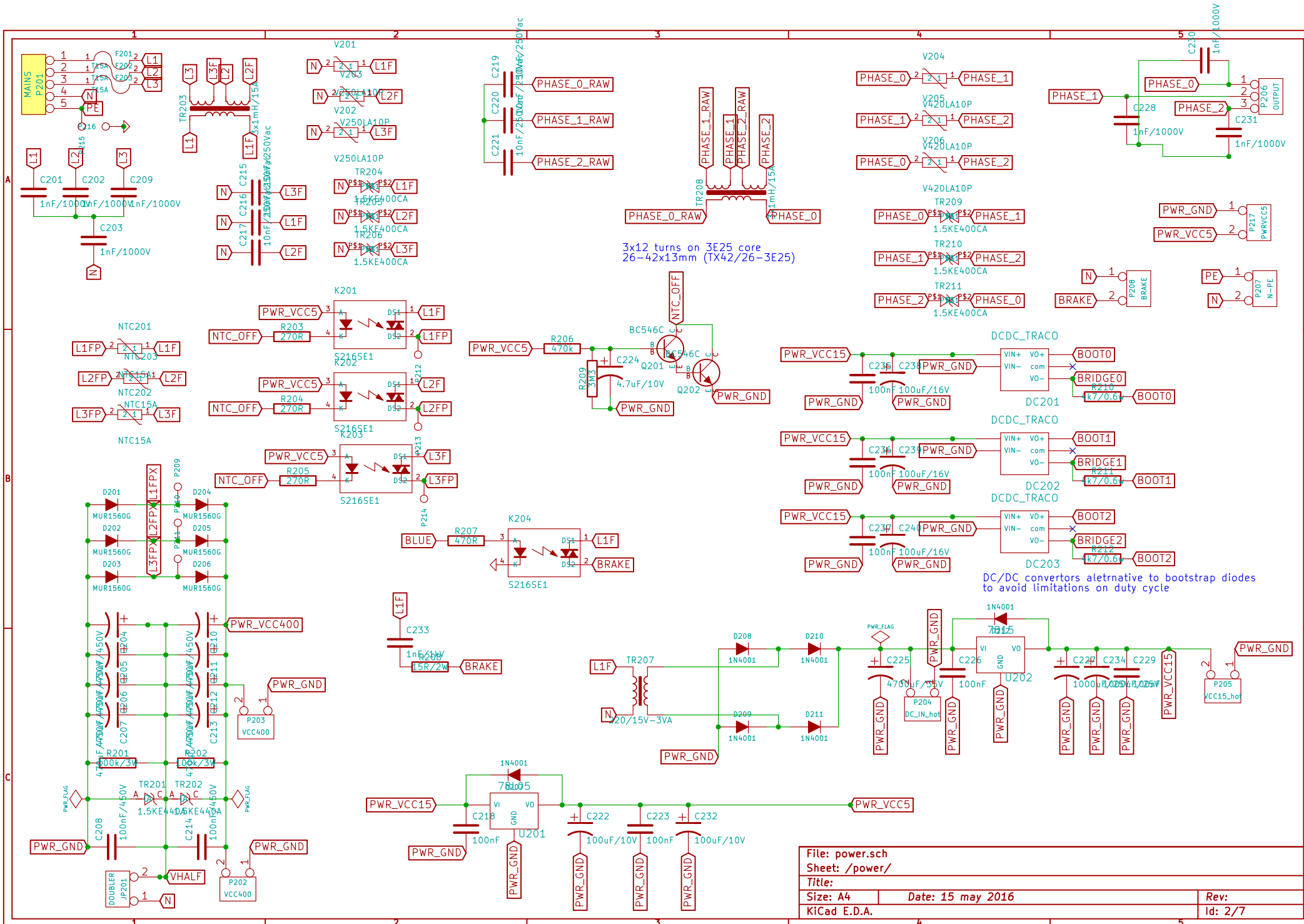


power	Expander
power.sch	expander.sch
sensing	bridges
sensing.sch	bridges.sch
overcurrent	sensing2
overcurrent.sch	sensing2.sch

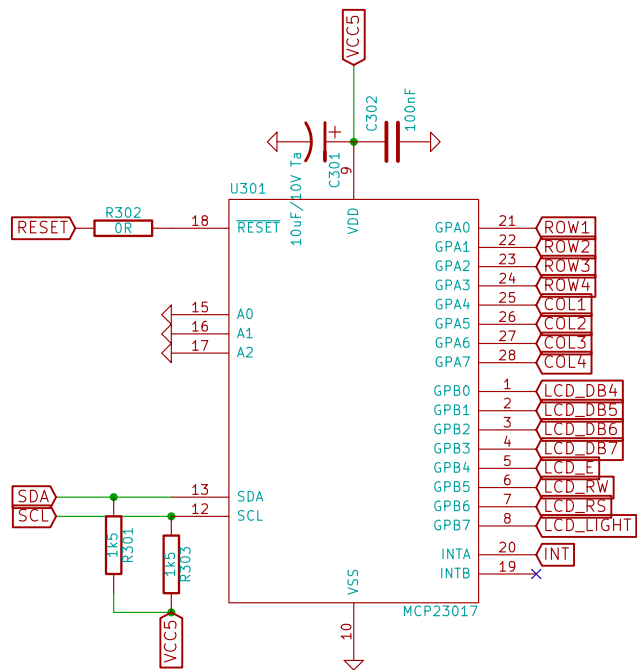
File: pwmsine.sch	
Sheet: /	
Title: 3-phase sine-wave frequency changer	
Size: A4	Date: 15 may 2016
KiCad E.D.A.	Rev: /
	Id: 1/7



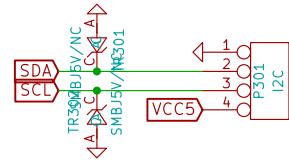
3x12 turns on 3E25 core
26-42x13mm (TX42/26-3E25)

DC/DC converters alternative to bootstrap diodes
to avoid limitations on duty cycle

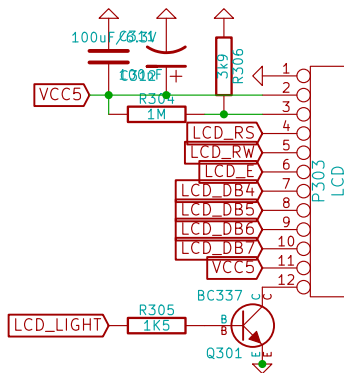
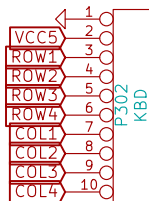
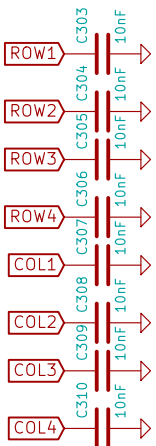
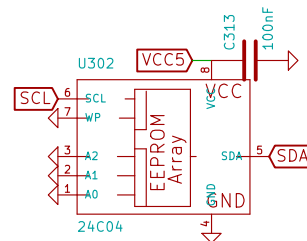
File: power.sch		Rev:	
Sheet: /power/		Id: 2/7	
Title:			
Size: A4	Date: 15 may 2016		
KiCad E.D.A.			



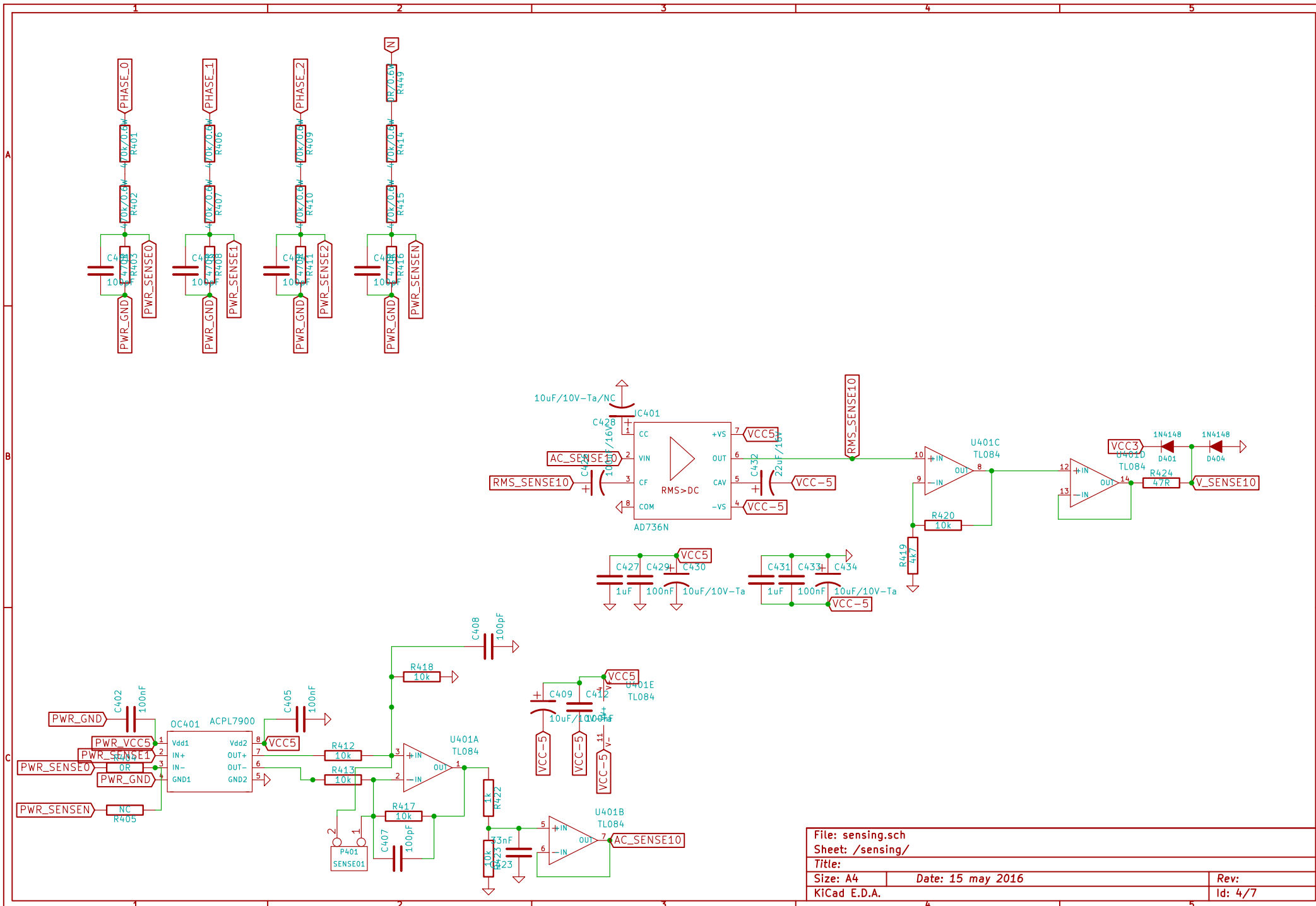
transils essential due to the cabled external sensor;
pullups have to be 1k5 for the bus to work with their capacitive load



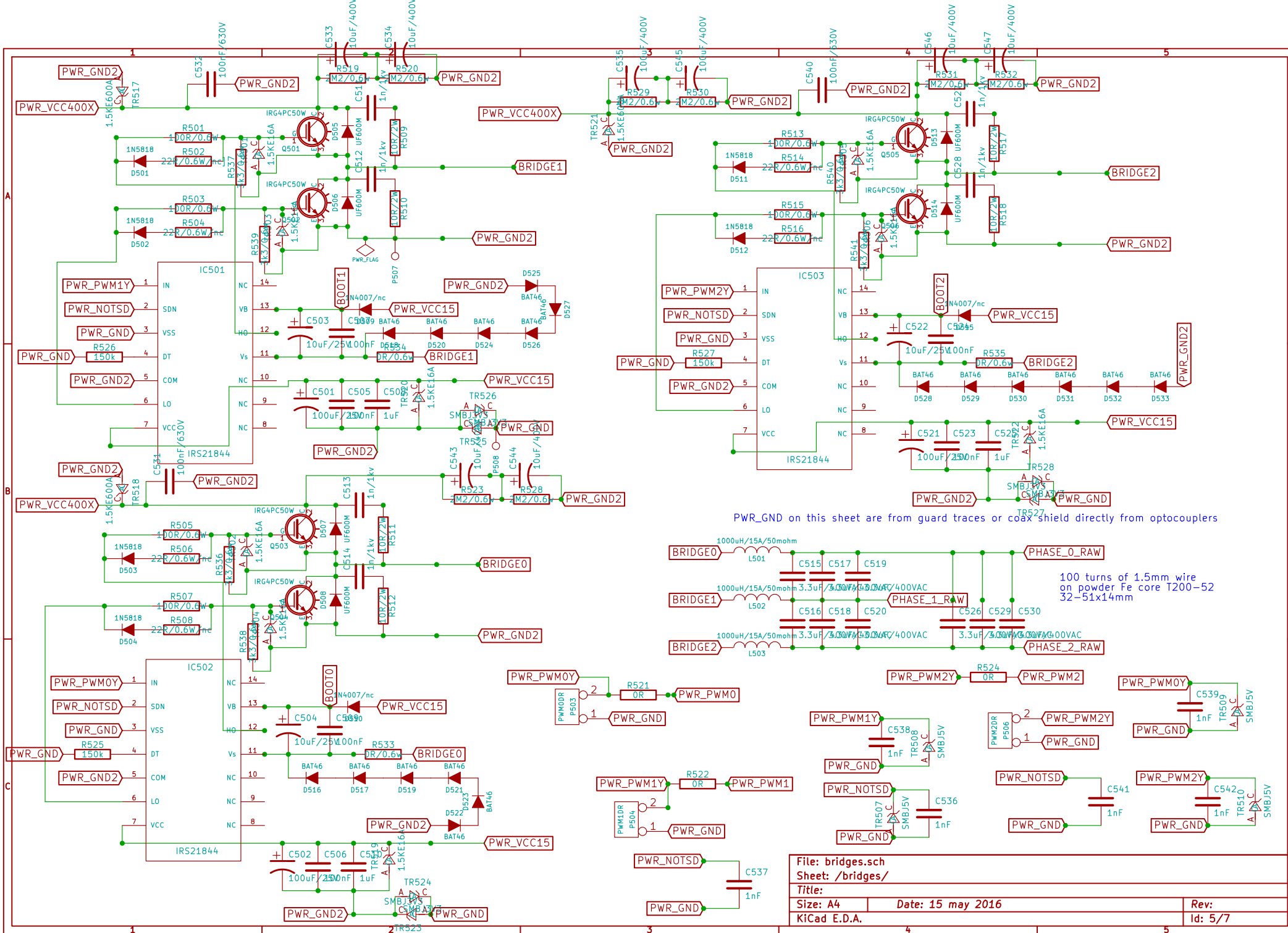
Connect I2C temperature sensor TC74 located at the IGBT heatsink



File: expander.sch		
Sheet: /Expander/		
Title:		
Size: A4	Date: 15 may 2016	Rev:
KiCad E.D.A.		Id: 3/7



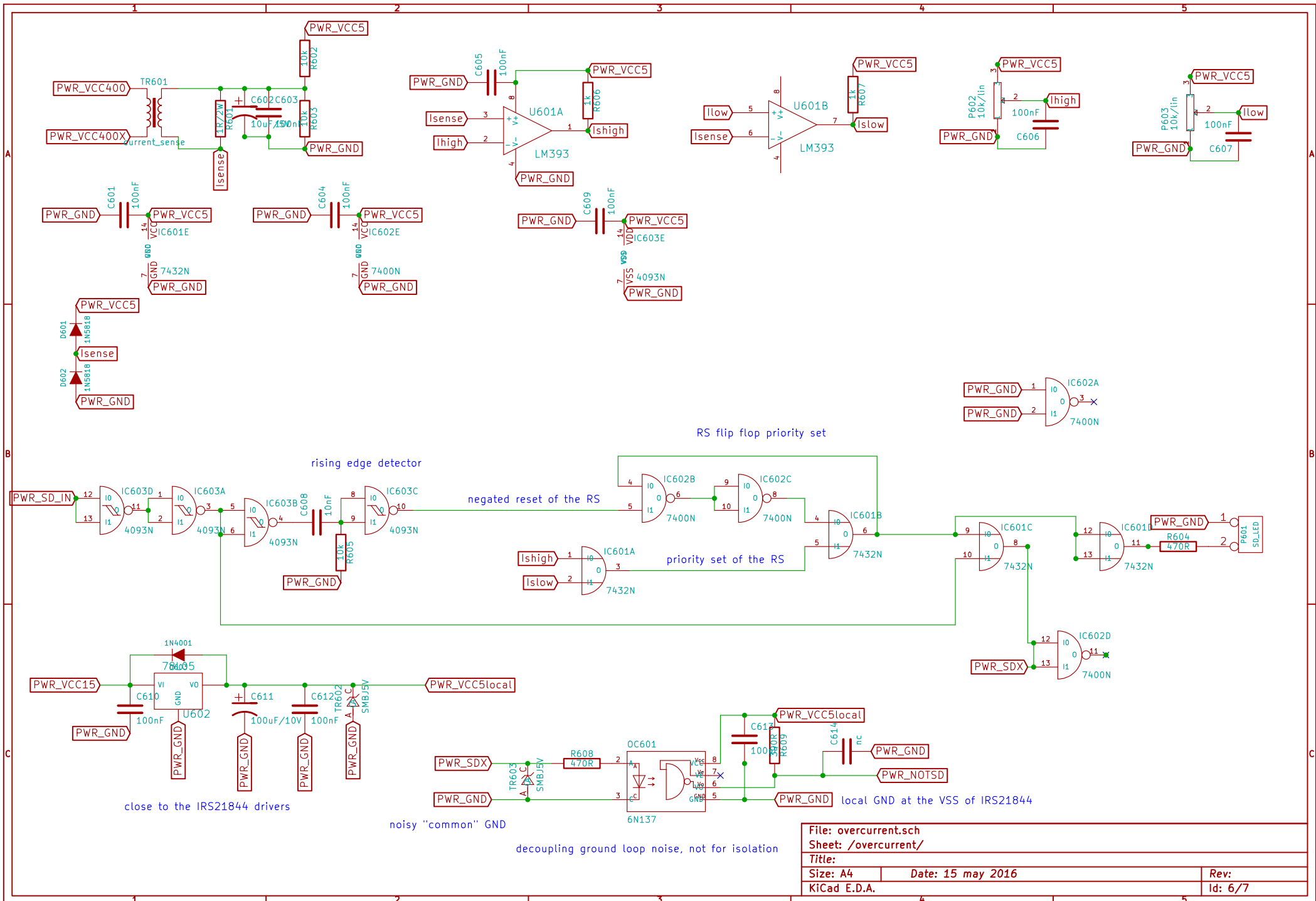
File: sensing.sch		Rev:	
Sheet: /sensing/		Id: 4/7	
Title:		Date: 15 may 2016	
Size: A4	KiCad E.D.A.		



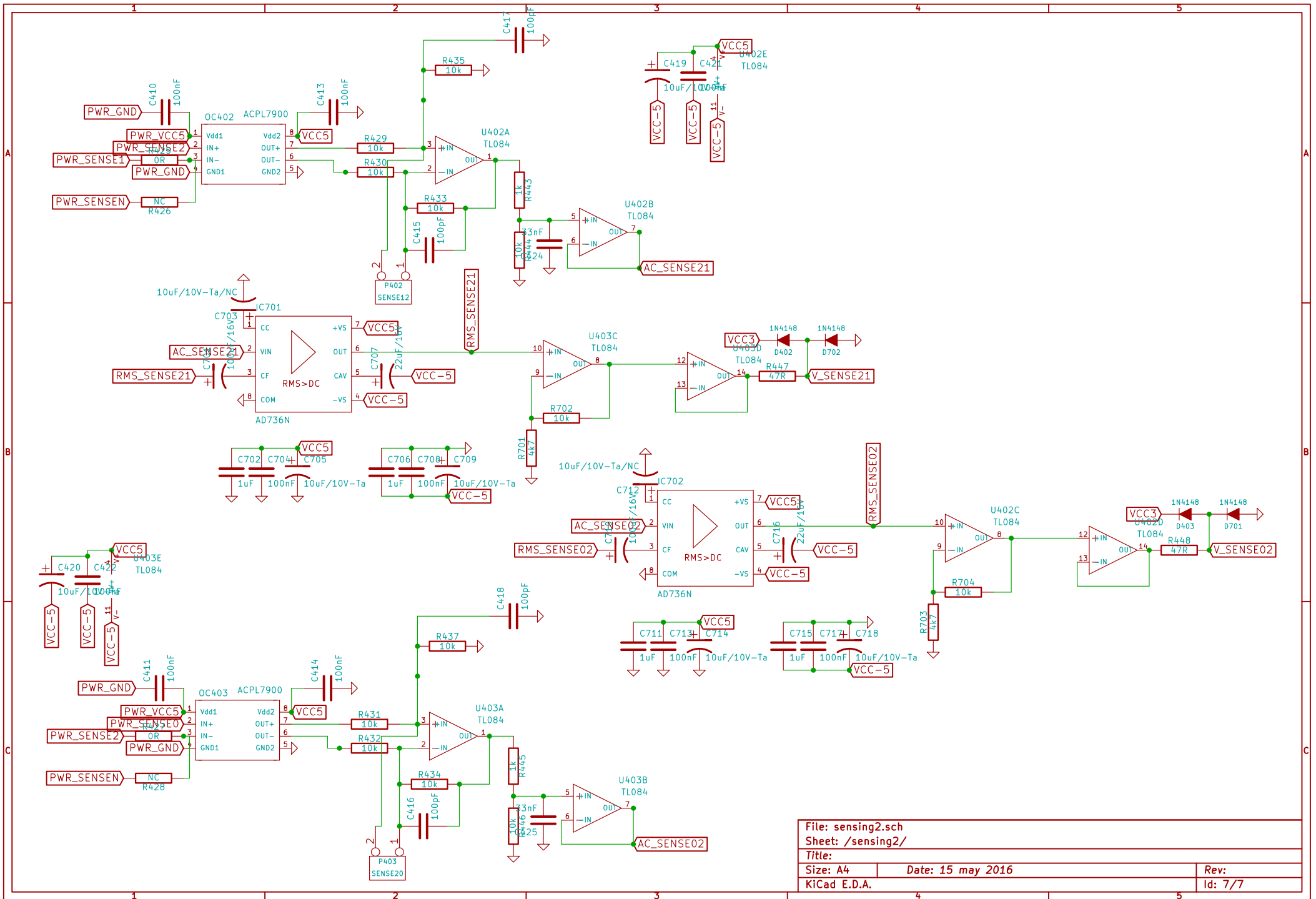
PWR_GND on this sheet are from guard traces or coax shield directly from optocouplers

100 turns of 1.5mm wire on powder Fe core T200-52 32-51x14mm

File: bridges.sch		Rev:	
Sheet: /bridges/		Id: 5/7	
Size: A4	Date: 15 may 2016		
KiCad E.D.A.			



File: overcurrent.sch		Rev:	
Sheet: /overcurrent/		Id: 6/7	
Title:			
Size: A4	Date: 15 may 2016		
KiCad E.D.A.			



File: sensing2.sch		
Sheet: /sensing2/		
Title:		
Size: A4	Date: 15 may 2016	Rev:
KiCad E.D.A.		Id: 7/7