

March 23, 2009

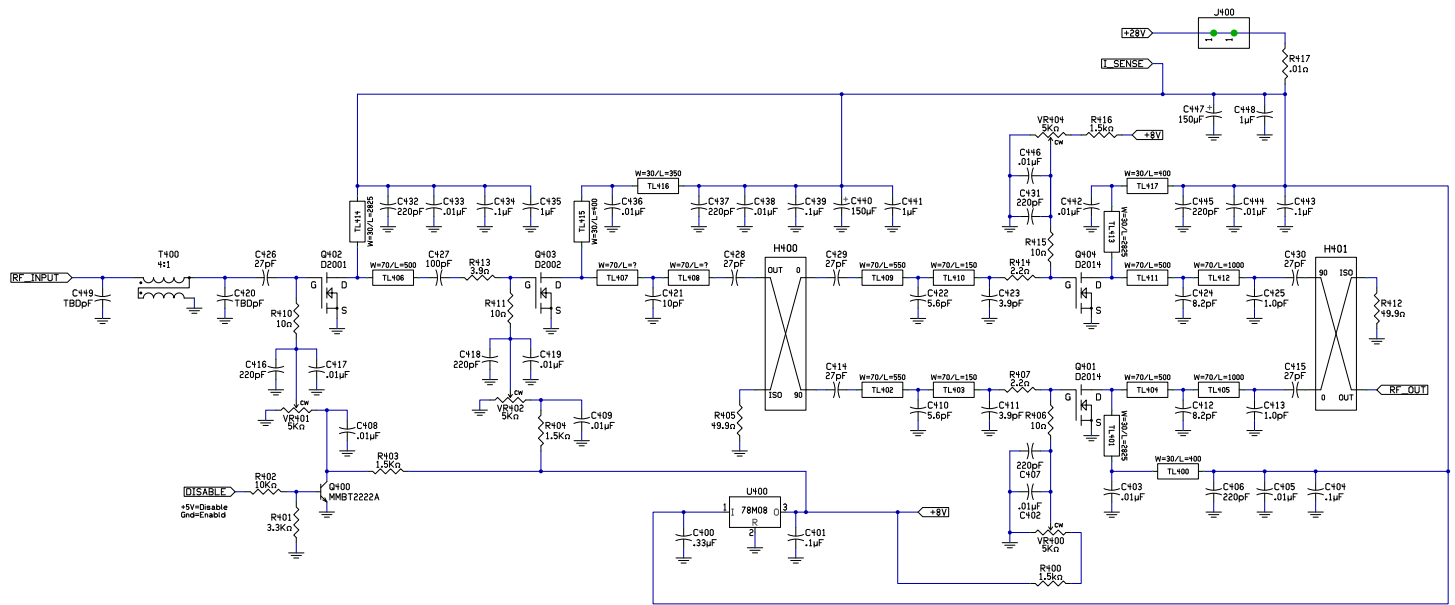
Schematic Diagram

TLUD-30-E

Should you have any questions, please do not hesitate to contact Technalogix:

Bob Gullon, President and CEO
bob@technalogix.ca

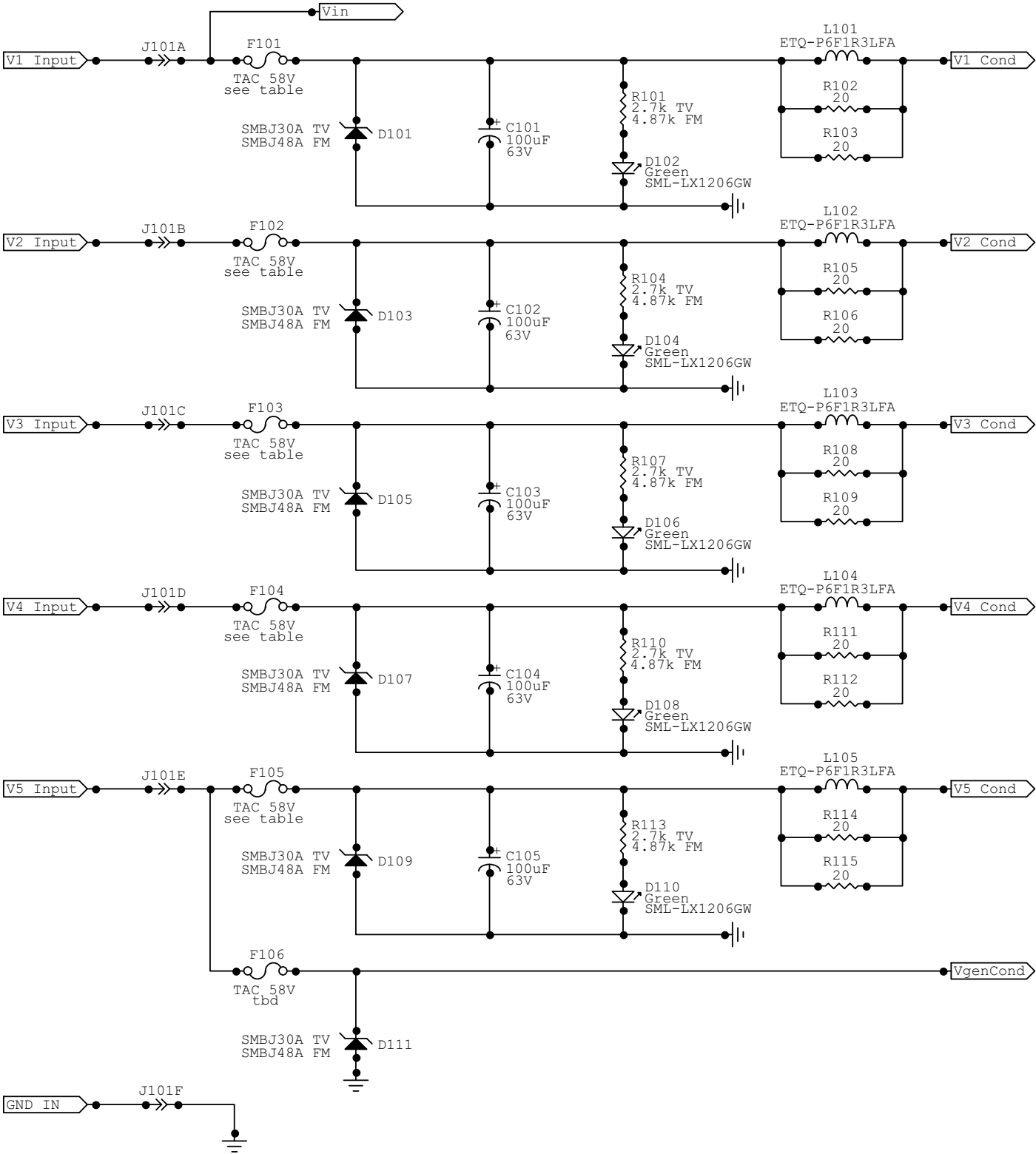
Aaron Sivacoe, Technical Director
aaron@technalogix.ca



Co:	Power Module Technology, Inc		
Title:	Class "A" 470-860MHz 10W		
Board:	10002 UHFTV-10	Revision:	C
Author:	R.S. McDonald	Size:	B
Date:	9-21-07	Sheet	1 of 1

User Interface Module

DC Supply Conditioning



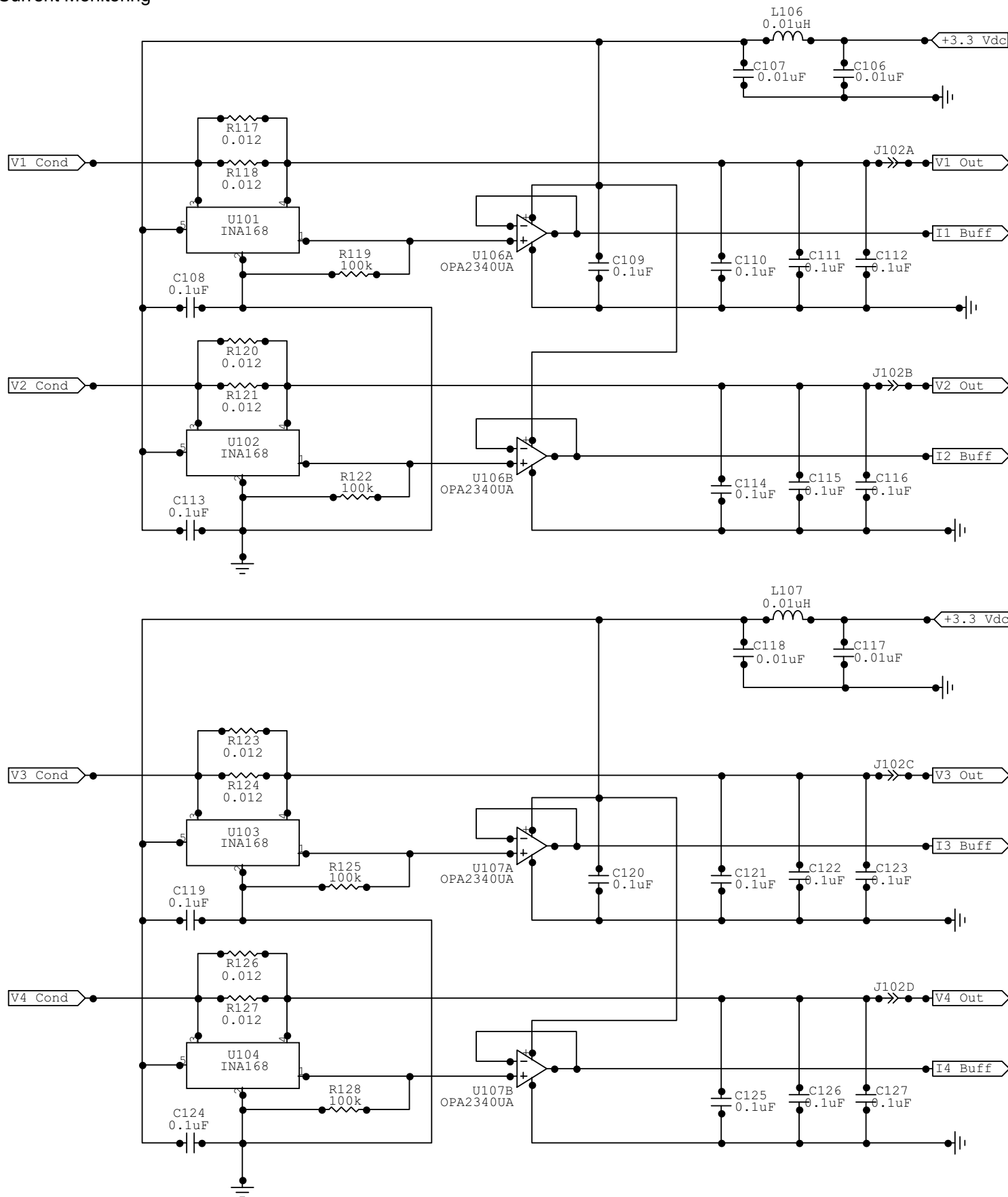
Fuse Table

PA5-UHF	2 A	PA25-VHF-L	4 A
PA10-UHF	3 A	PA25-VHF-H	5 A
P50-UHF	10 A	P200-VHF-L	15 A
P150-UHF	10 A/side	P200-VHF-H	15 A
U60LD UHF	3 A	P400-VHF-L	15 A/side
U200LD UHF	7.5 A/side	P400-VHF-H	10 A/side
P350-FM	15 A		
P750-FM	15 A/side		

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User Interface Module	
Rev B	ID Insight Control System
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User Interface Module

Current Monitoring



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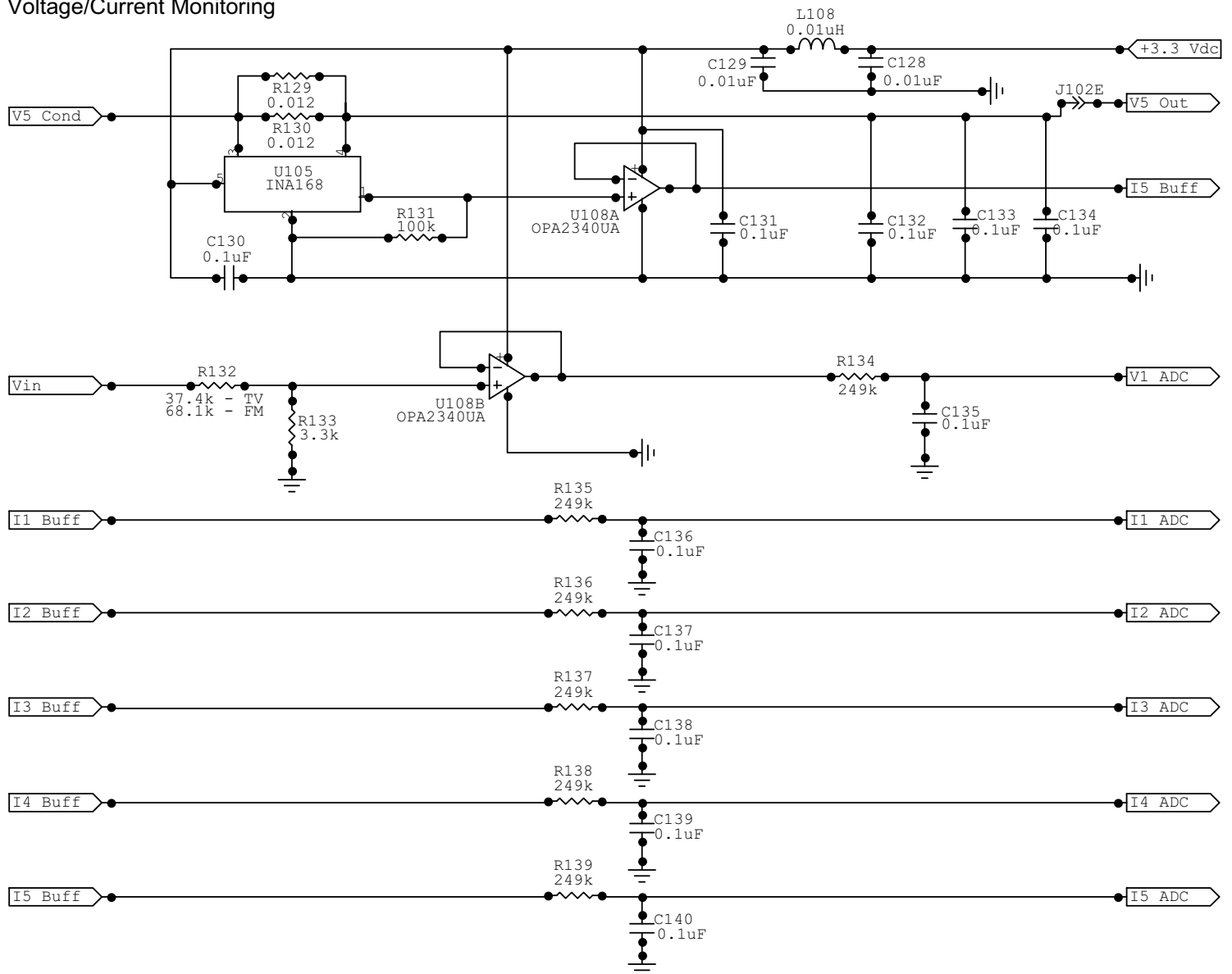
User Interface Module

Rev	ID
B	Insight Control System

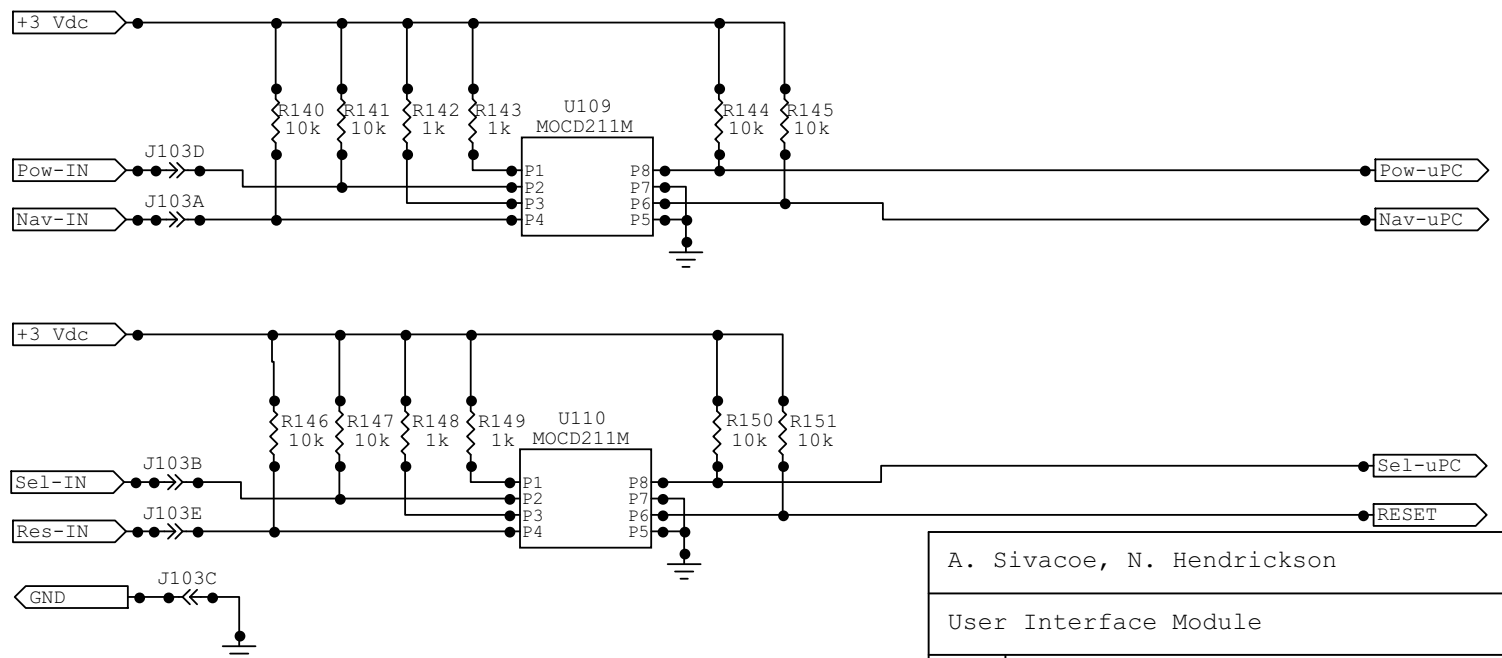
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User Interface Module

Voltage/Current Monitoring

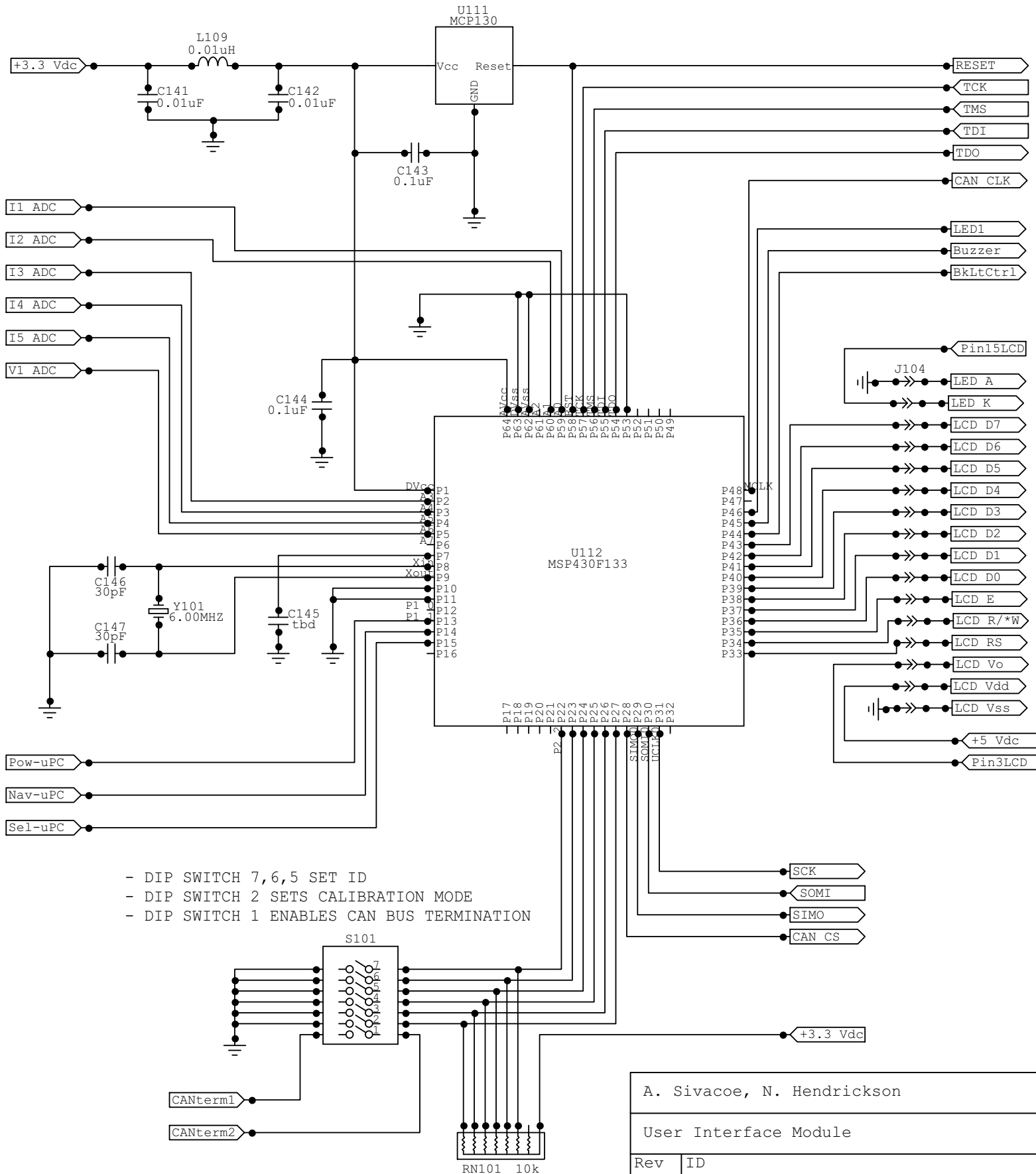


Membrane Switch Inputs



User Interface Module

Microcontroller



- DIP SWITCH 7,6,5 SET ID
- DIP SWITCH 2 SETS CALIBRATION MODE
- DIP SWITCH 1 ENABLES CAN BUS TERMINATION

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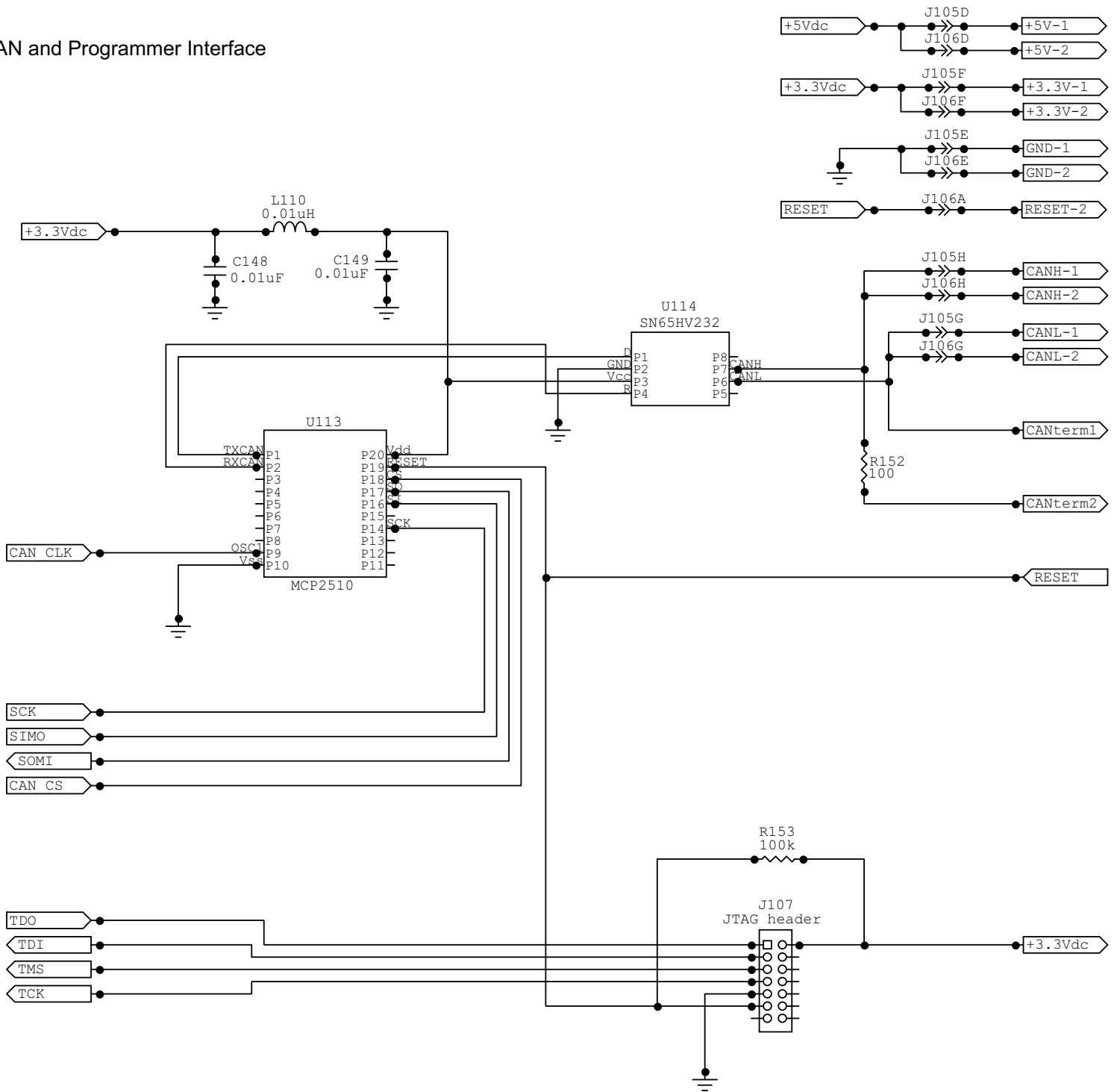
User Interface Module

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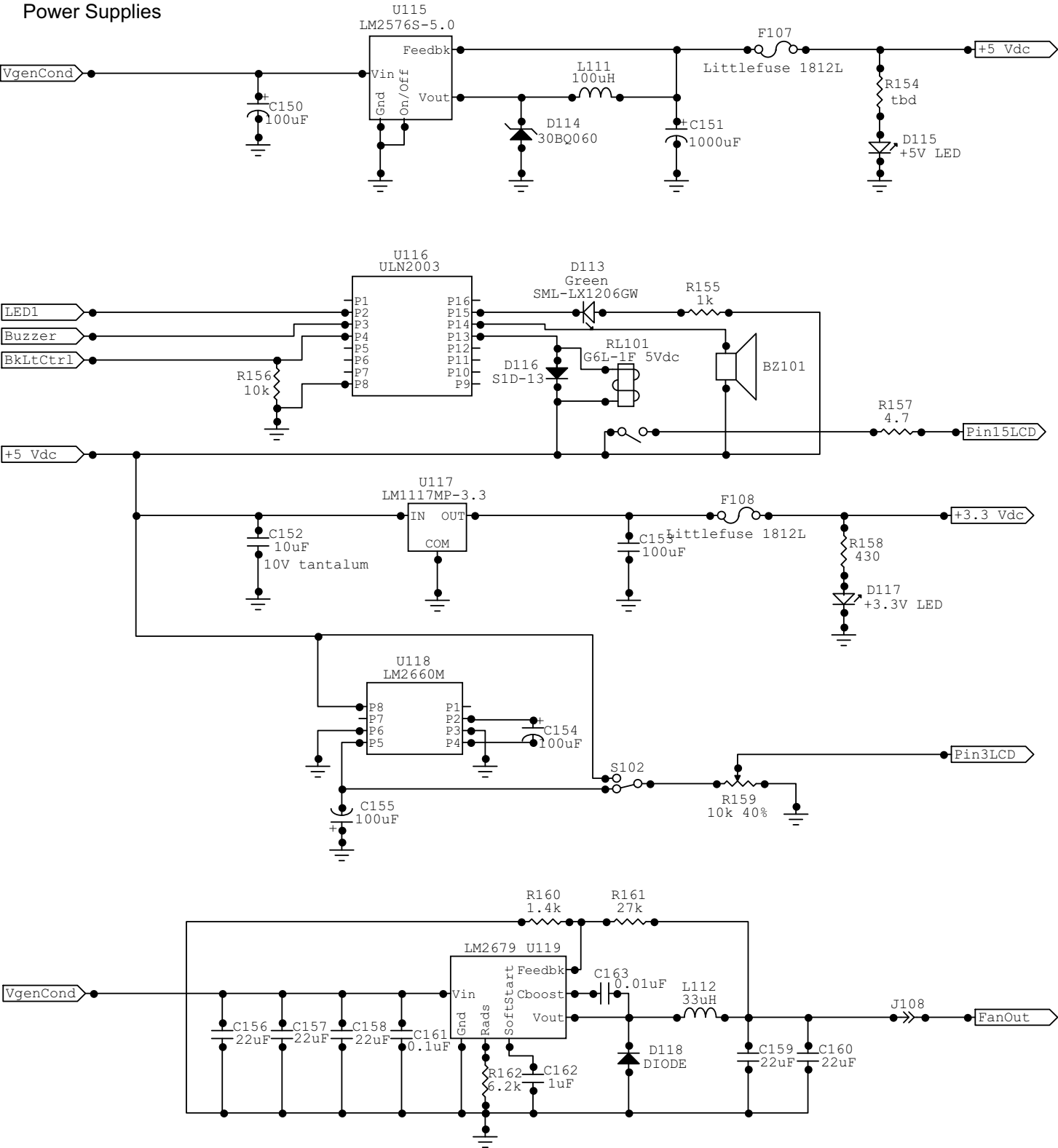
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User Interface Module	
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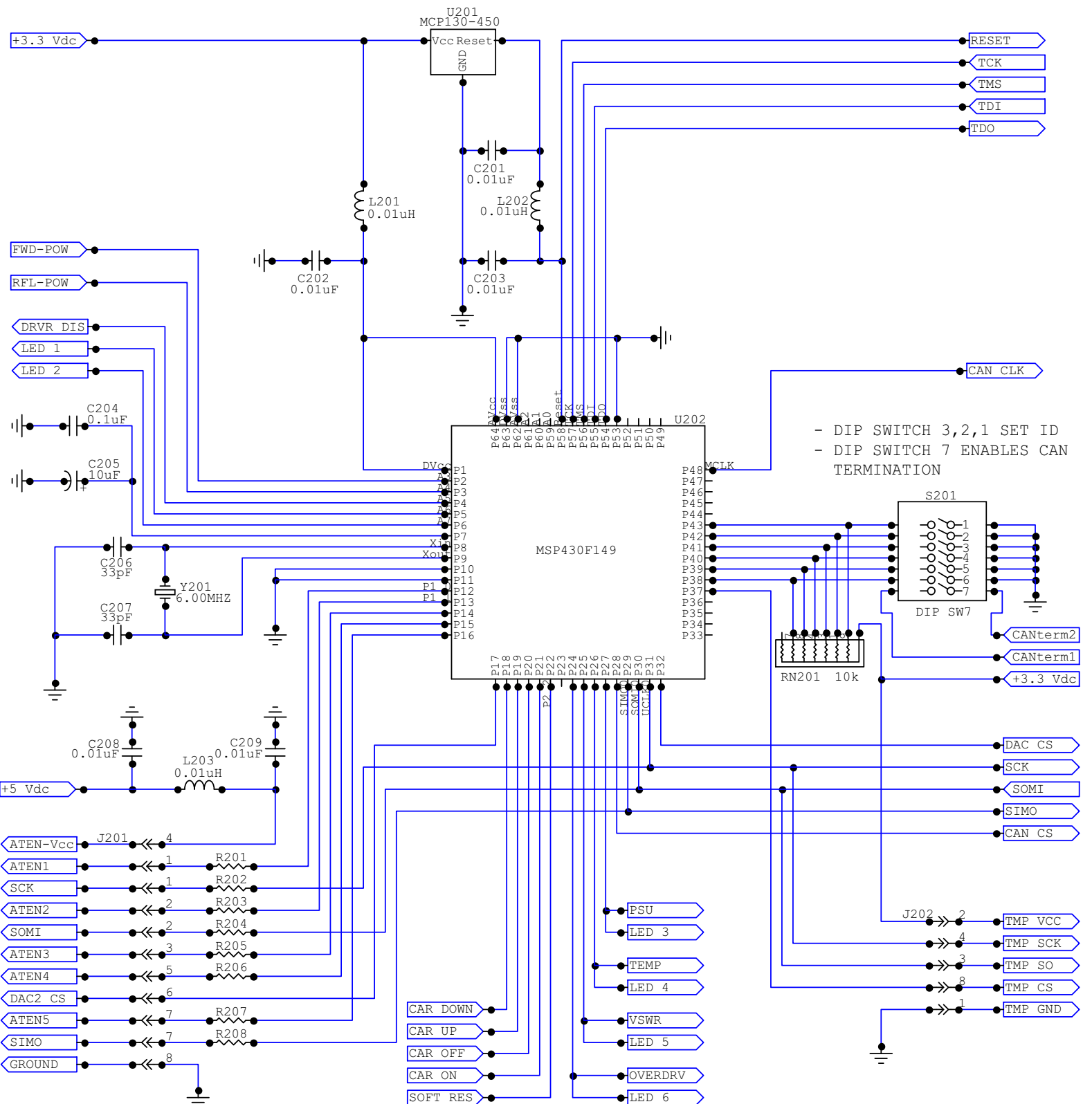
User Interface Module

Power Supplies



Coupler Conditioning Module

Microcontroller



A. Sivacoe

Coupler Conditioning

Rev

1.10

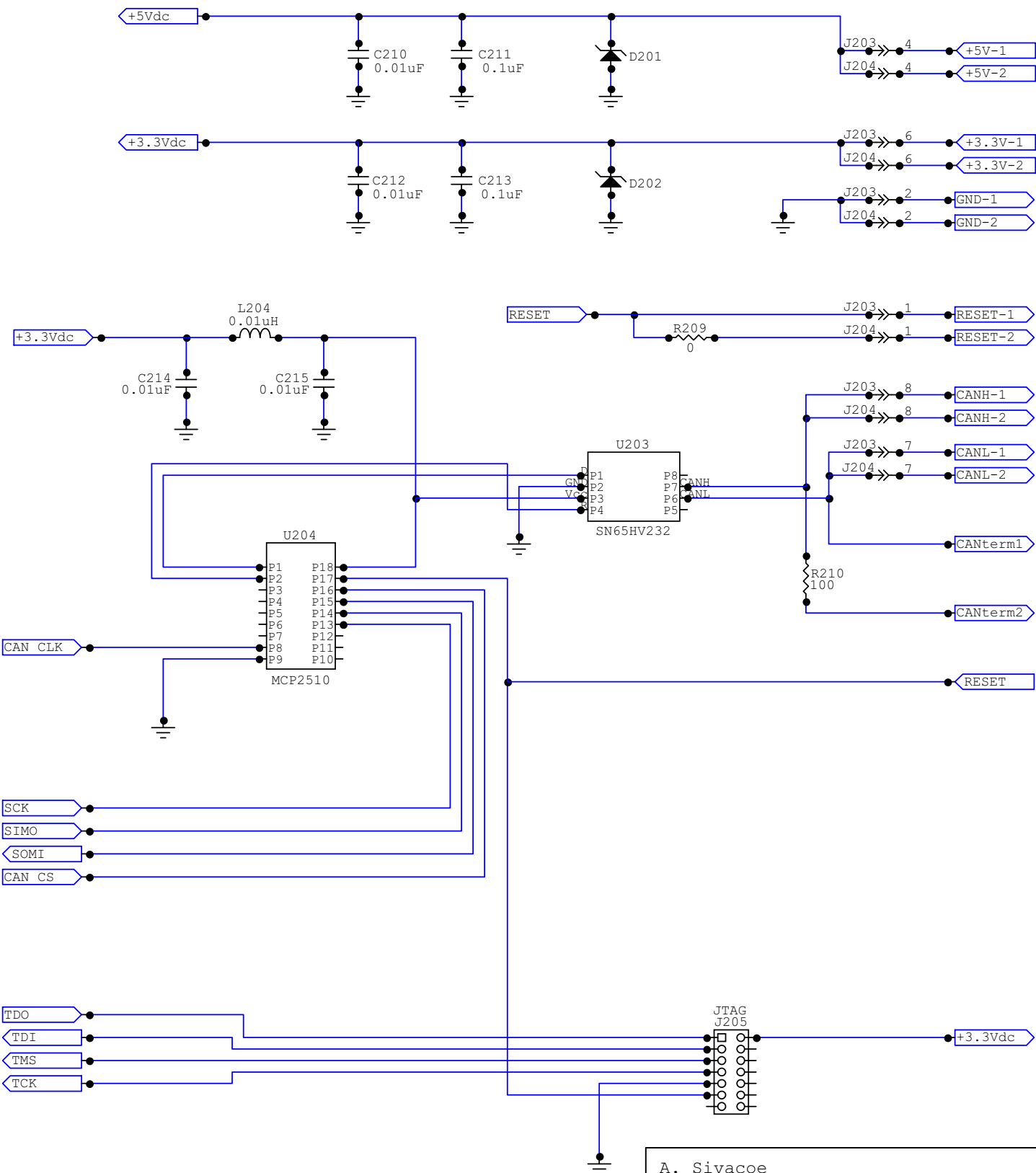
ID

Insight Control System

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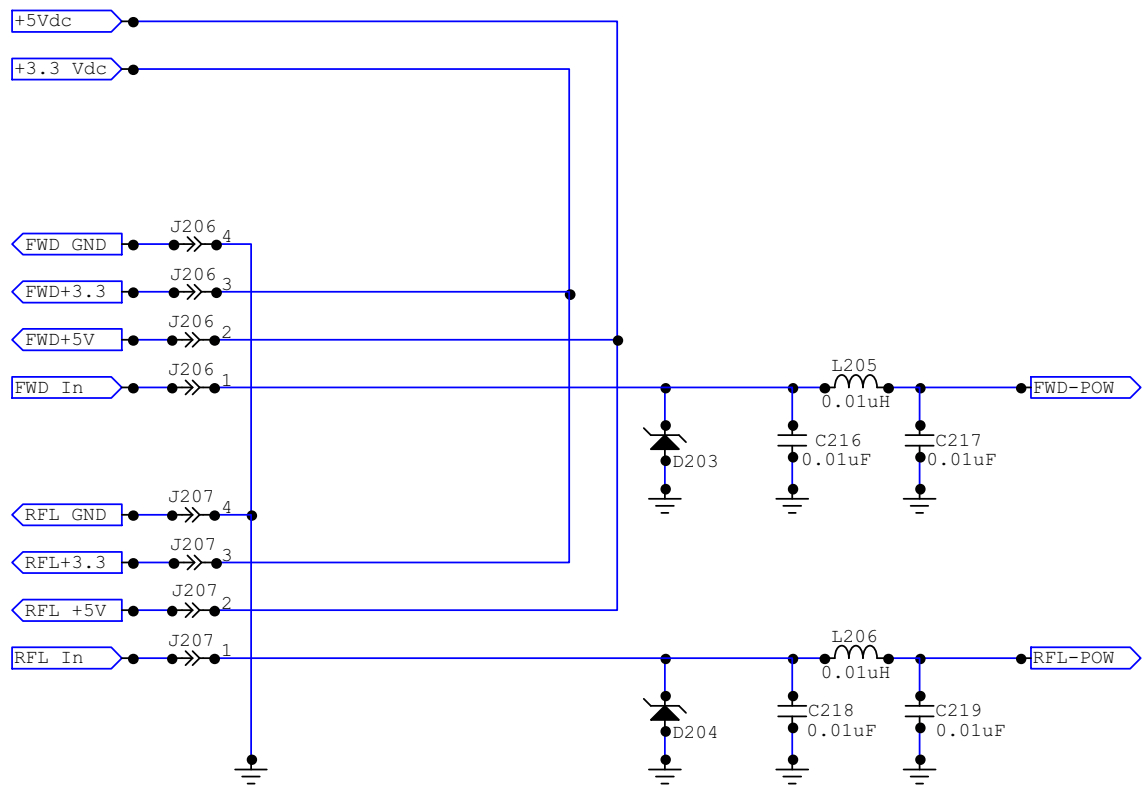
Coupler Conditioning Module

CAN and Programmer Interface

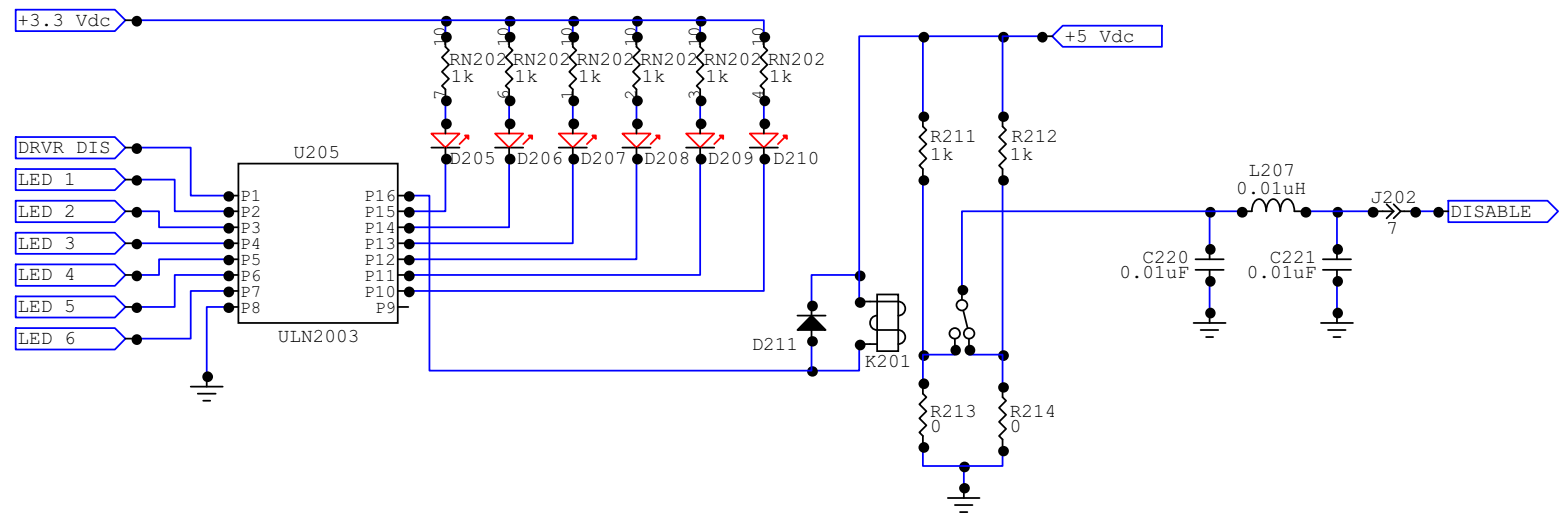


Coupler Conditioning Module

Coupler Input



Interface



The schematic diagram illustrates the Remote Access Port (RAP) circuit, featuring three MOCD211M optocouplers (U210, U211, U212) interfacing various inputs and outputs through resistors (RN203, RN204, RN205, R218, R219). The circuit is powered by +5 Vdc and +3.3 Vdc, with ground connections.

Inputs and Outputs:

- Inputs:** VSWR, OVERDRV, TEMP, PSU, RFL-OUT, FWD-OUT.
- Outputs:** CAR OFF, CAR ON, CAR UP, CAR DOWN, SOFT RES, RESET.

Optocouplers and Resistors:

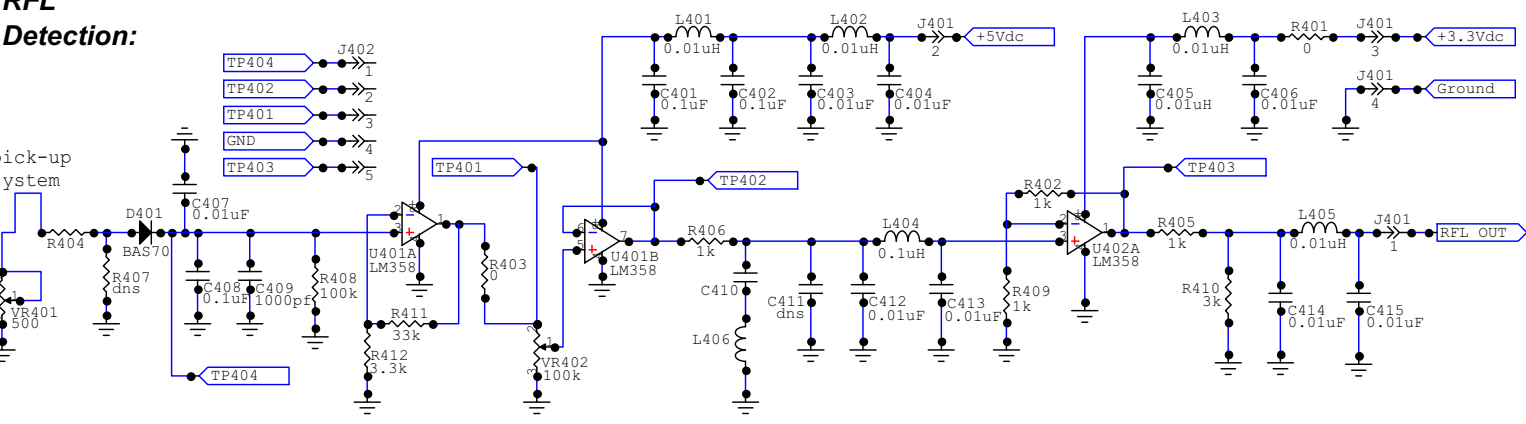
- U210:** MOCD211M optocoupler. Inputs: VSWR (RN204, 1k), OVERDRV (RN204, 1k). Outputs: CAR OFF (RN203, 10k), CAR ON (RN203, 10k).
- U211:** MOCD211M optocoupler. Inputs: TEMP (RN204, 1k), PSU (RN204, 1k). Outputs: CAR UP (RN203, 10k), CAR DOWN (RN203, 10k).
- U212:** MOCD211M optocoupler. Inputs: RFL-OUT (RN204, 1k), FWD-OUT (RN204, 1k). Outputs: SOFT RES (RN203, 10k), RESET (RN203, 10k).

Power and Grounding:

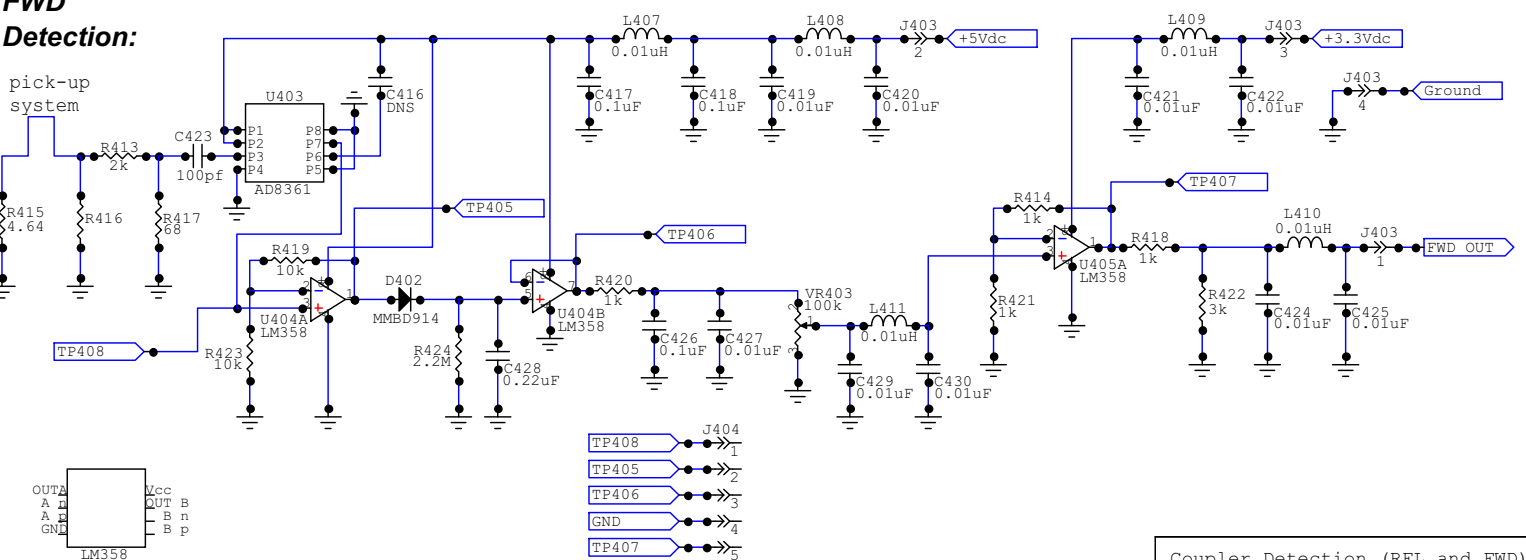
- +5 Vdc:** Power supply for the RAP.
- +3.3 Vdc:** Power supply for the RAP.
- Ground:** Common ground connection for the RAP.

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**RFL
Detection:**

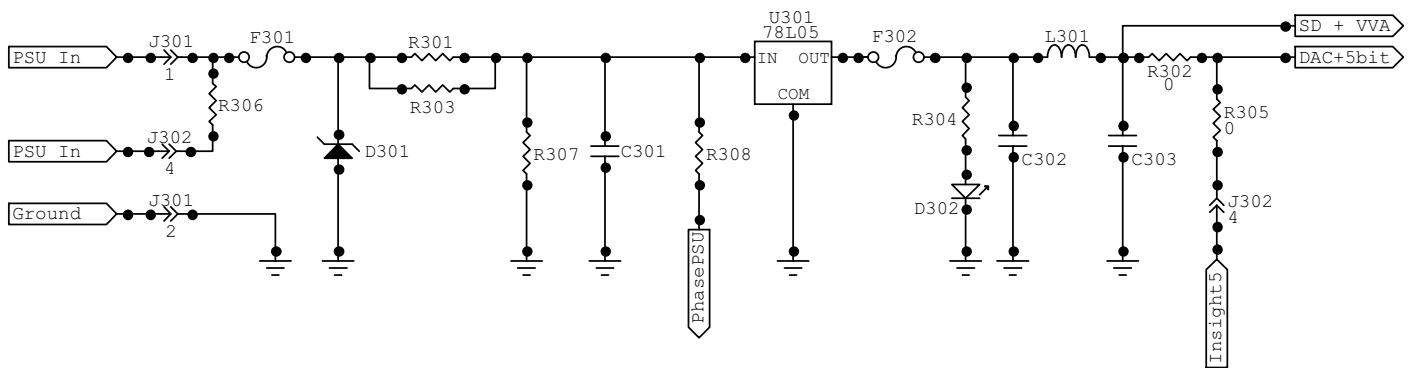


**FWD
Detection:**

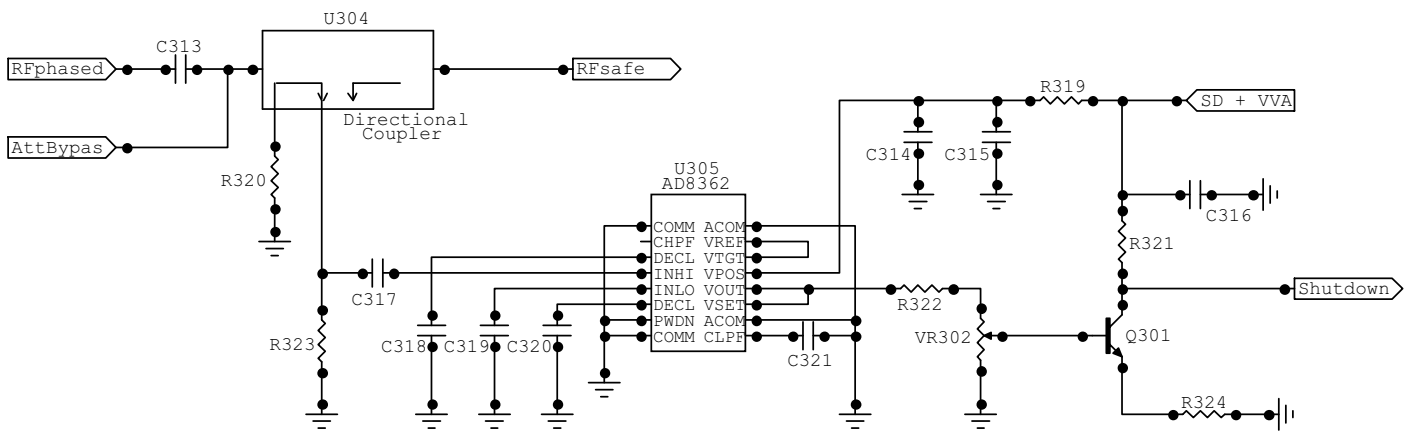


Coupler Detection (RFL and FWD)	
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3.05	A. Florey, A. Sivacoe
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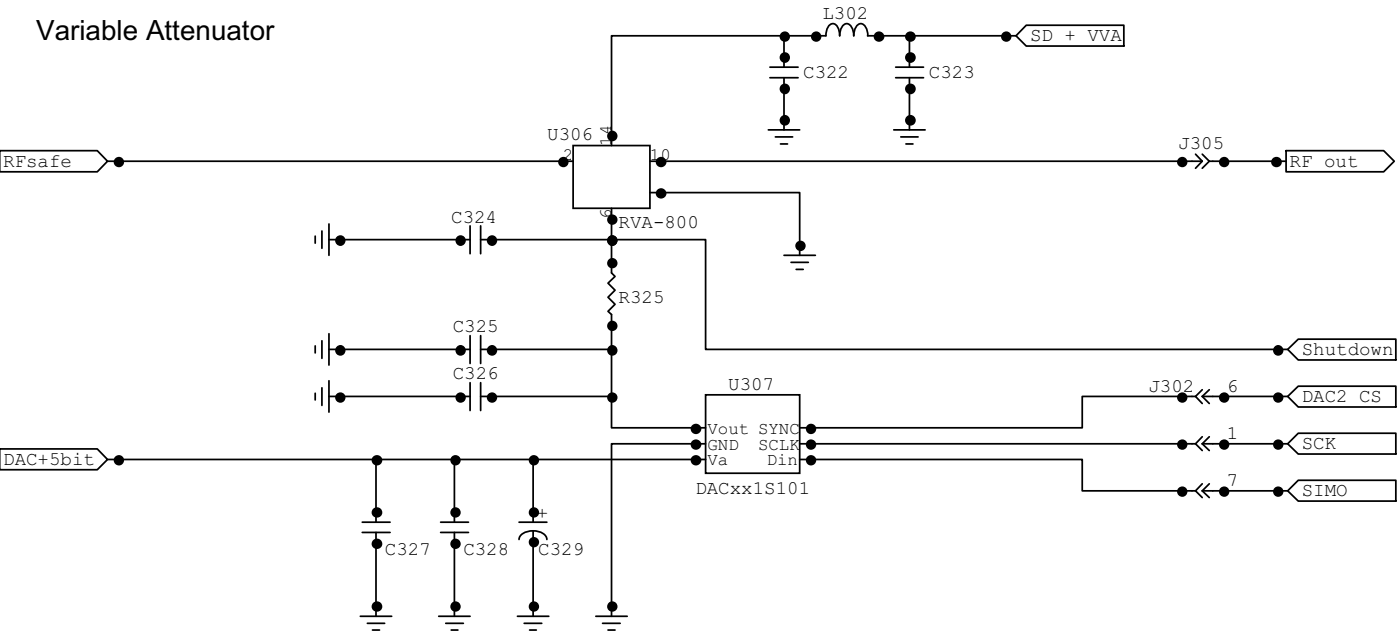
External Power Supply



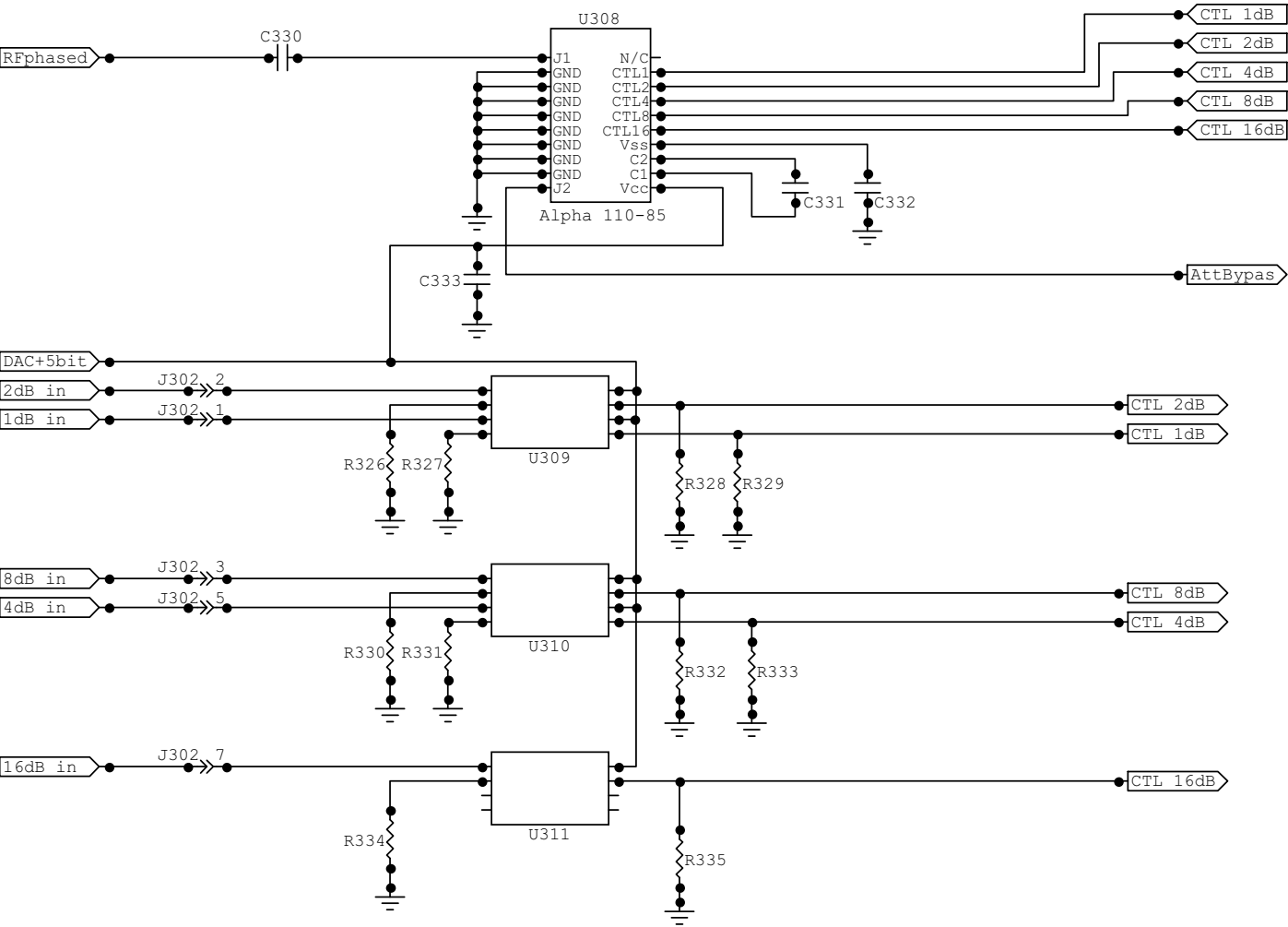
High Speed Shutdown

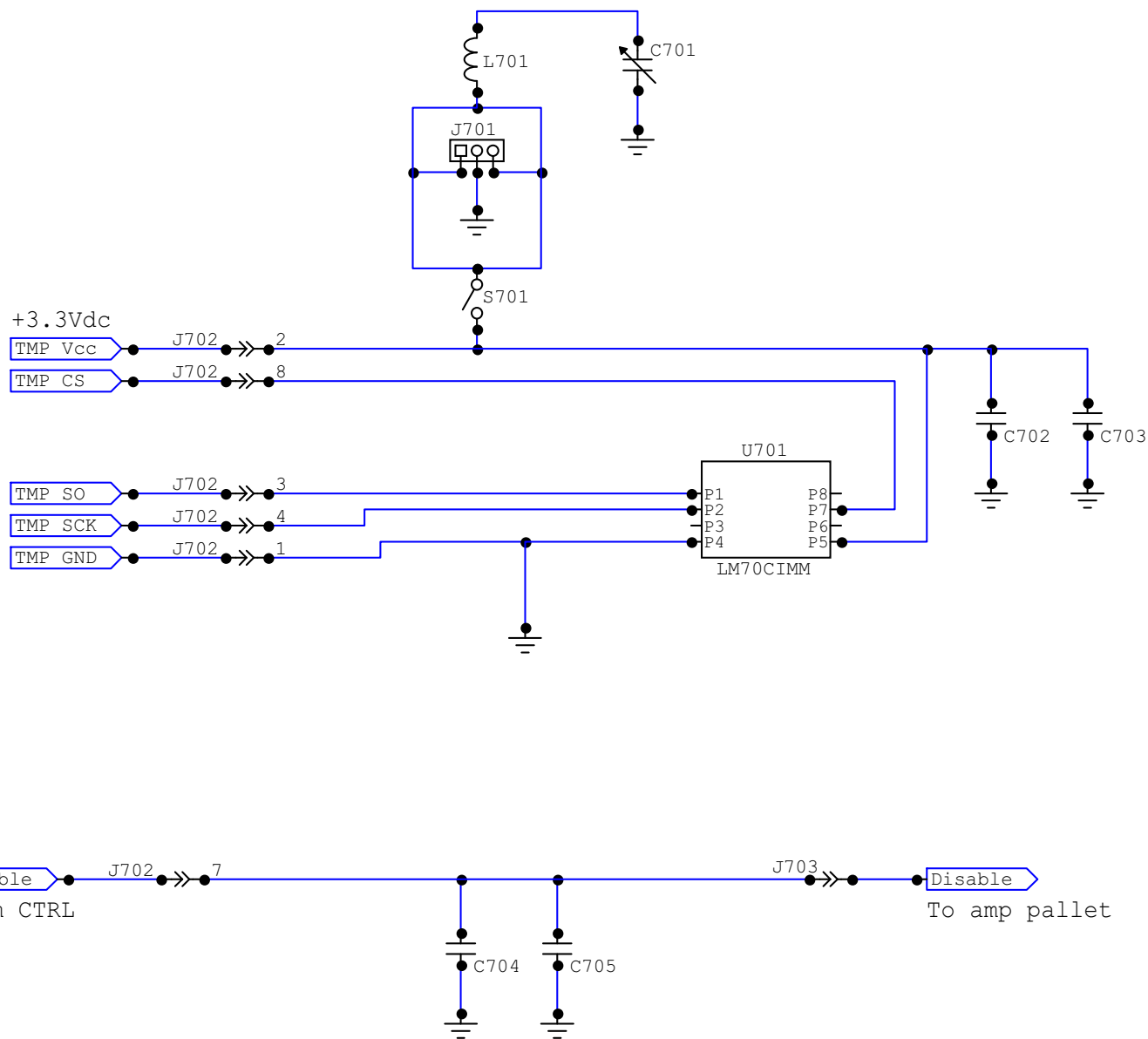


Variable Attenuator



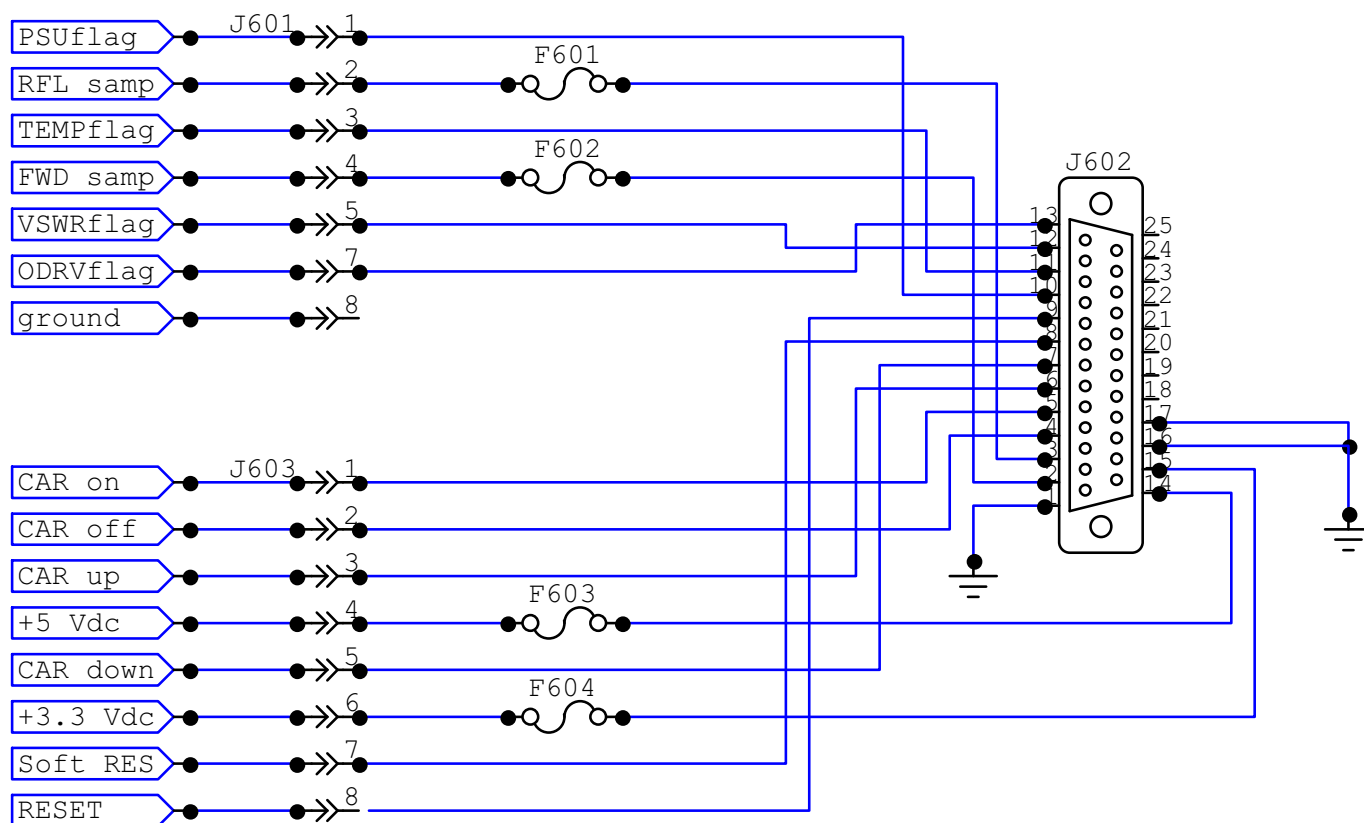
Digital Attenuator





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A. Sivacoe	
Temperature Sensor Board	
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