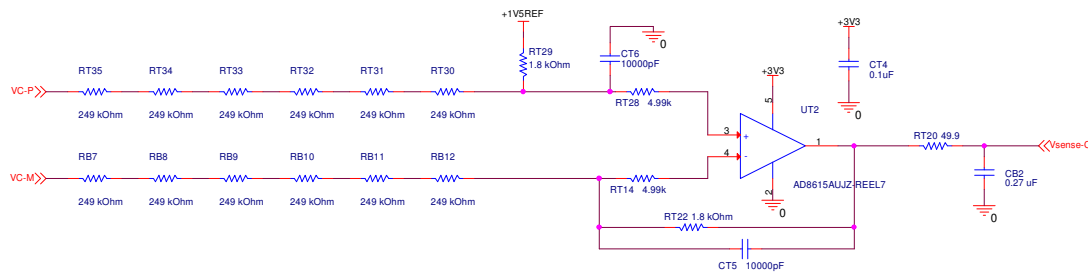
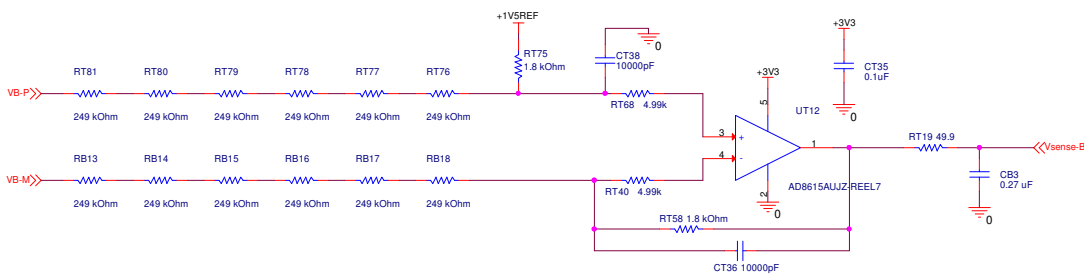
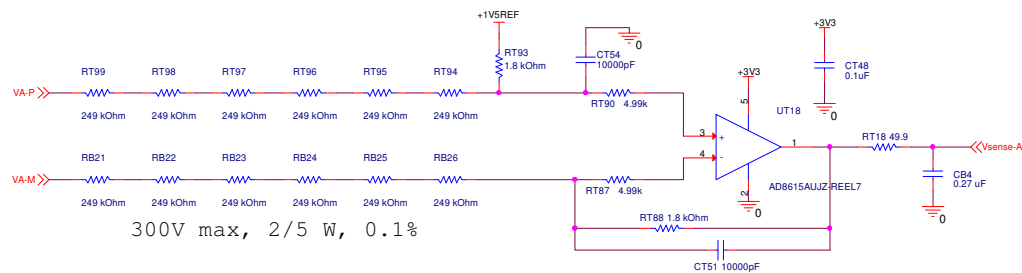
Wolfspeed

Title Current Sensors

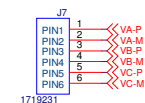
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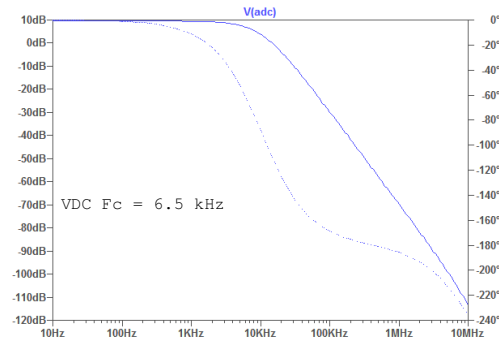
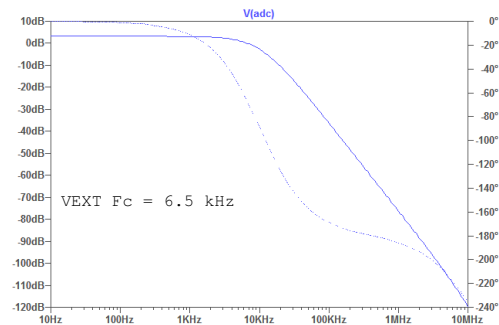
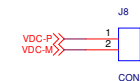
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HV Differential



HV DC BUS



Standard

Wolfspeed

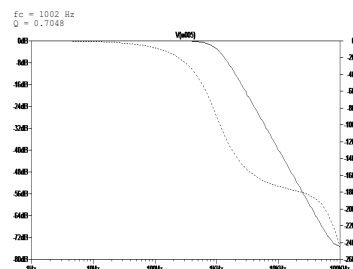
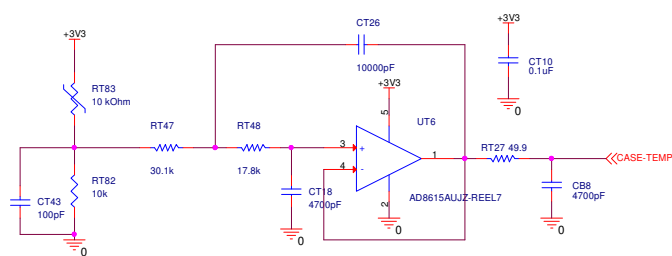
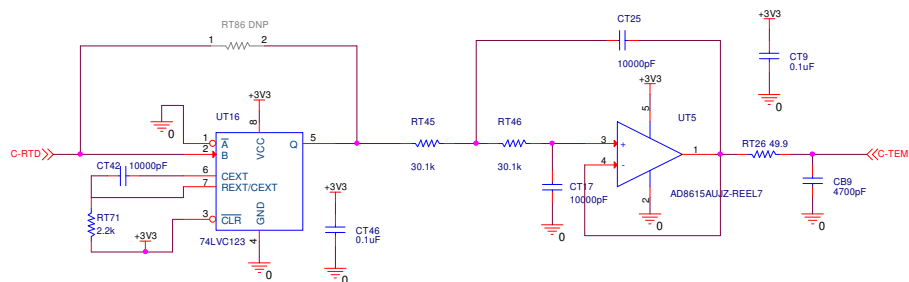
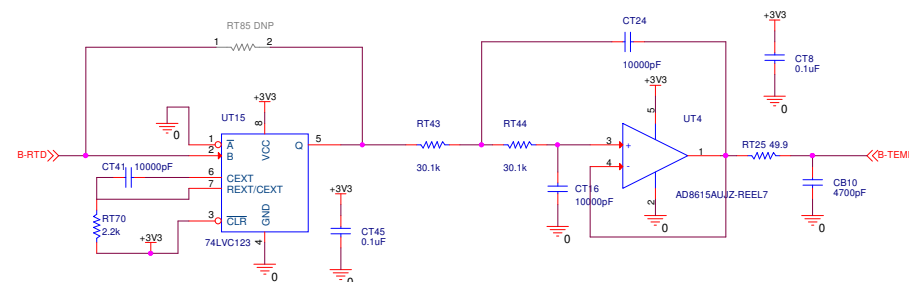
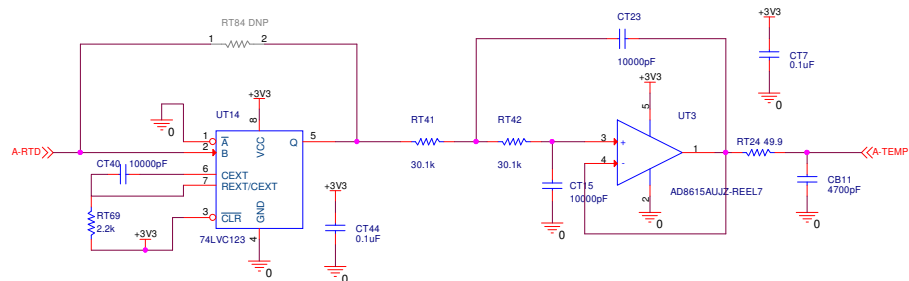
Title Voltage Sense

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Standard



Title Temperature Sense

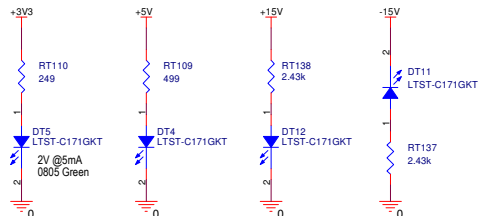
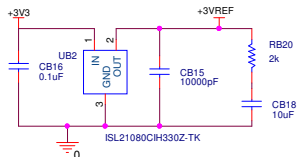
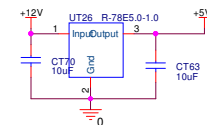
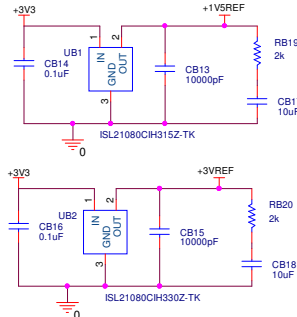
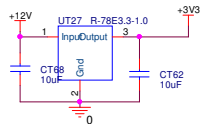
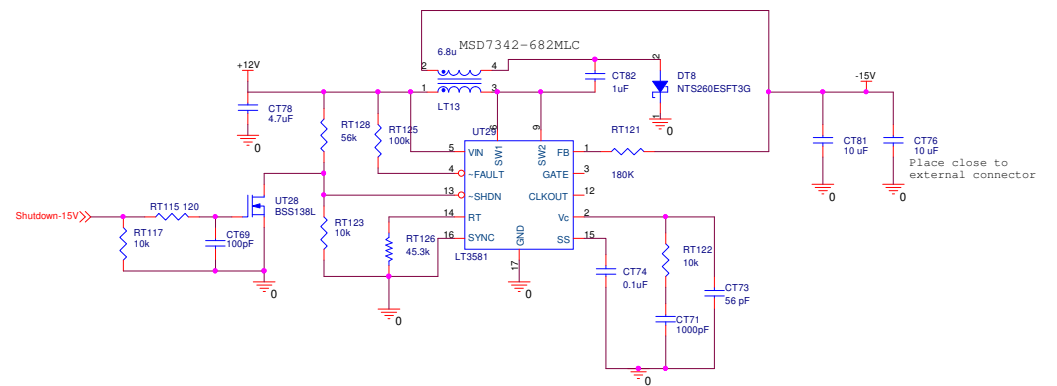
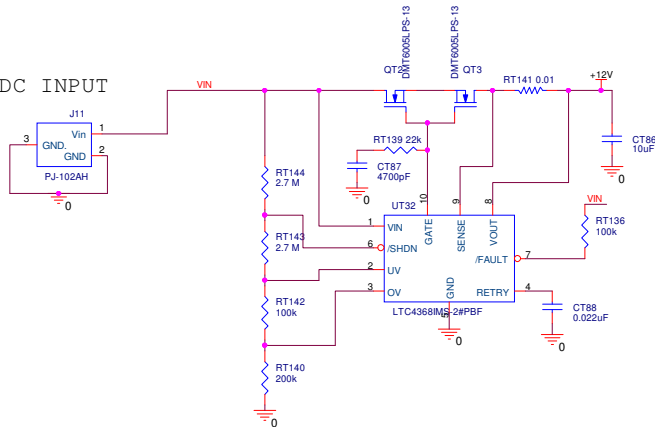
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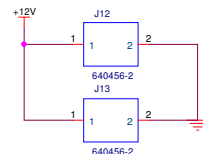
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DC INPUT

Power Supply PSAC60M-120
993-1107-ND
Pkg: CP3-1000-ND



Fan Power



Standard

Wolfspeed

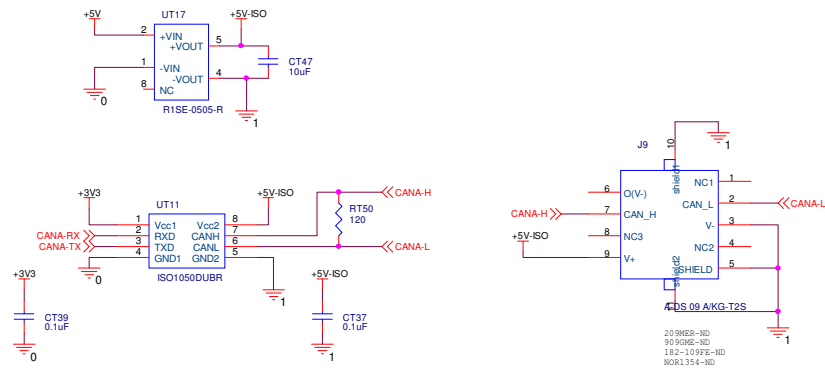
Title Power Supply

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Standard



Title CAN

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A

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Revision History:

V1.0 1/21/2019
Initial design release
For internal use not for resale
Using LAUNCHXL-F28379D
V1.1 5/15/2019
Added direct connection to RTD/NTC module signals for eCAP of FM type
Added one-shot circuit for analog measurement of FM type RTD signal
Renumbered connectors in order
Added HV Warning to silkscreen
Added additional mounting holes next to GD connectors to prevent flex when removing ribbon cable
Increased DC bus connector hole size
Changed silkscreen from ABC to UVW
Moved case LEDs to under logo in lid
V1.2 9/4/2019
Corrected 74LV123 pinout
Change LT3581 soft start capacitor to 0.1uF
Renumber Ref Des
Change current sense resistor footprint from 1210 to 1206

Standard



Title Revision History

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