Block Diagram	
Inverter_v01	
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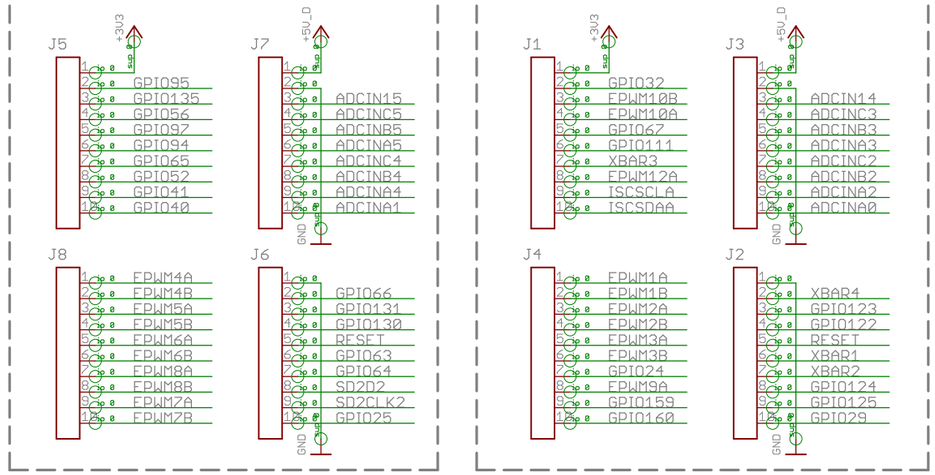
40Pin Boosterpack Connectors



40Pin Boosterpack Connectors

Widerstand auf Launchpad auslöten für EPWM7

	Connectors
	Inverter_v01
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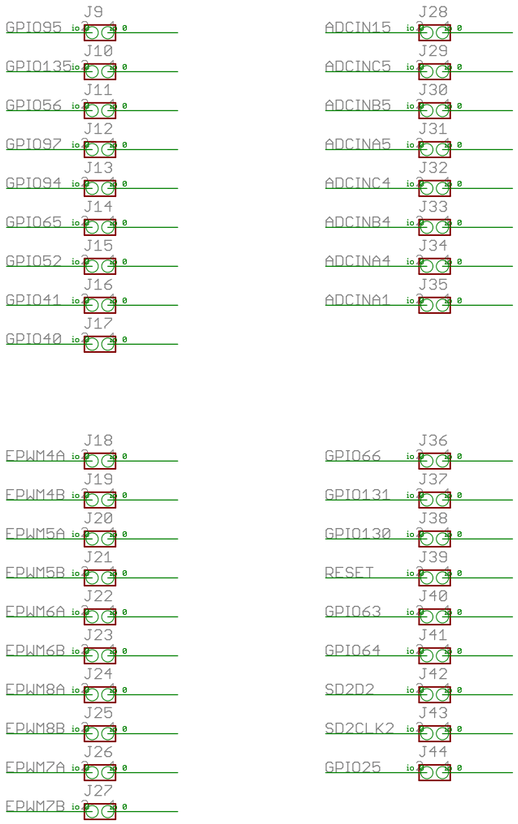
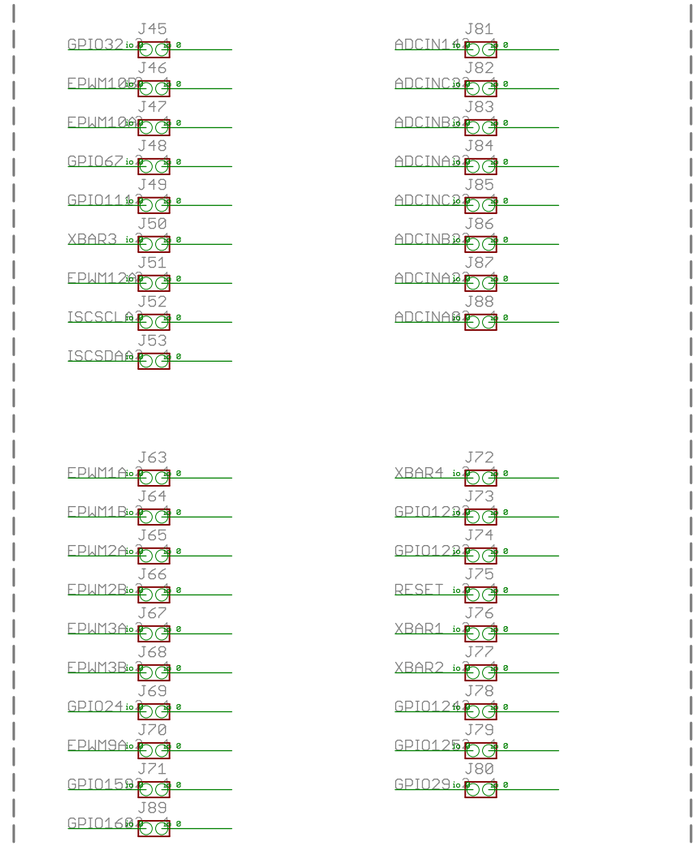
Signals from J5, J6, J7, J8



Signals from J1, J2, J3, J4



- Für die Simulation eines Phasenausfalls kann ein beliebiger PWM oder Inhibit Jumper gezogen werden
- Selbiges gilt für Messsignale
- Prüfen ob Drivestrength eines GPIO für alle INH Signale ausreichend ist

	Signaljumper
	Inverter_v01
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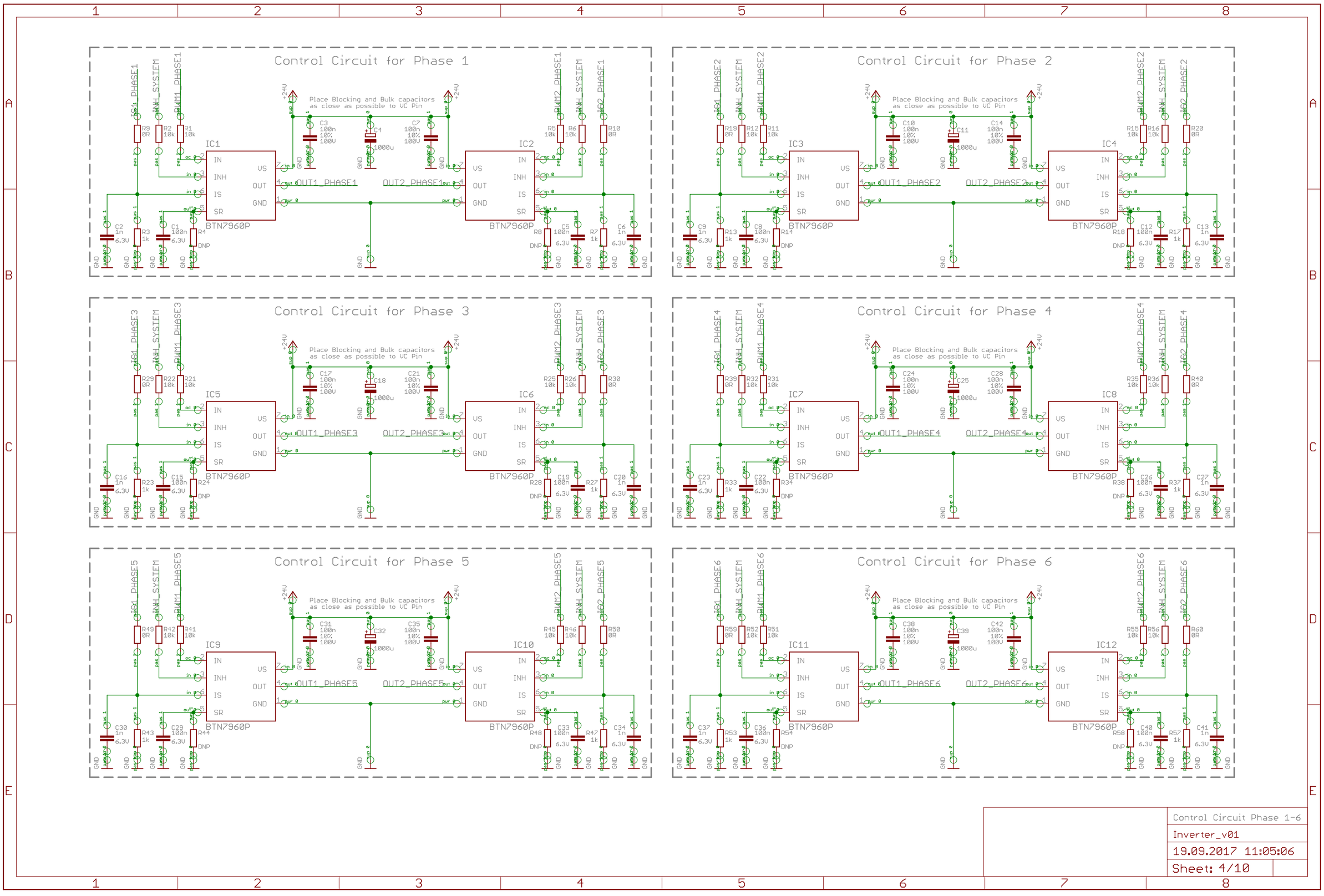

	Control Circuit Phase 1-6
	Inverter_v01
	19.09.2017 11:05:06
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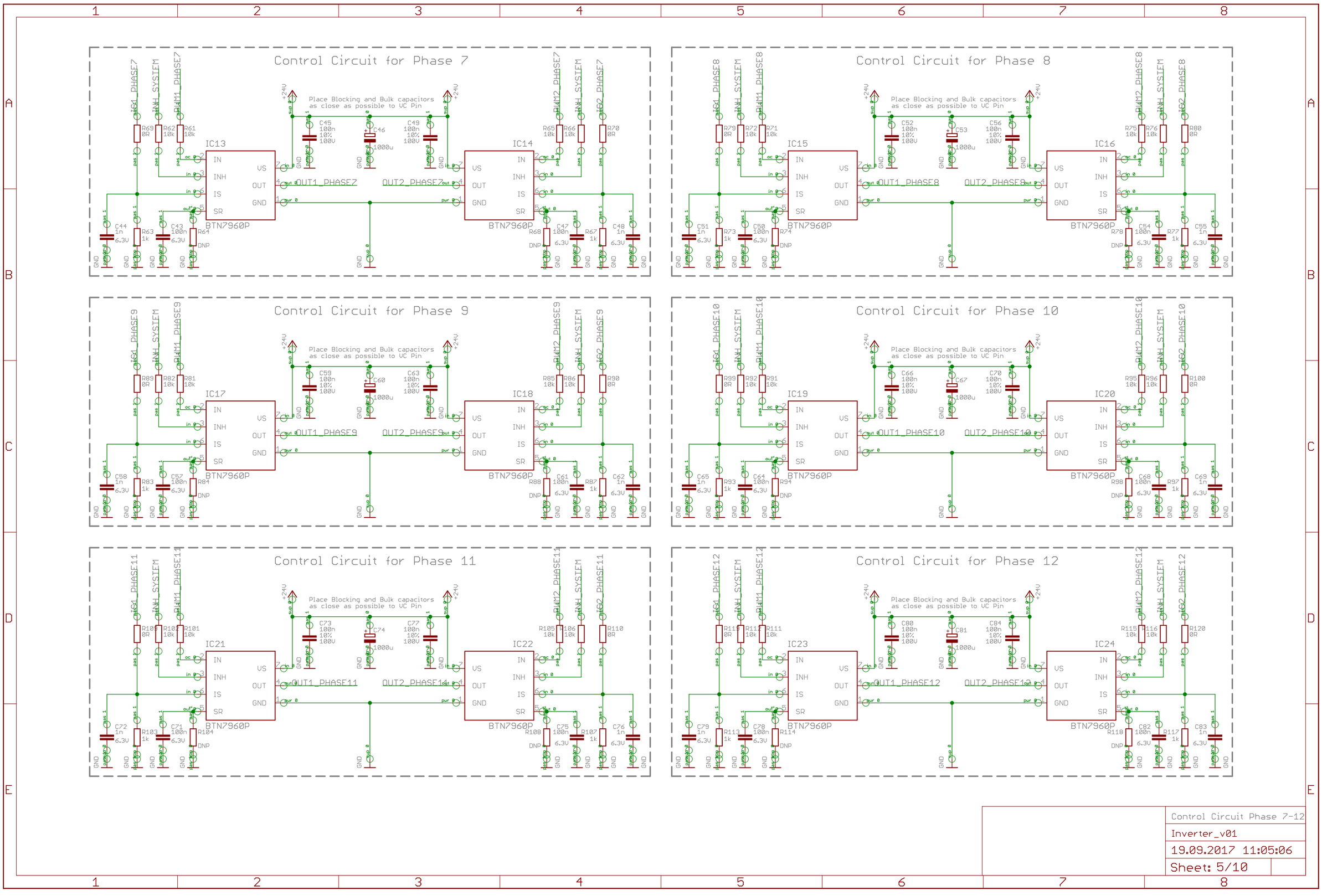
Control Circuit for Phase 7
Control Circuit for Phase 8
Control Circuit for Phase 9
Control Circuit for Phase 10
Control Circuit for Phase 11
Control Circuit for Phase 12
Place Blocking and Bulk capacitors as close as possible to VC Pin
IC13
IC14
IC15
IC16
IC17
IC18
IC19
IC20
IC21
IC22
IC23
IC24
BTN7960P
IN
INH
IS
SR
VS
OUT
GND
+24V
OUT1_PHASE7
OUT2_PHASE7
OUT1_PHASE8
OUT2_PHASE8
OUT1_PHASE9
OUT2_PHASE9
OUT1_PHASE10
OUT2_PHASE10
OUT1_PHASE11
OUT2_PHASE11
OUT1_PHASE12
OUT2_PHASE12
IC1_PHASE7
IC2_PHASE7
PWM_SYSTEM
PWM1_PHASE7
PWM2_PHASE7
IC1_PHASE8
IC2_PHASE8
PWM1_PHASE8
PWM2_PHASE8
IC1_PHASE9
IC2_PHASE9
PWM1_PHASE9
PWM2_PHASE9
IC1_PHASE10
IC2_PHASE10
PWM1_PHASE10
PWM2_PHASE10
IC1_PHASE11
IC2_PHASE11
PWM1_PHASE11
PWM2_PHASE11
IC1_PHASE12
IC2_PHASE12
PWM1_PHASE12
PWM2_PHASE12
DNP
Control Circuit Phase 7-12
Inverter_v01
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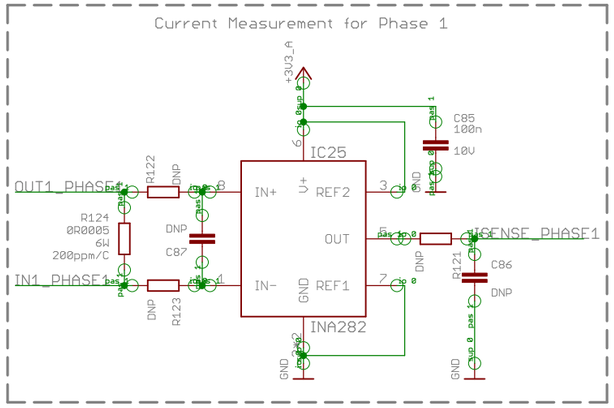

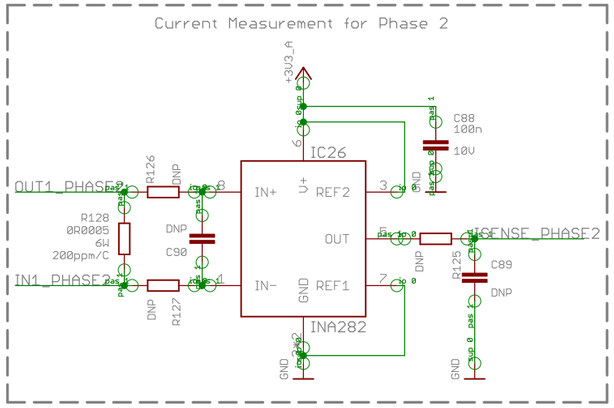

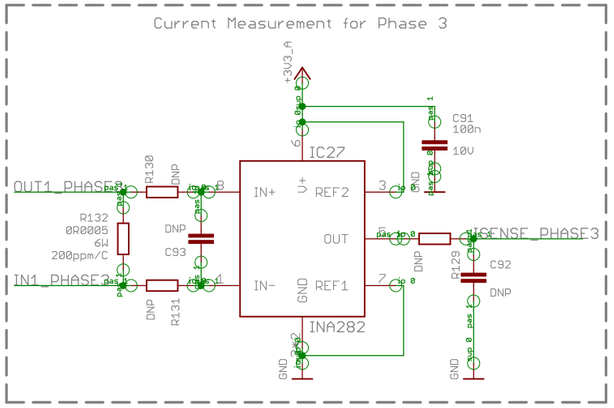

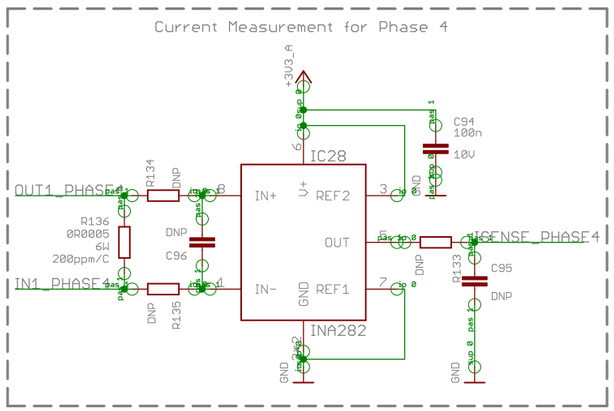

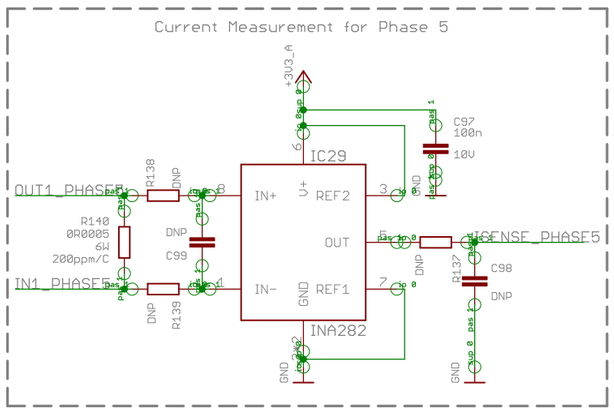

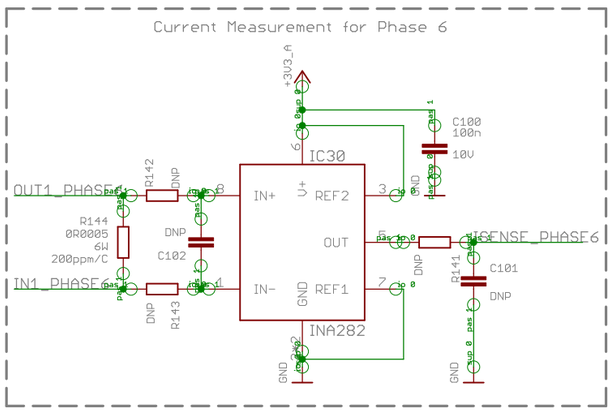

Vorsicht beim LÖten der Widerstände wegen Resistance to soldering heat (Datenblatt) manchml <260°C für 10s

INA282 mandatory circuit
Measuring range: +/- 70A @ GAIN=50V/V
VOUT=GAIN x Rm x I + 1.65V @ +/- 3V3 Supply

	Current Measurement 1-6
	Inverter_v01
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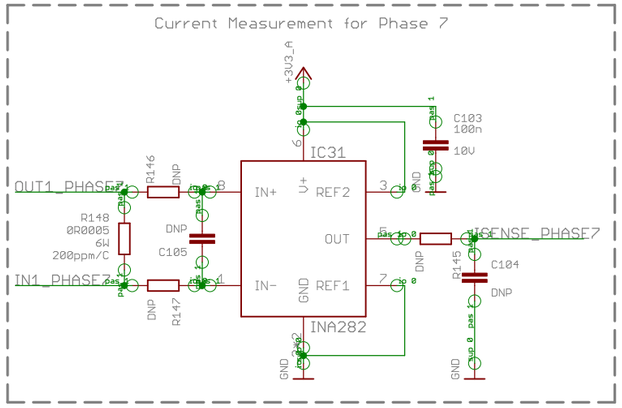

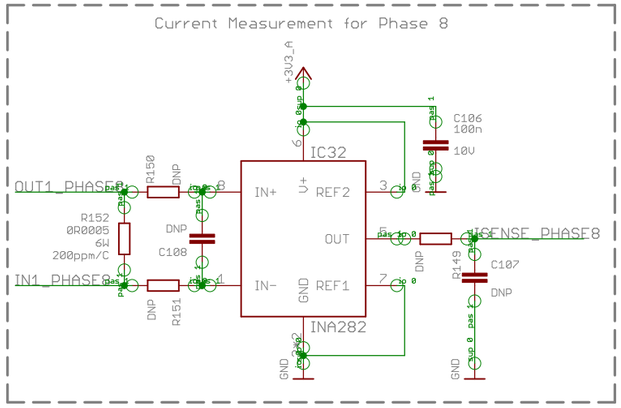

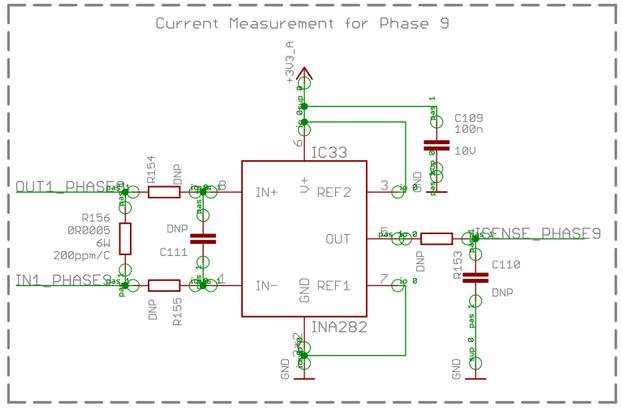

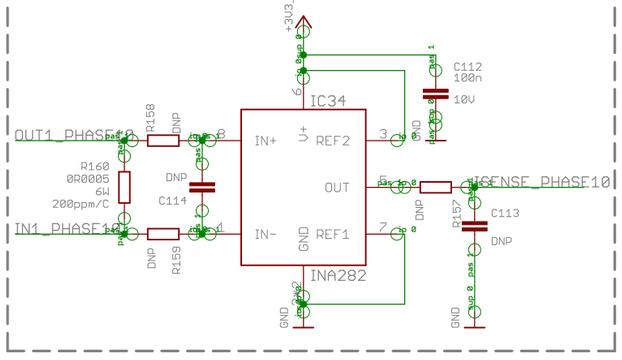

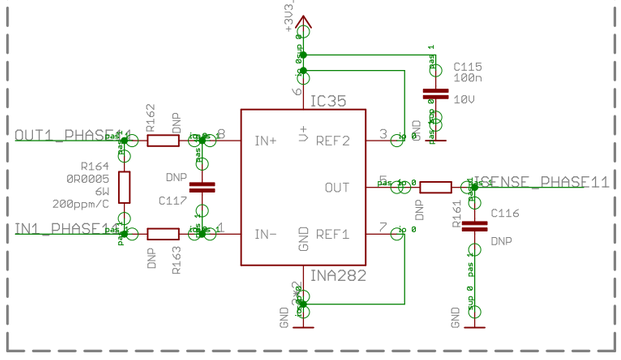

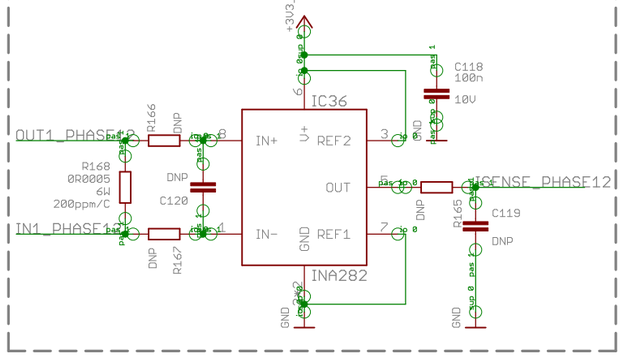

INA282 mandatory circuit
Measuring range: +/- 70A @ GAIN=50V/V
VOUT=GAIN x Rm x I + 1.65V @ +/- 3V3 Supply

	Current Measurement 7-12
	Inverter_v01
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Encoder, Resolver oder Infineon Baustein

Rotary Encoder

Inverter_v01

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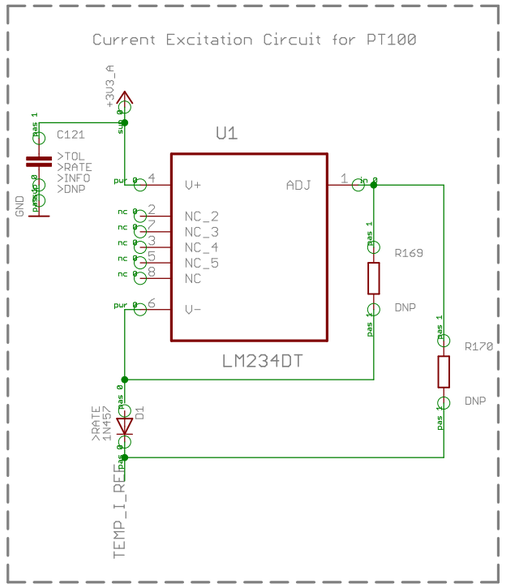

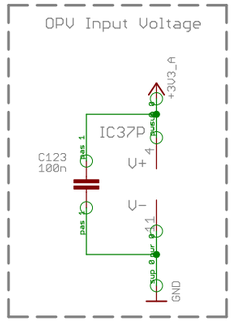

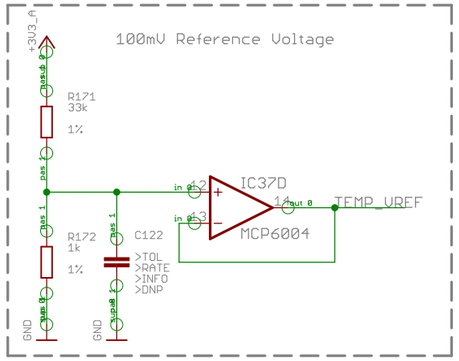

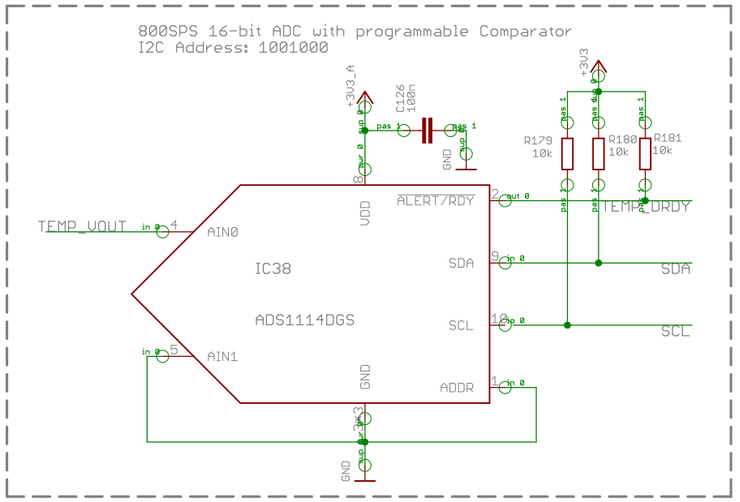

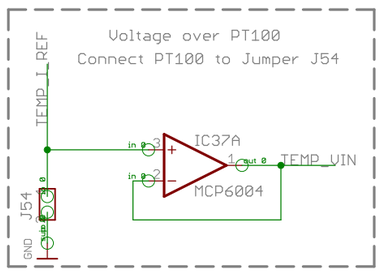

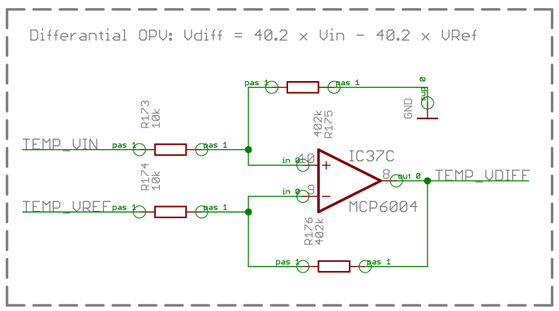

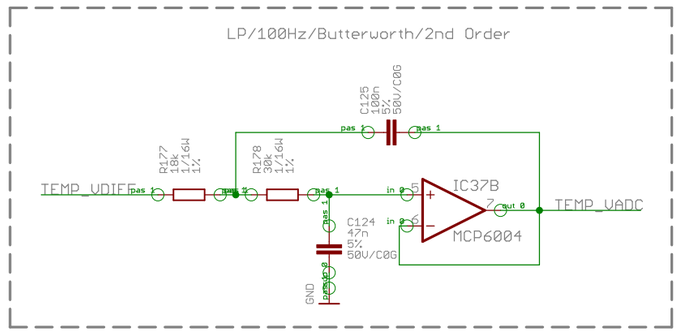

	Temperature Measurement
	Inverter_v01
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Evtl Powercircuit aber sicherlich Leistungsmessung über Strom in DC Leitung (aller Versorgungen) und Spannungsüberwachung

Power inkl. Power Measurement

Inverter_v01

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