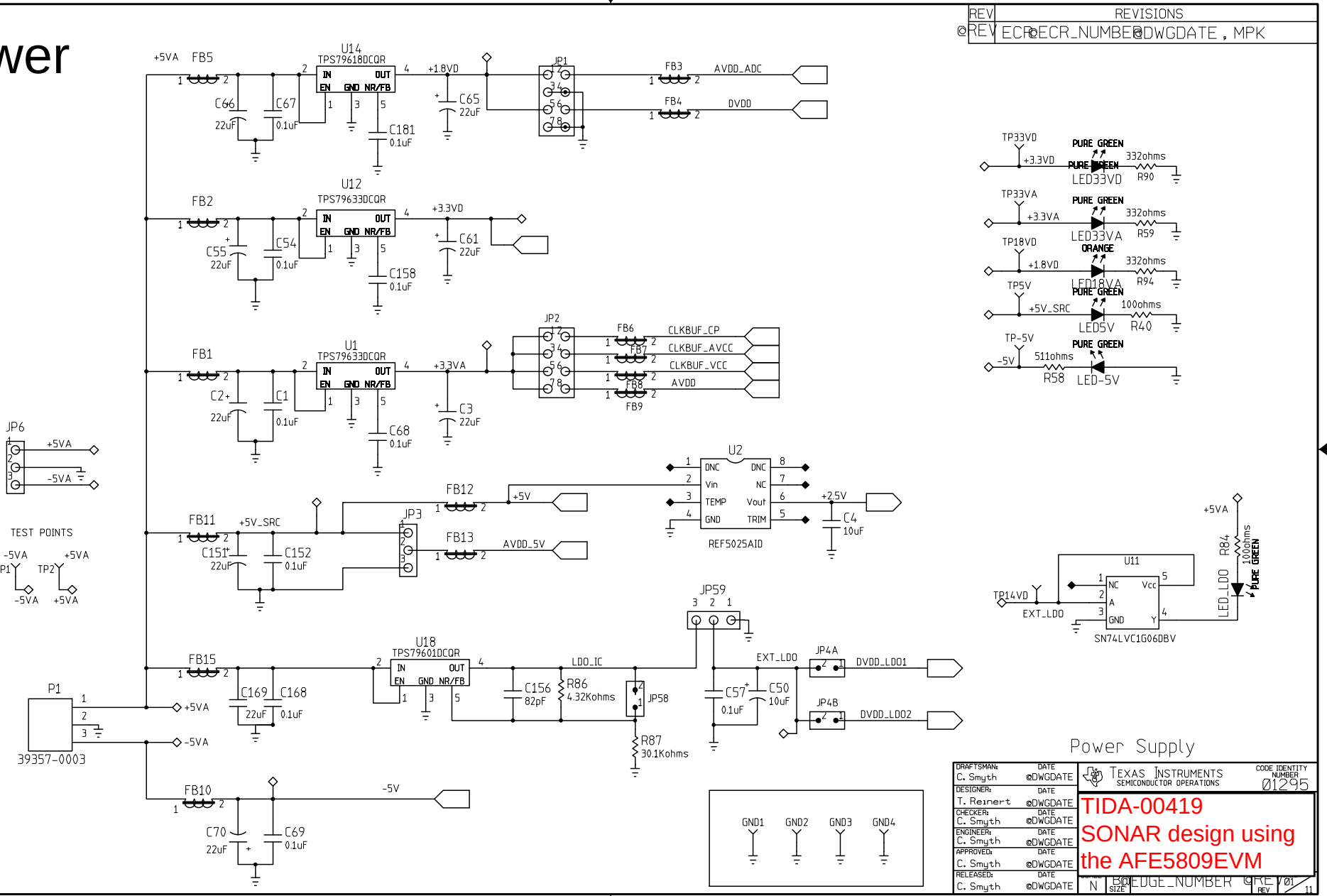
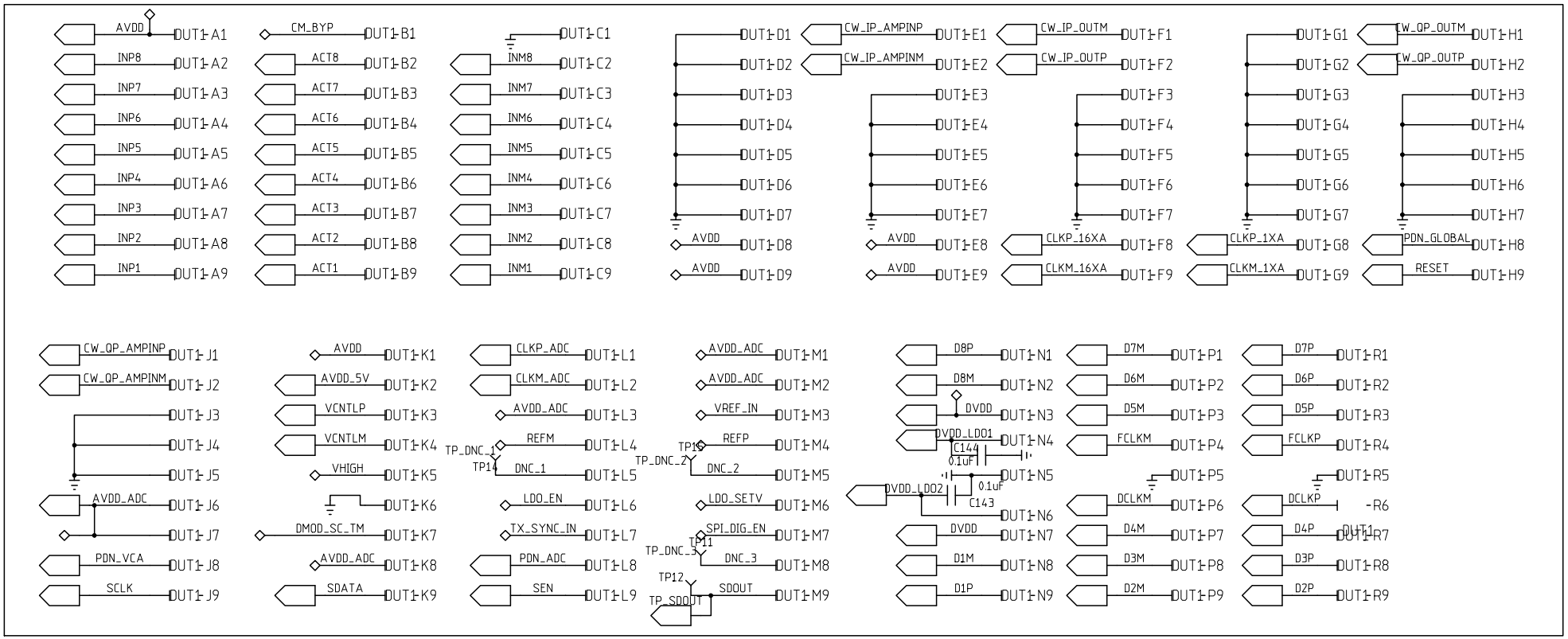
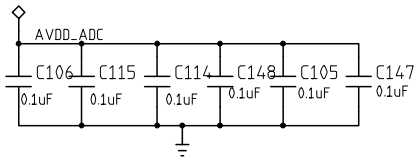
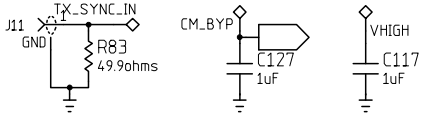
# Power

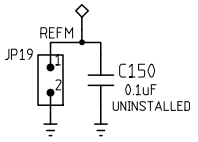

REV
REVISIONS
@REV
ECR@ECR_NUMBER@DWGDATE, MPK
U14
TPS79618DCQR
IN
OUT
EN
GND
NR/FB
+5VA
FB5
+1.8VD
C66
22uF
C67
0.1uF
C181
0.1uF
C65
22uF
JP1
FB3
AVDD_ADC
FB4
DVDD
U12
TPS79633DCQR
FB2
+3.3VD
C55
22uF
C54
0.1uF
C158
0.1uF
C61
22uF
U1
TPS79633DCQR
FB1
+3.3VA
C2
22uF
C1
0.1uF
C68
0.1uF
C3
22uF
JP2
FB6
FB7
FB8
FB9
CLKBUF_CP
CLKBUF_AVCC
CLKBUF_VCC
AVDD
TP33VD
+3.3VD
PURE GREEN
LED33VD
332ohms
R90
TP33VA
+3.3VA
LED33VA
R59
TP18VD
+1.8VD
ORANGE
LED18VA
R94
TP5V
+5V_SRC
LED5V
100ohms
R40
TP-5V
-5V
511ohms
R58
LED-5V
JP6
+5VA
-5VA
TEST POINTS
TP1
TP2
U2
DNC
Vin
TEMP
GND
Vout
TRIM
REF5025AID
+2.5V
C4
10uF
FB12
+5V
FB11
+5V_SRC
C151
22uF
C152
0.1uF
JP3
FB13
AVDD_5V
U11
TP14VD
EXT_LDO
NC
Vcc
A
GND
Y
SN74LVC1G06DBV
LED_LDO
R84
100ohms
JP59
U18
TPS79601DCQR
FB15
C169
22uF
C168
0.1uF
LDO_IC
C156
82pF
R86
4.32Kohms
JP58
R87
30.1Kohms
EXT_LDO
JP4A
JP4B
DVDD_LDO1
DVDD_LDO2
C57
0.1uF
C50
10uF
P1
39357-0003
FB10
-5V
C70
22uF
C69
0.1uF
GND1
GND2
GND3
GND4
Power Supply
DRAFTSMAN: C. Smyth DATE @DWGDATE
DESIGNER: T. Reinert DATE @DWGDATE
CHECKER: C. Smyth DATE @DWGDATE
ENGINEER: C. Smyth DATE @DWGDATE
APPROVED: C. Smyth DATE @DWGDATE
RELEASED: C. Smyth DATE @DWGDATE
TEXAS INSTRUMENTS
SEMICONDUCTOR OPERATIONS
CODE IDENTITY NUMBER Ø1295
TIDA-00419
SONAR design using the AFE5809EVM
SIZE N
@EDGE_NUMBER @REV Ø1
REV
11

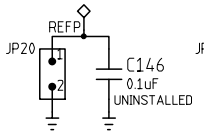
# AFE5809 DEVICE

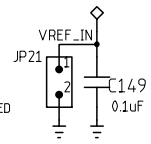


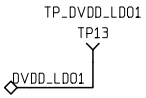



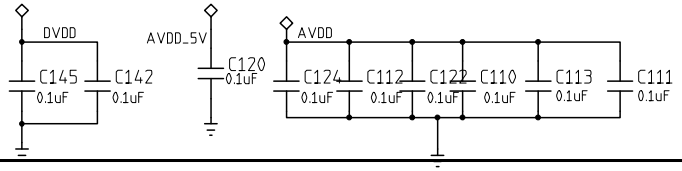



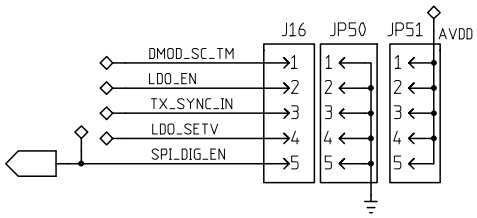



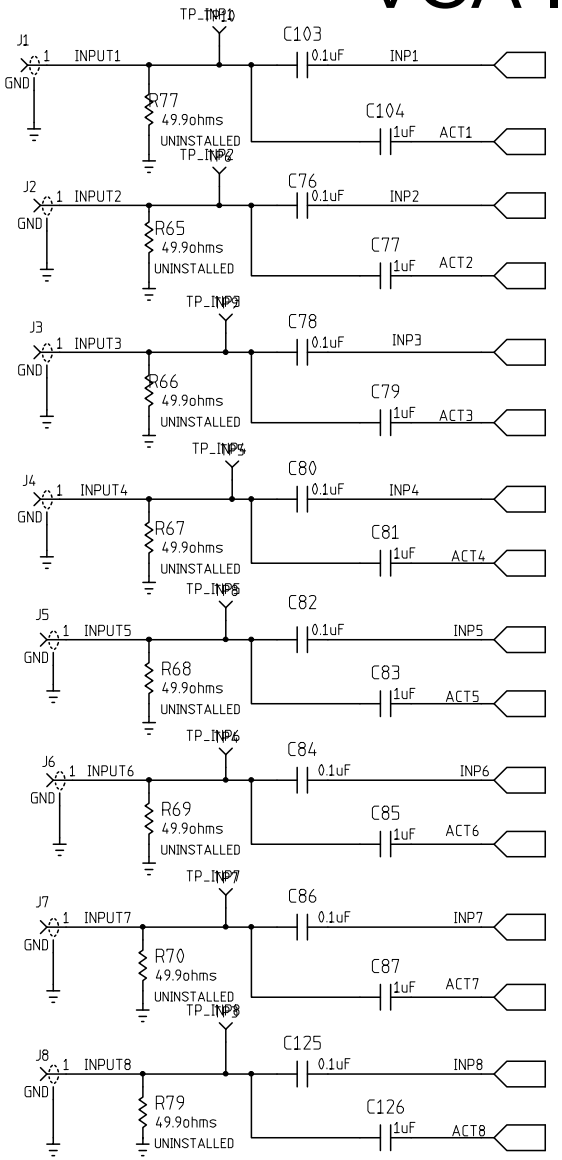



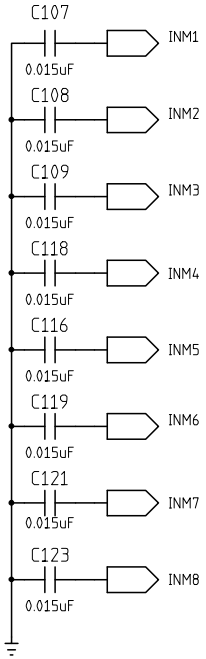

TEXAS INSTRUMENTS
SEMICONDUCTOR OPERATIONS

CODE IDENTITY NUMBER
Ø1295

SCALE N | SIZE B | EDGE_NUMBER | REV | SHEET Ø2 11

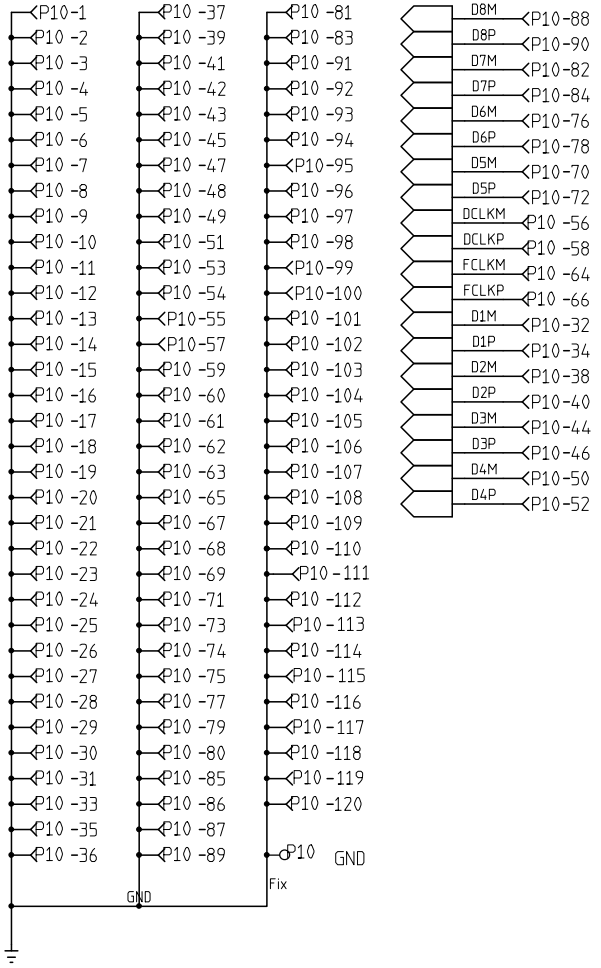
# VCA INPUT



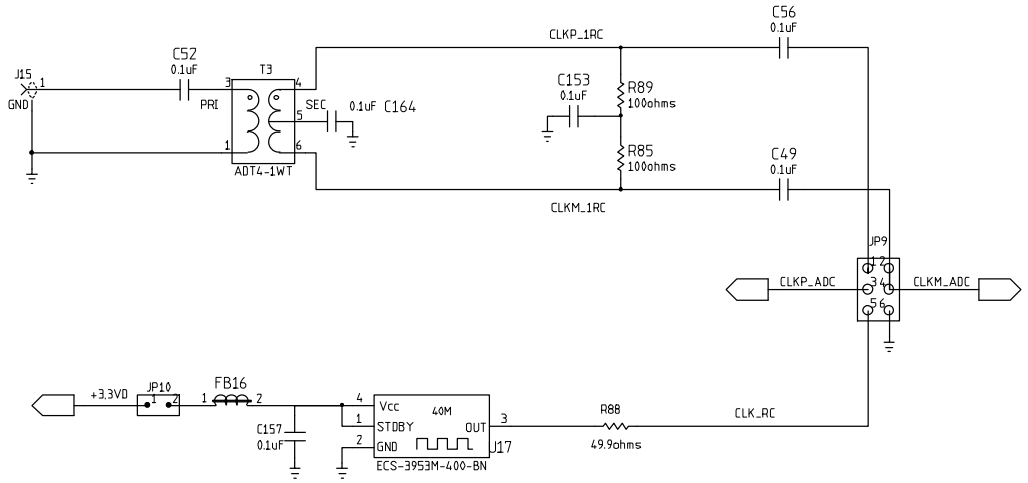




Priority of Close to Pins INPx
C22-C29 1st
C30-C37 2nd

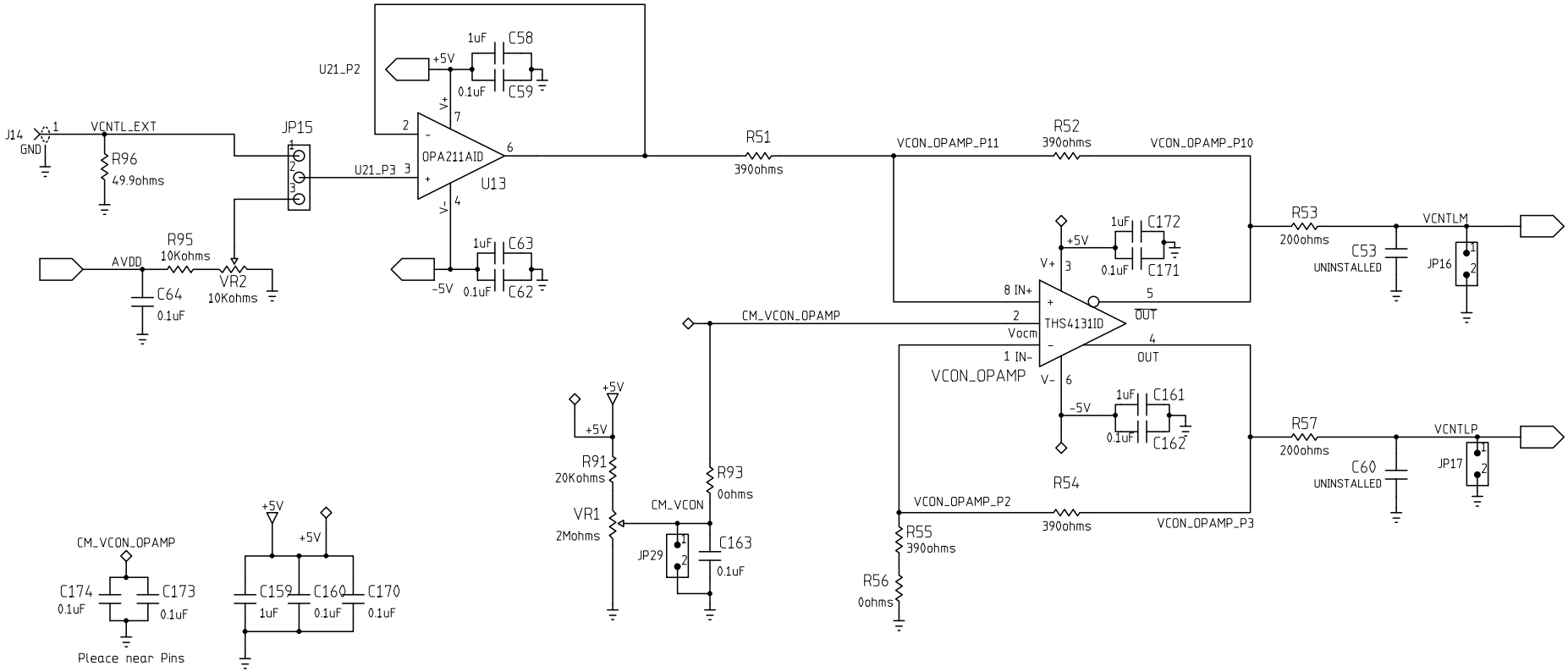
# ADC OUTPUT



# ADC CLOCK



# VCON SINGLE TO DIFFERENTIAL CONVERTER

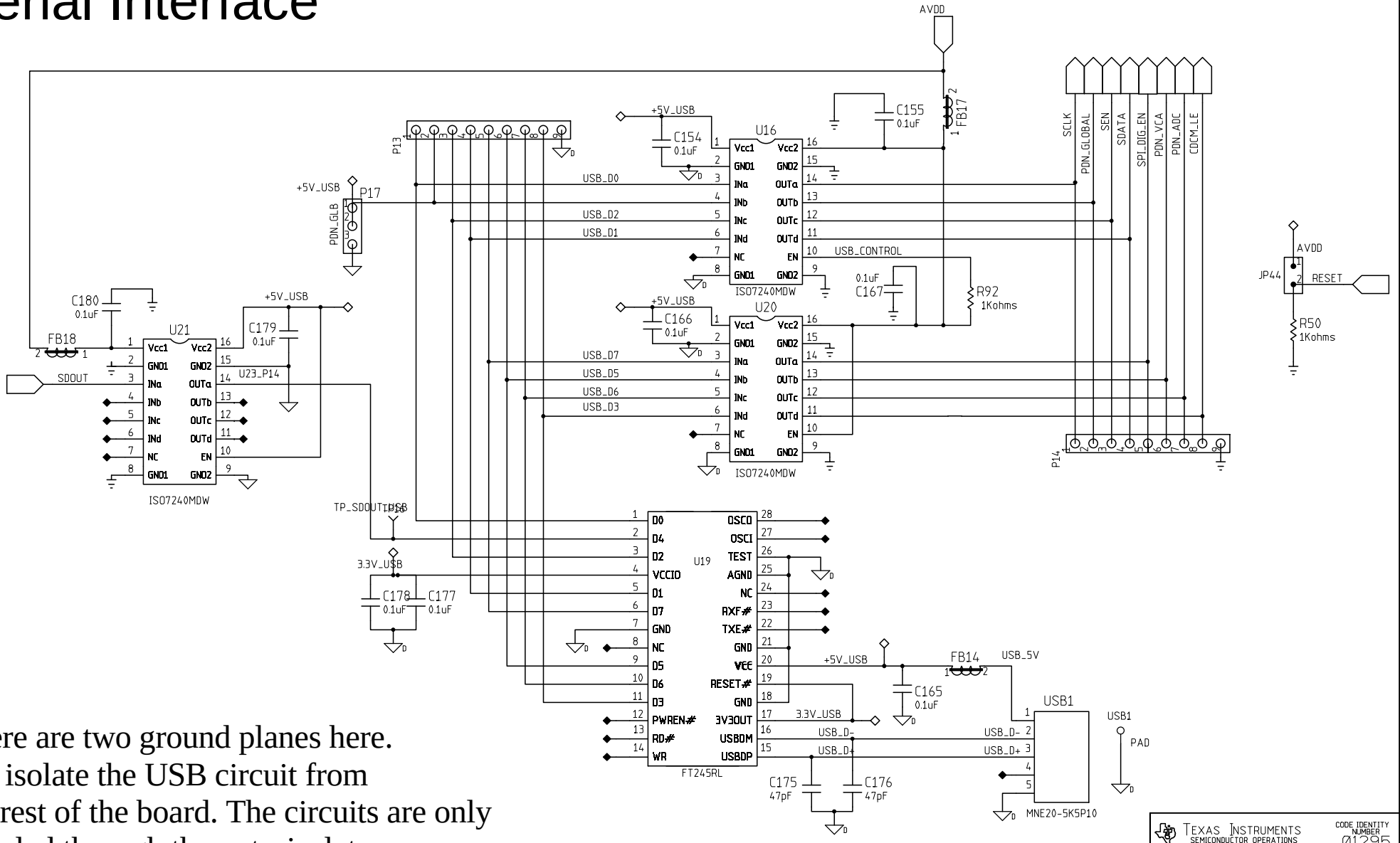



TEXAS INSTRUMENTS
SEMICONDUCTOR OPERATIONS

CODE IDENTITY NUMBER
Ø1295

SCALE N | SIZE B | EDGE_NUMBER | REV Ø7 | SHEET 11

# Serial Interface




There are two ground planes here.
We isolate the USB circuit from
the rest of the board. The circuits are only
coupled through the opto-isolators.

TEXAS INSTRUMENTS
SEMICONDUCTOR OPERATIONS

CODE IDENTITY NUMBER
Ø1295

SCALE N | B | EDGE_NUMBER | REV | SHEET Ø9 11

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