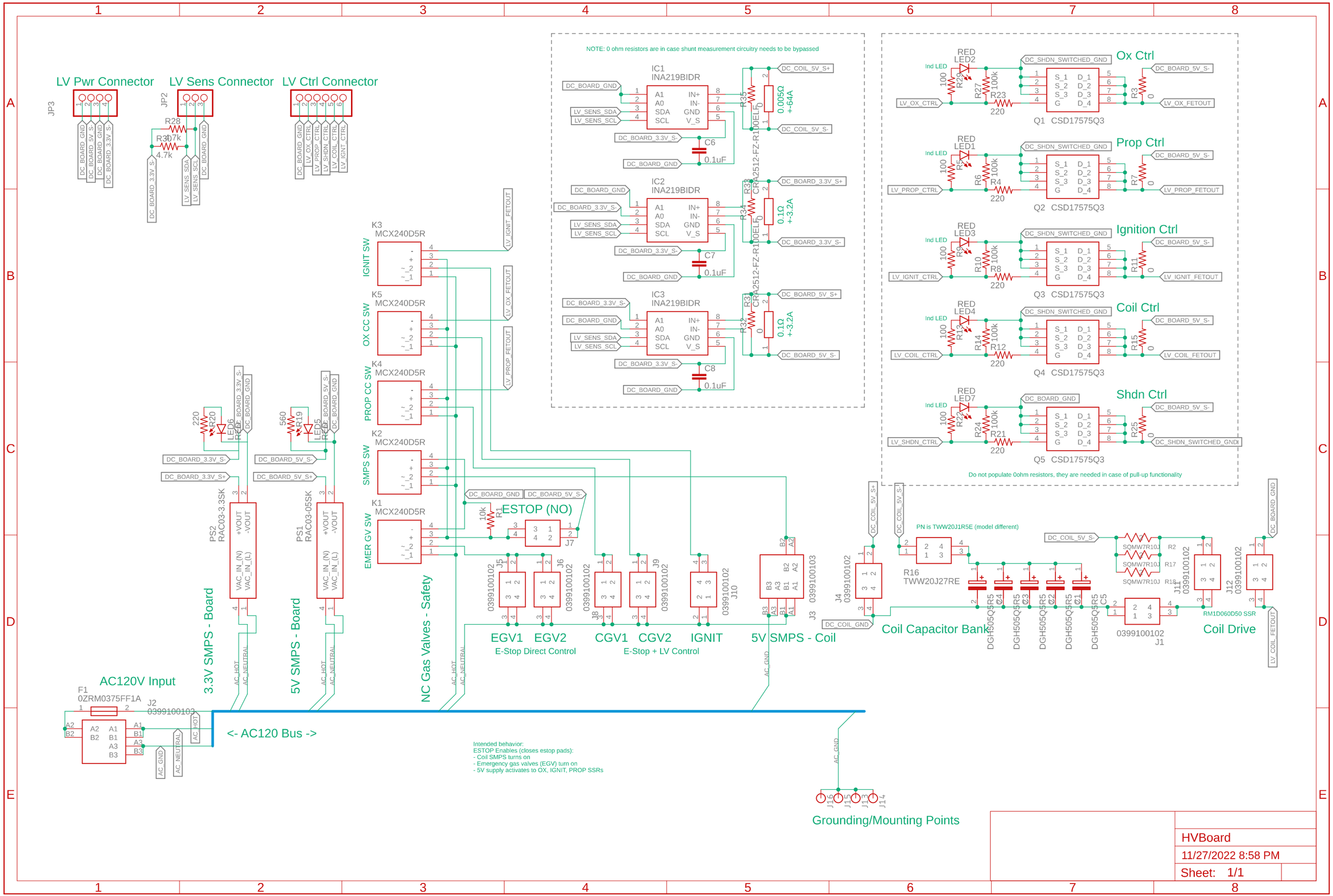
LV Pwr Connector
LV Sens Connector
LV Ctrl Connector
NOTE: 0 ohm resistors are in case shunt measurement circuitry needs to be bypassed
IC1 INA219BIDR
IC2 INA219BIDR
IC3 INA219BIDR
CRA2512-FZ-R100ELF 0.005Ω +-64A
CRA2512-FZ-R100ELF 0.1Ω +-3.2A
CRA2512-FZ-R100ELF 0.1Ω +-3.2A
Ox Ctrl
Prop Ctrl
Ignition Ctrl
Coil Ctrl
Shdn Ctrl
Q1 CSD17575Q3
Q2 CSD17575Q3
Q3 CSD17575Q3
Q4 CSD17575Q3
Q5 CSD17575Q3
Do not populate 0ohm resistors, they are needed in case of pull-up functionality
IGNIT SW
OX CC SW
PROP CC SW
SMPS SW
EMER GV SW
ESTOP (NO)
PS2 RAC03-3.3SK
PS1 RAC03-05SK
3.3V SMPS - Board
5V SMPS - Board
NC Gas Valves - Safety
EGV1 EGV2
E-Stop Direct Control
CGV1 CGV2
E-Stop + LV Control
IGNIT
5V SMPS - Coil
PN is TWW20J1R5E (model different)
R16 TWW20J27RE
Coil Capacitor Bank
Coil Drive
RM1D060D50 SSR
AC120V Input
F1 0ZRM0375FF1A
J2 0399100103
<- AC120 Bus ->
Intended behavior:
ESTOP Enables (closes estop pads):
- Coil SMPS turns on
- Emergency gas valves (EGV) turn on
- 5V supply activates to OX, IGNIT, PROP SSRs
Grounding/Mounting Points
HVBoard
11/27/2022 8:58 PM
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