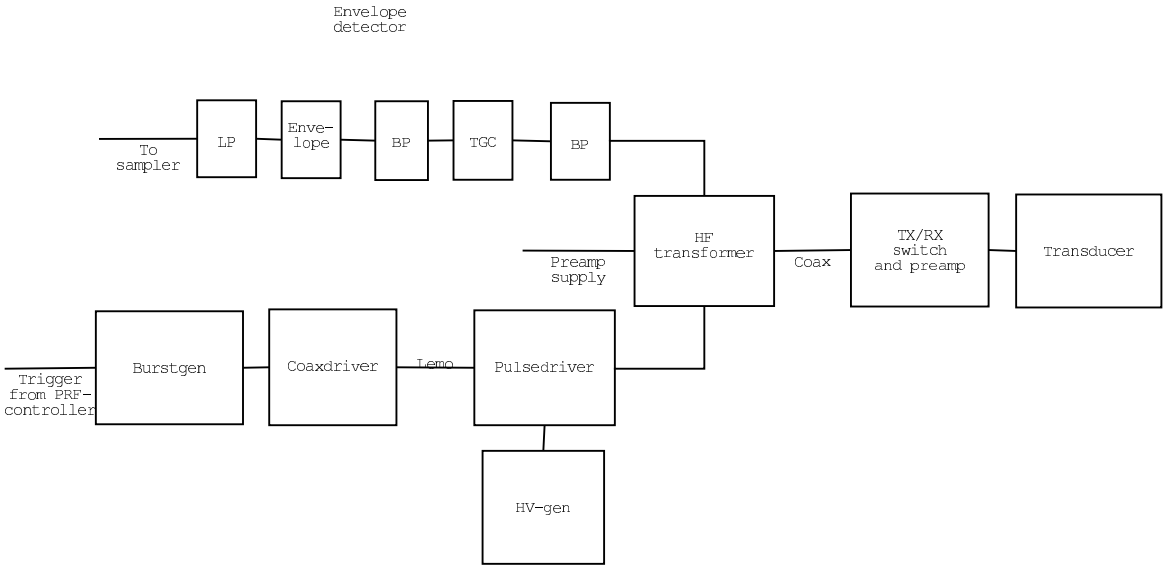
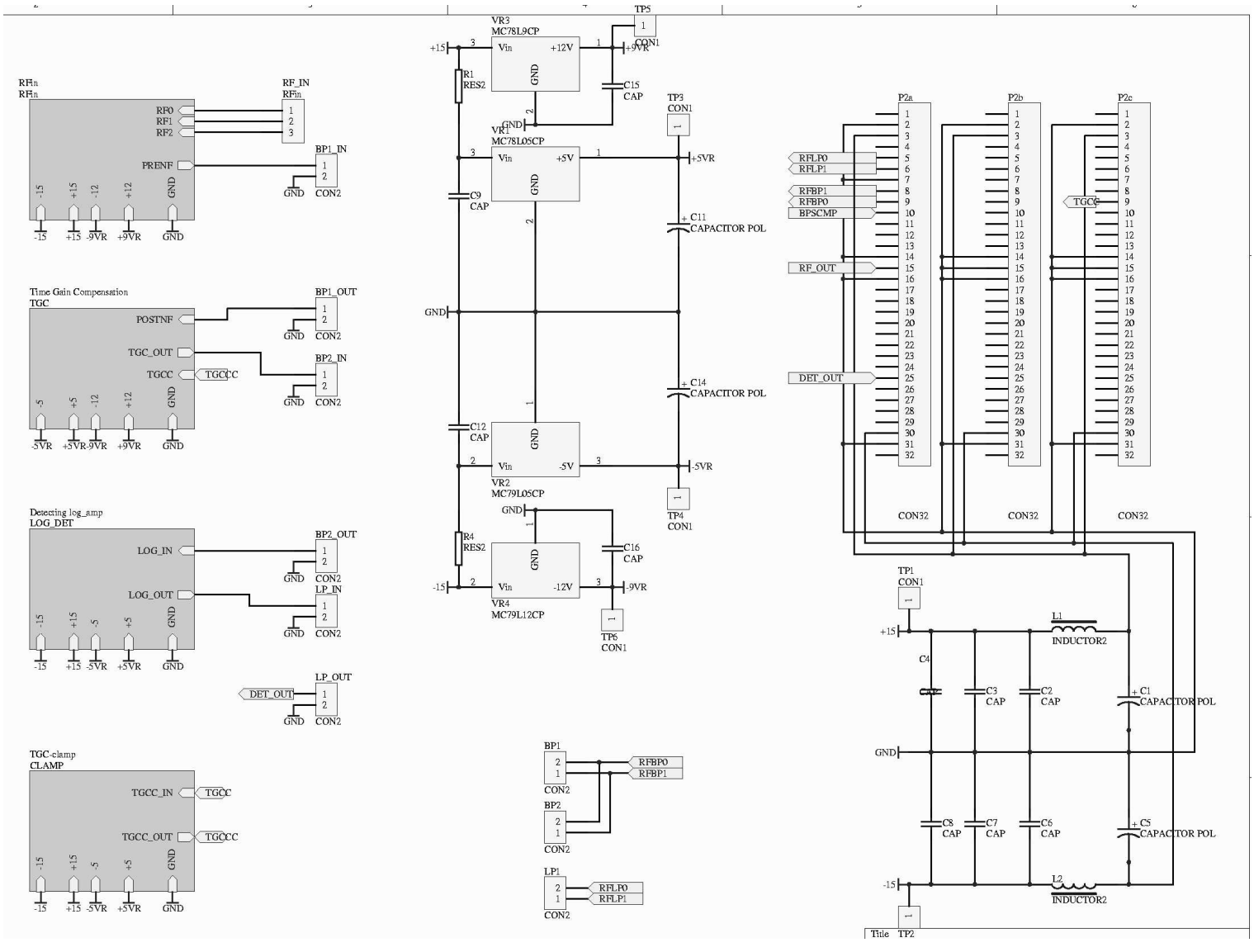
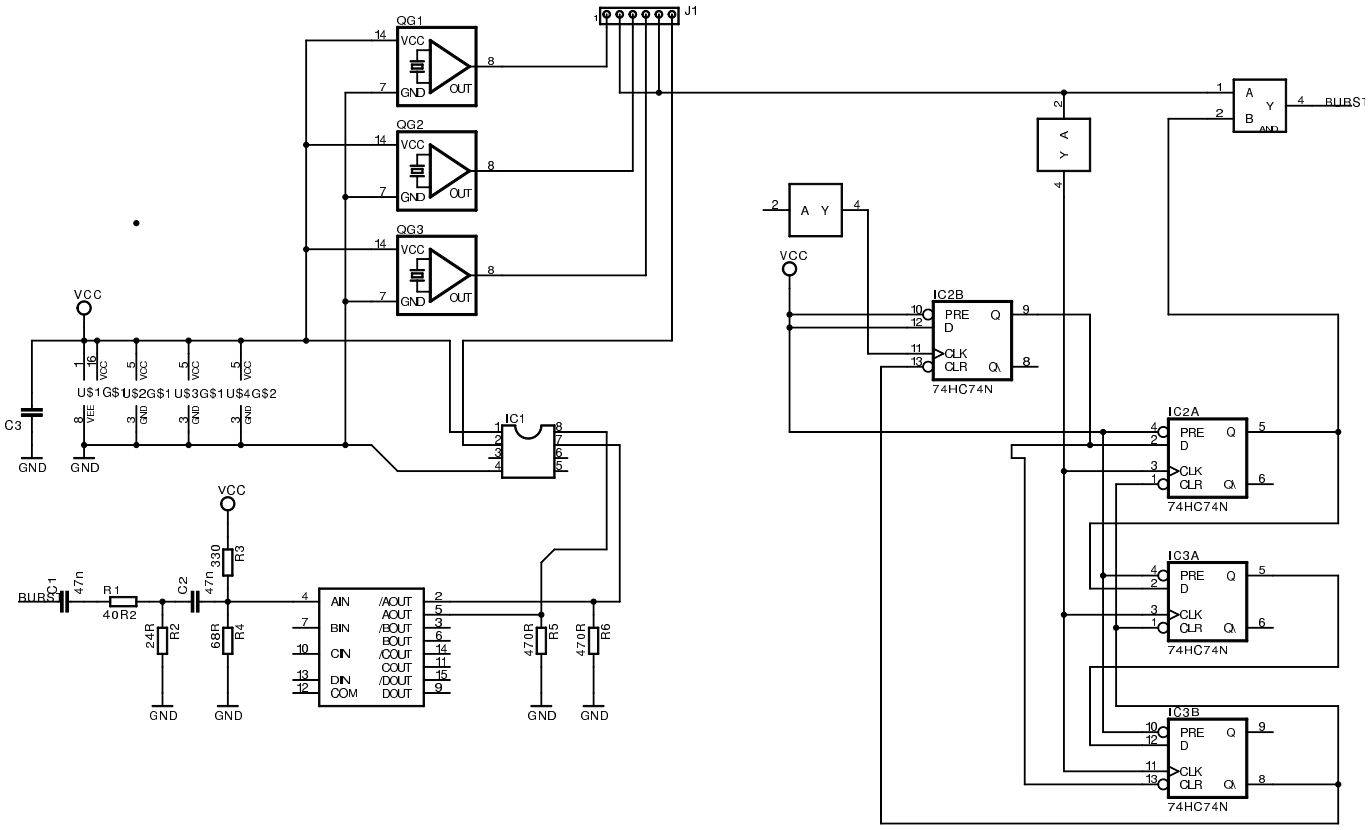
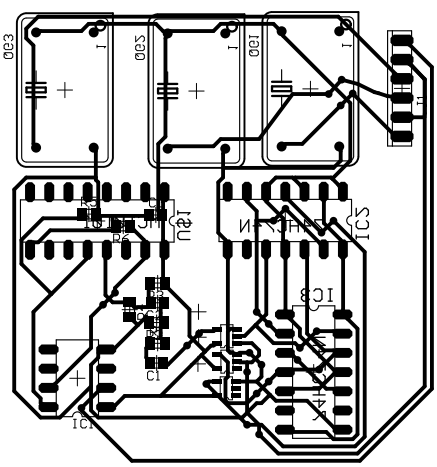
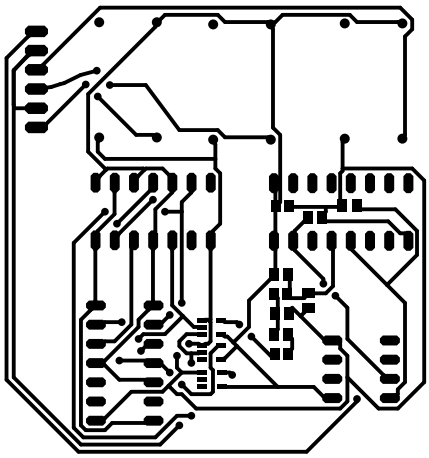
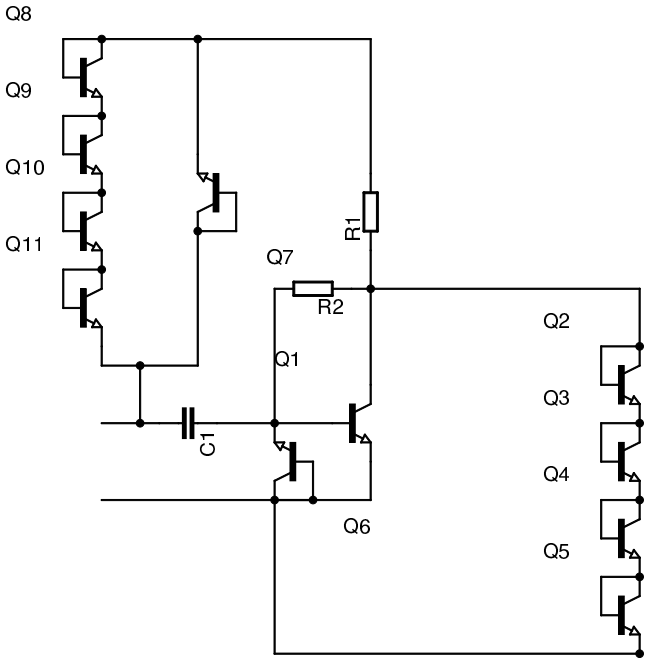

Envelope
detector
To
sampler
LP
Enve-
lope
BP
TGC
BP
Preamp
supply
HF
transformer
Coax
TX/RX
switch
and preamp
Transducer
Trigger
from PRF-
controller
Burstgen
Coaxdriver
Lemo
Pulsedriver
HV-gen


RFin
RFin
RF0
RF1
RF2
PRENF
-15
+15
-12
+12
GND
-15
+15
-9VR
+9VR
GND
RF_IN
RFin
BP1_IN
GND
CON2
Time Gain Compensation
TGC
POSTNF
TGC_OUT
TGCC
-5
+5
-12
+12
GND
-5VR
+5VR
-9VR
+9VR
GND
BP1_OUT
BP2_IN
Detecting log_amp
LOG_DET
LOG_IN
LOG_OUT
-15
+15
-5
+5
GND
-15
+15
-5VR
+5VR
GND
BP2_OUT
LP_IN
DET_OUT
LP_OUT
TGC-clamp
CLAMP
TGCC_IN
TGCC_OUT
TGCC
-15
+15
-5
+5
GND
-15
+15
-5VR
+5VR
GND
VR3
MC78L9CP
Vin
+12V
+9VR
GND
R1
RES2
C15
CAP
TP5
CON1
VR1
MC78L05CP
Vin
+5V
+5VR
C9
CAP
C11
CAPACITOR POL
TP3
CON1
C12
CAP
VR2
MC79L05CP
Vin
-5V
-5VR
C14
CAPACITOR POL
TP4
CON1
R4
RES2
C16
CAP
VR4
MC79L12CP
Vin
-12V
-9VR
TP6
CON1
BP1
BP2
LP1
RFBP0
RFBP1
RFLP0
RFLP1
CON2
P2a
P2b
P2c
RFLP0
RFLP1
RFBP1
RFBP0
BPSCMP
RF_OUT
DET_OUT
TGCC
CON32
CON32
CON32
TP1
CON1
L1
INDUCTOR2
C4
CAP
C3
CAP
C2
CAP
C1
CAPACITOR POL
C8
CAP
C7
CAP
C6
CAP
C5
CAPACITOR POL
L2
INDUCTOR2
Title TP2

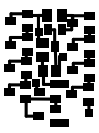

J1
QG1
QG2
QG3
VCC
OUT
GND
U$1G$1
U$2G$1
U$3G$1
U$4G$2
VEE
C3
IC1
AIN
BIN
CIN
DIN
COM
/AOUT
AOUT
/BOUT
BOUT
/COUT
COUT
/DOUT
DOUT
C1
47n
R1
40R
C2
R2
24R
R3
330
R4
68R
R5
470R
R6
IC2B
74HC74N
PRE
CLK
CLR
Q
IC2A
IC3A
IC3B
A
B
Y
AND

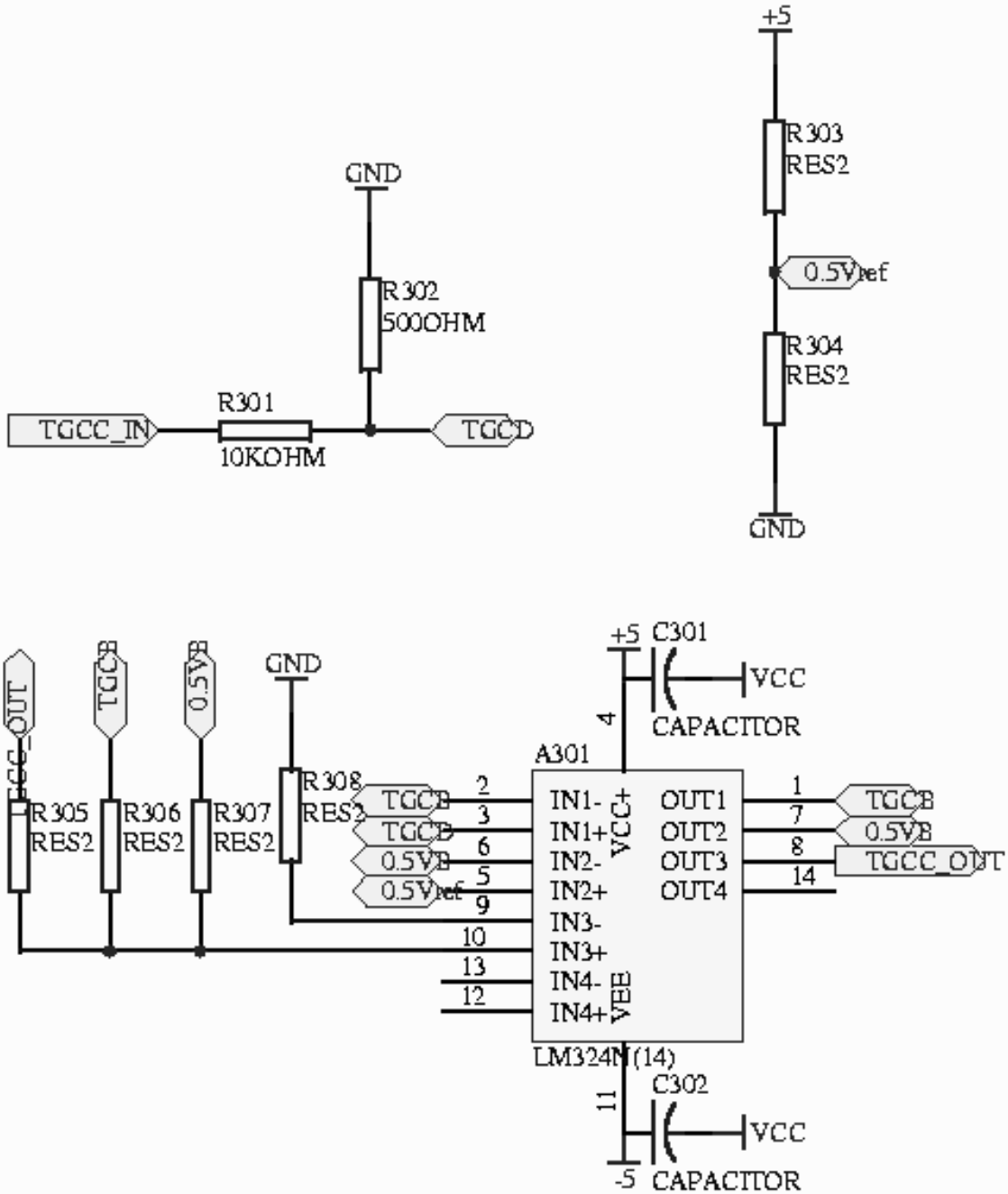

C3
C2
C1
IC1
IC2
IC3

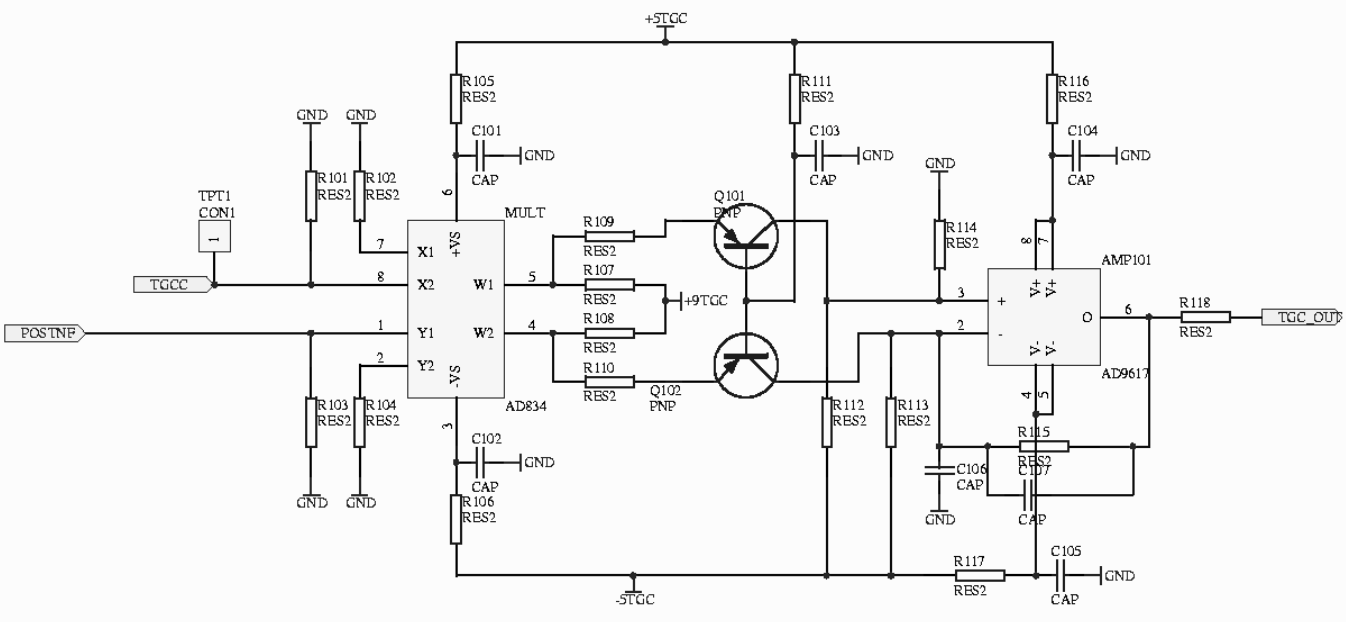


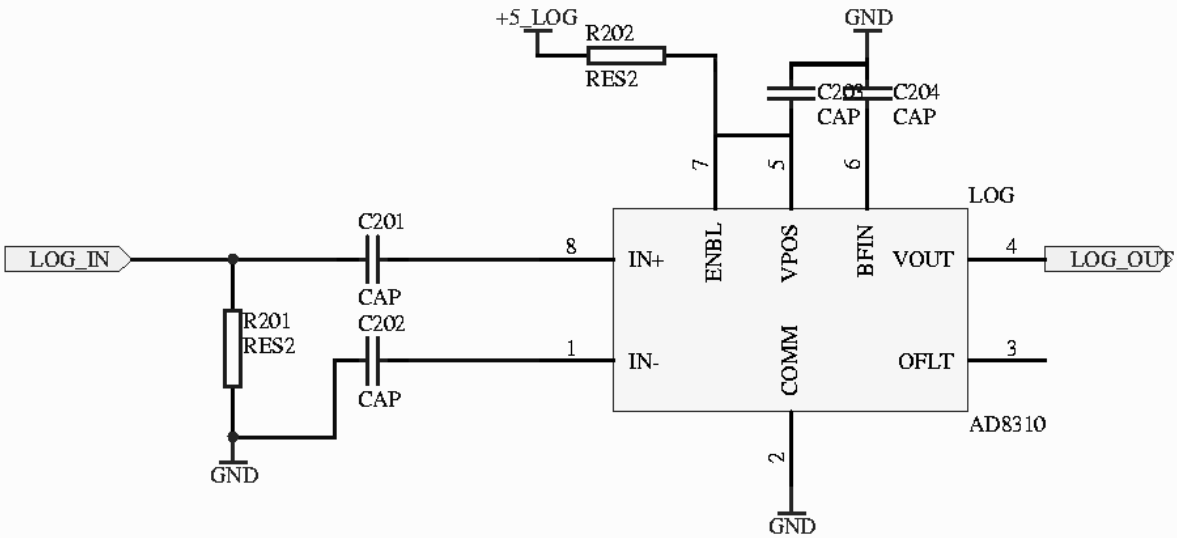

Q8
Q9
Q10
Q11
R1
Q7
R2
Q2
Q1
Q3
C1
Q4
Q6
Q5

Q5 Q4 Q3 Q2




+5
R303
RES2
0.5Vref
R304
RES2
GND
GND
R302
500OHM
R301
TGCC_IN
10KOHM
TGCD
TGCC_OUT
TGCB
0.5VB
GND
+5
C301
VCC
CAPACITOR
4
A301
R305
RES2
R306
RES2
R307
RES2
R308
RES2
2
TGCB
3
TGCD
6
0.5VB
5
0.5Vref
9
10
13
12
IN1-
IN1+
IN2-
IN2+
IN3-
IN3+
IN4-
IN4+
VCC+
VEE
OUT1
OUT2
OUT3
OUT4
1
TGCB
7
0.5VB
8
TGCC_OUT
14
LM324N(14)
11
C302
VCC
-5
CAPACITOR


+5TGC
R105
RES2
R111
RES2
R116
RES2
GND
GND
C101
CAP
GND
C103
CAP
GND
C104
CAP
GND
R101
RES2
R102
RES2
TPT1
CON1
1
MULT
X1
X2
Y1
Y2
+VS
-VS
W1
W2
AD834
R109
RES2
R107
RES2
R108
RES2
R110
RES2
Q101
PNP
Q102
PNP
+9TGC
R114
RES2
AMP101
V+
V+
V-
V-
O
AD9617
R118
RES2
TGC_OUT
TGCC
POSTNF
R103
RES2
R104
RES2
C102
CAP
GND
R106
RES2
R112
RES2
R113
RES2
R115
RES2
C106
CAP
C107
CAP
R117
RES2
C105
CAP
-5TGC


+5_LOG
R202
RES2
GND
C203
CAP
C204
CAP
7
5
6
LOG
LOG_IN
C201
CAP
8
IN+
ENBL
VPOS
BFIN
VOUT
4
LOG_OUT
R201
RES2
C202
CAP
1
IN-
COMM
OFLT
3
AD8310
GND
2
GND