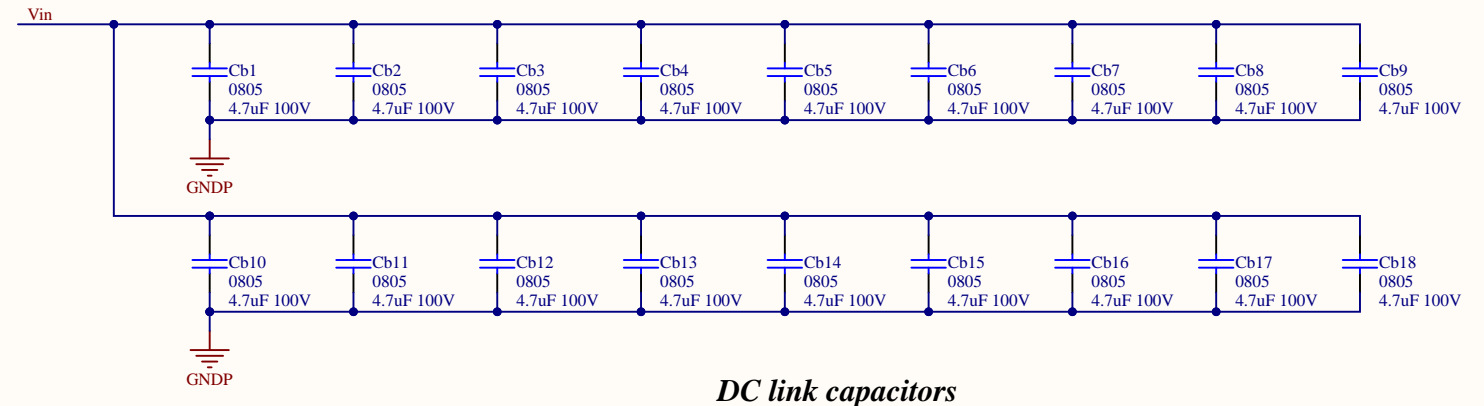
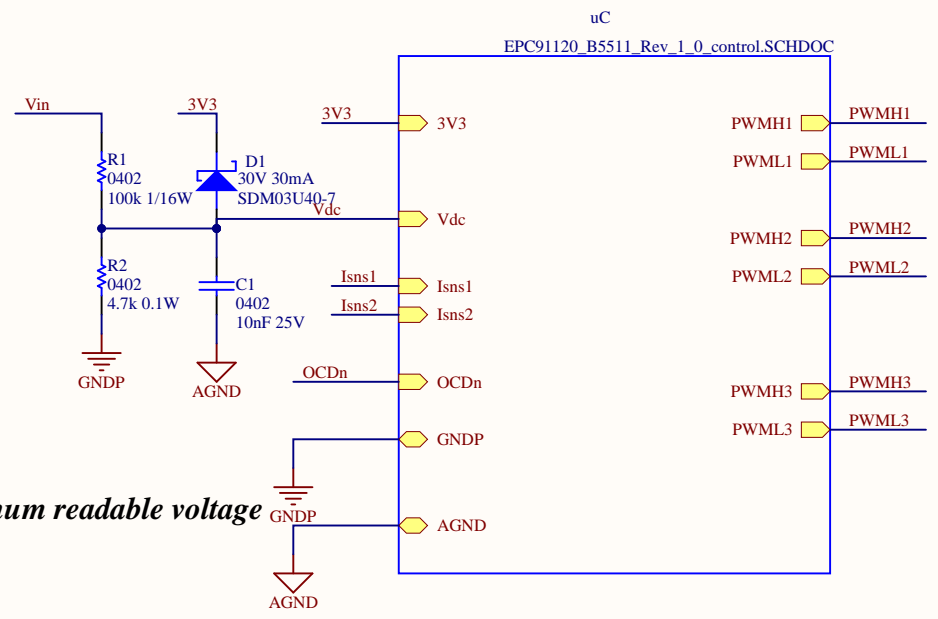


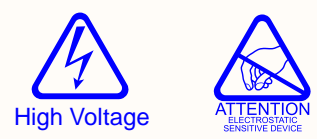
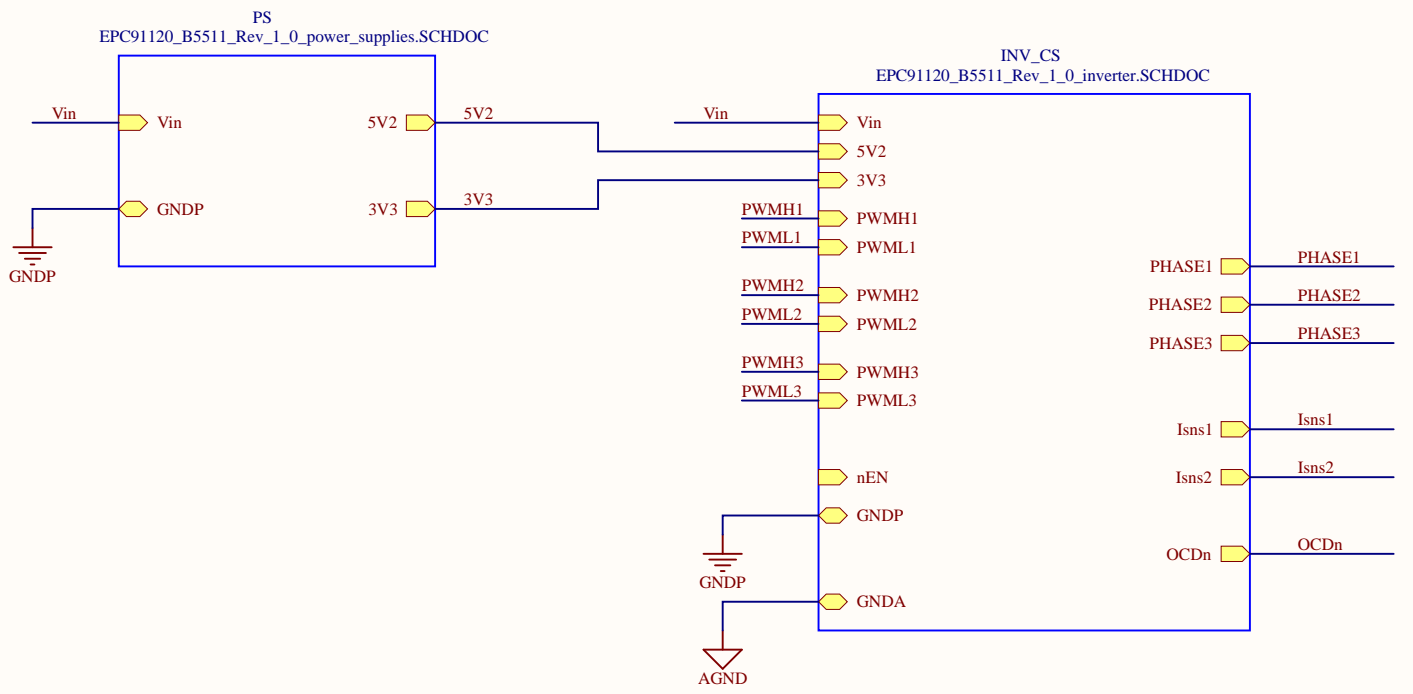
Input voltage 15 V - 55 V
5V power supply limited to 65 V max



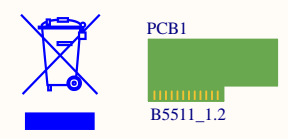
DC link capacitors



44.89 mV/V
73.5 V maximum readable voltage

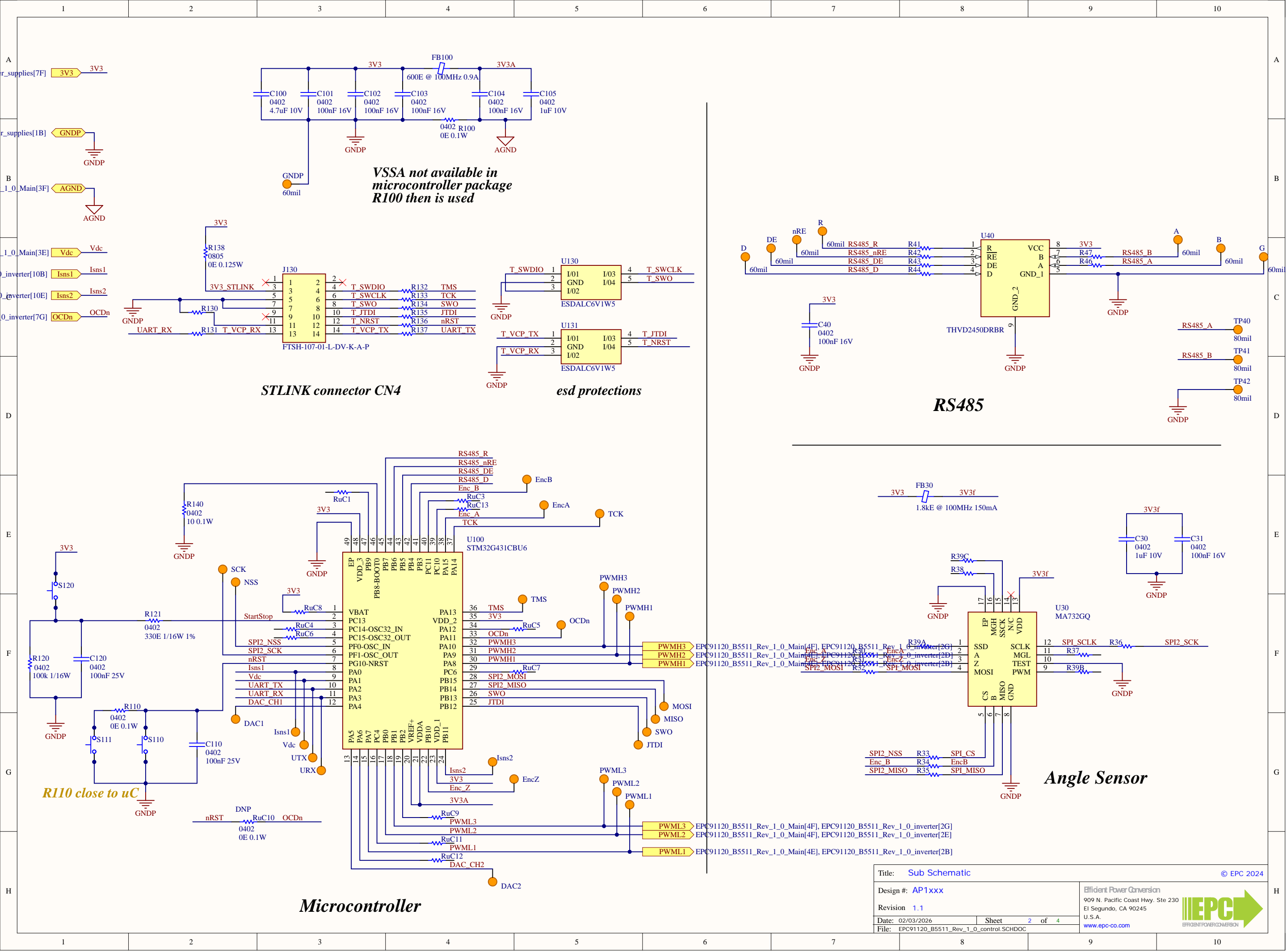


Serial# yyww-



For evaluation only;
not FCC approved for resale

Title: EPC91120 - Humanoid joint motor drive with EPC23104		© EPC 2025
Design #: EPC91120	PCB #: B5511	Efficient Power Conversion 909 N. Pacific Coast Hwy. Ste 230 El Segundo, CA 90245 U.S.A. www.epc-co.com
Revision 1.2	Revision: 1.2	
Date: 02/03/2026	Sheet 1 of 4	
File: EPC91120_B5511_Rev_1_0_Main.SCHDOC		



VSSA not available in microcontroller package R100 then is used


STLINK connector CN4

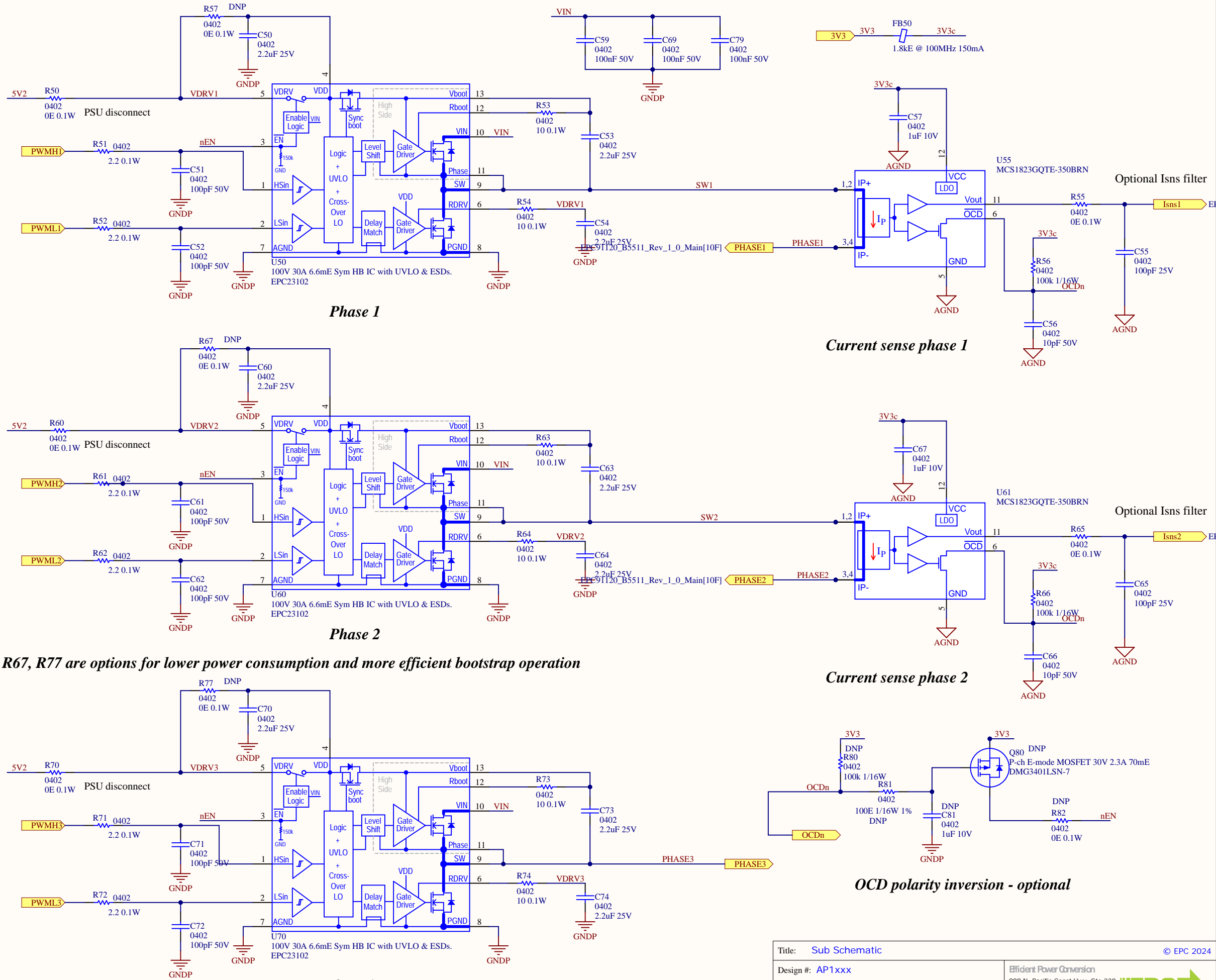
esd protections

RS485

Angle Sensor


Microcontroller

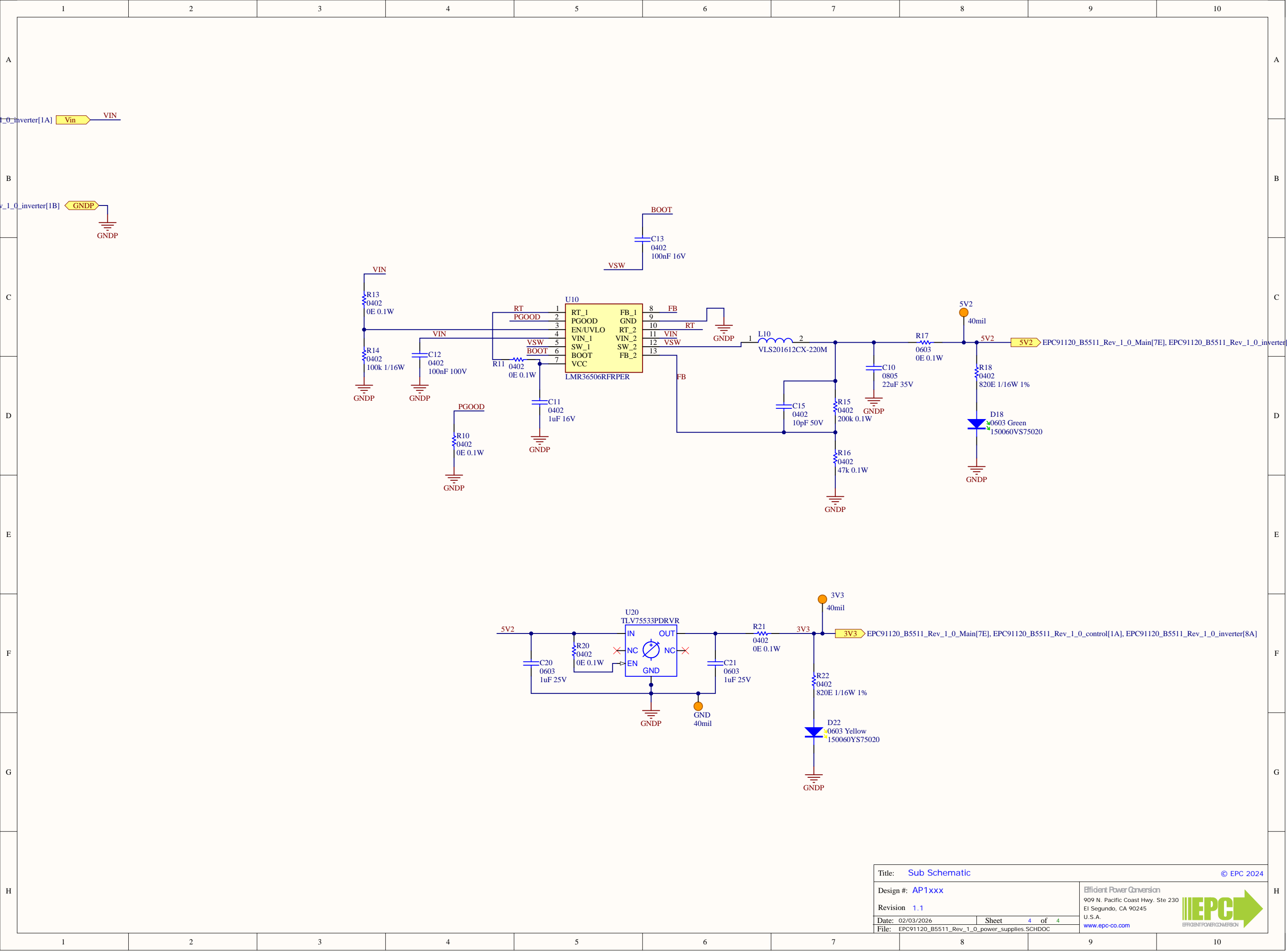
Title: Sub Schematic		© EPC 2024
Design #: AP1xxx		Efficient Power Conversion 909 N. Pacific Coast Hwy. Ste 230 El Segundo, CA 90245 U.S.A. www.epc-co.com 
Revision 1.1		
Date: 02/03/2026	Sheet 2 of 4	
File: EPC91120_B5511_Rev_1_0_control.SCHDOC		




R57, R67, R77 are options for lower power consumption and more efficient bootstrap operation

OCD polarity inversion - optional

Title: Sub Schematic		© EPC 2024
Design #: AP1xxx		Efficient Power Conversion 909 N. Pacific Coast Hwy. Ste 230 El Segundo, CA 90245 U.S.A. www.epc-co.com 
Revision 1.1		
Date: 02/03/2026	Sheet 3 of 4	
File: EPC91120_B5511_Rev_1_0_inverter.SCHDOC		



Title: Sub Schematic		© EPC 2024
Design #: AP1xxx		Efficient Power Conversion 909 N. Pacific Coast Hwy. Ste 230 El Segundo, CA 90245 U.S.A. www.epc-co.com
Revision 1.1		
Date: 02/03/2026	Sheet 4 of 4	
File: EPC91120_B5511_Rev_1_0_power_supplies.SCHDOC		