

E

D

C

B

A

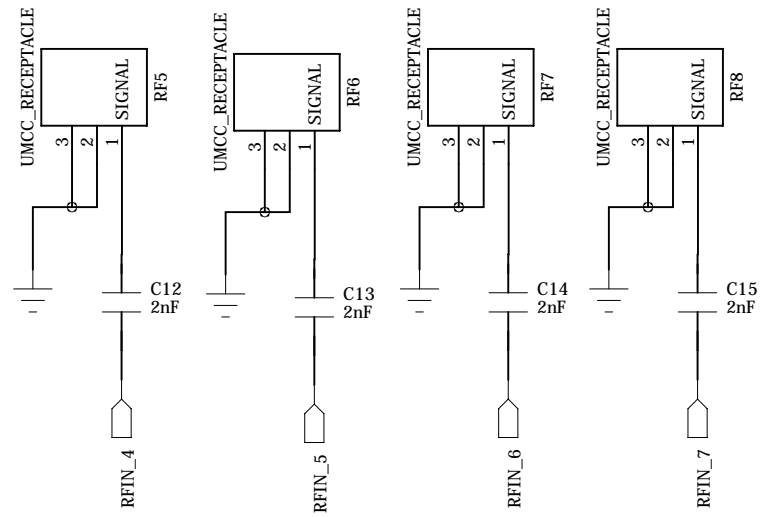
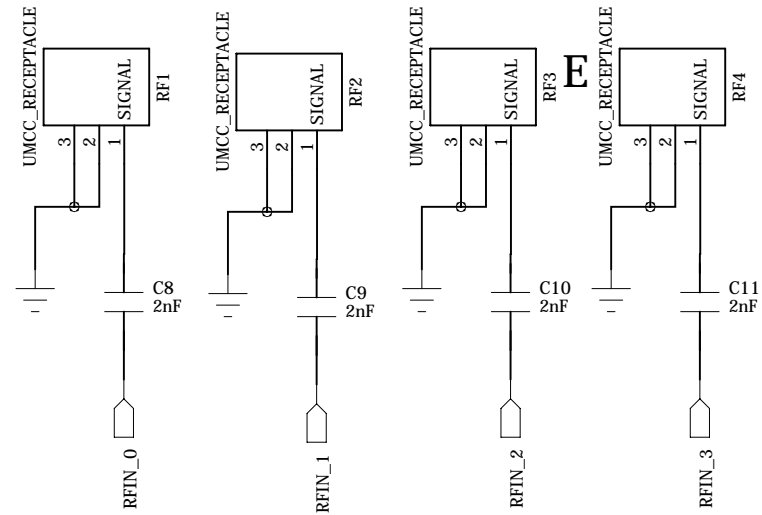
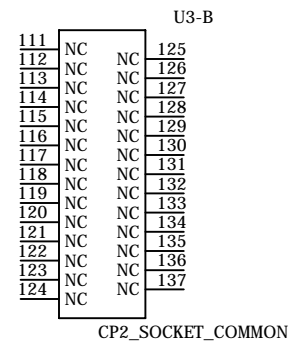
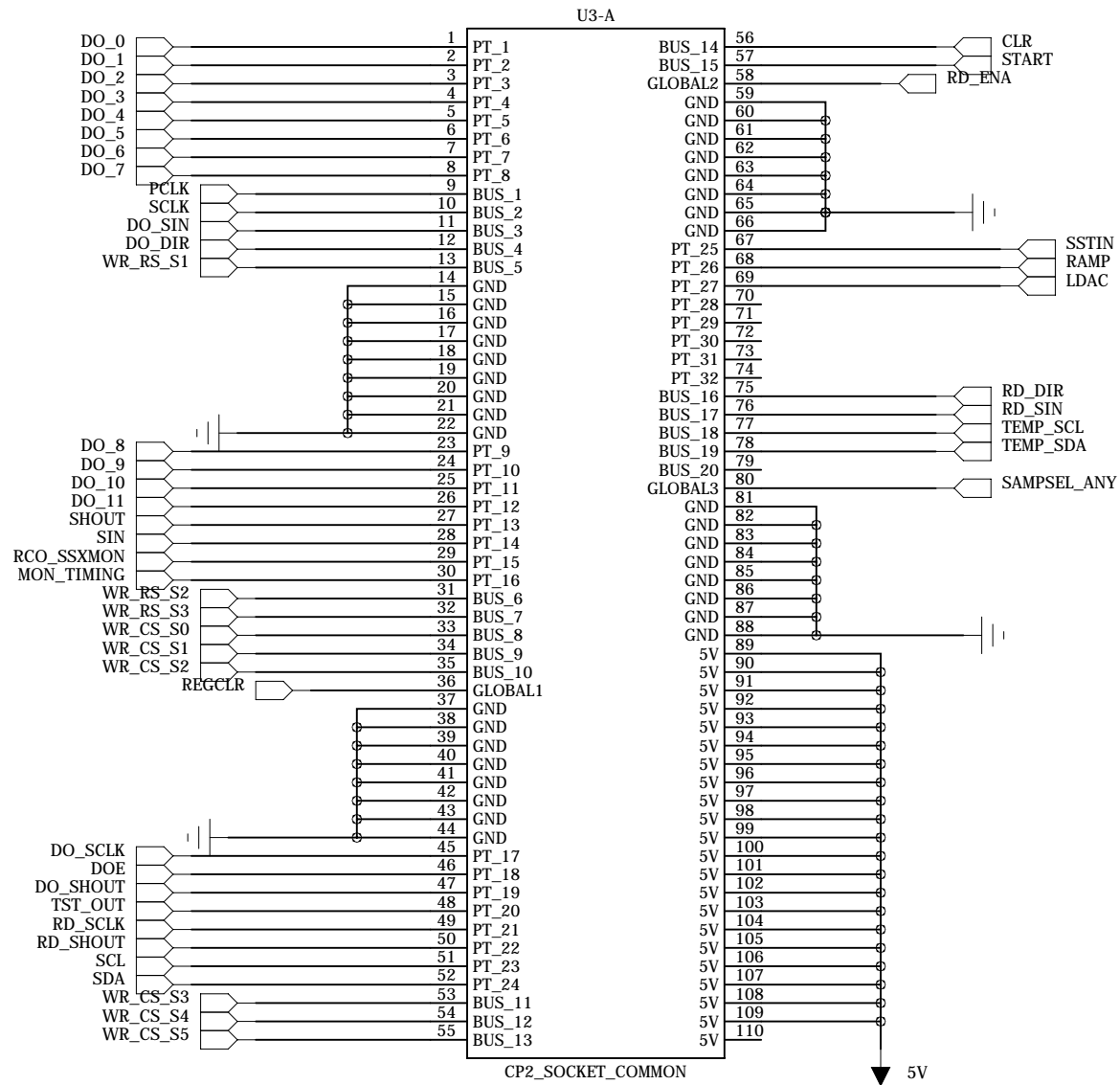
D

C

B

A

Input capacitors 1.6 -2 pF



institution:	University of Hawai'i at Manoa High Energy Physics Group Instrumentation Development Lab
title:	DC_IRS3C
revision:	A
IDLAB design #:	IDL_13_038
circuit design:	JM
PCB design:	JM
sheet #:	1 of 3
sheet description:	Input / SCROD connection
date last modified:	5-October-2013

6

5

4

3

2

1

E

E

D

D

C

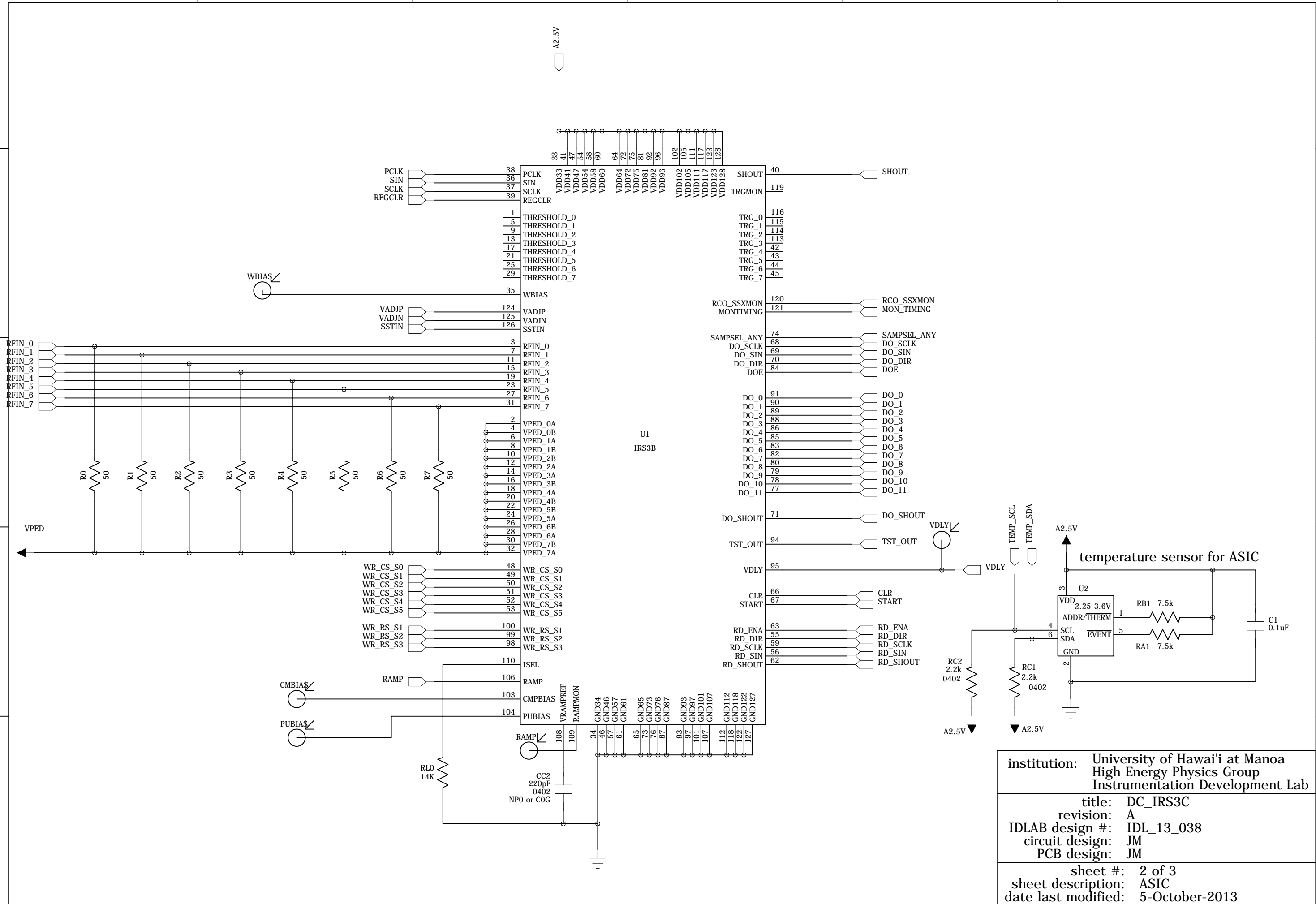
C

B

B

A

A



institution:	University of Hawai'i at Manoa High Energy Physics Group Instrumentation Development Lab
title:	DC_IRS3C
revision:	A
IDLAB design #:	IDL_13_038
circuit design:	JM
PCB design:	JM
sheet #:	2 of 3
sheet description:	ASIC
date last modified:	5-October-2013

6

5

4

3

2

1

E

E

D

D

C

C

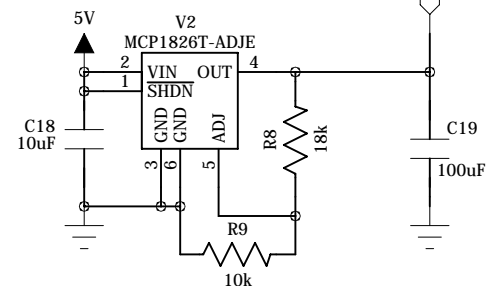
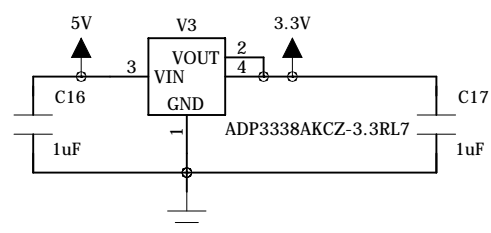
B

B

A

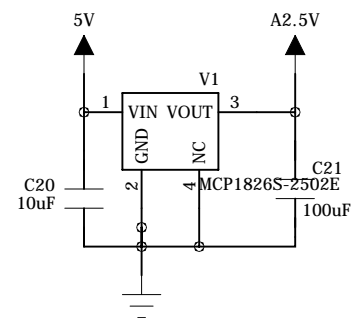
A

Provides 3.3 volts to DAC



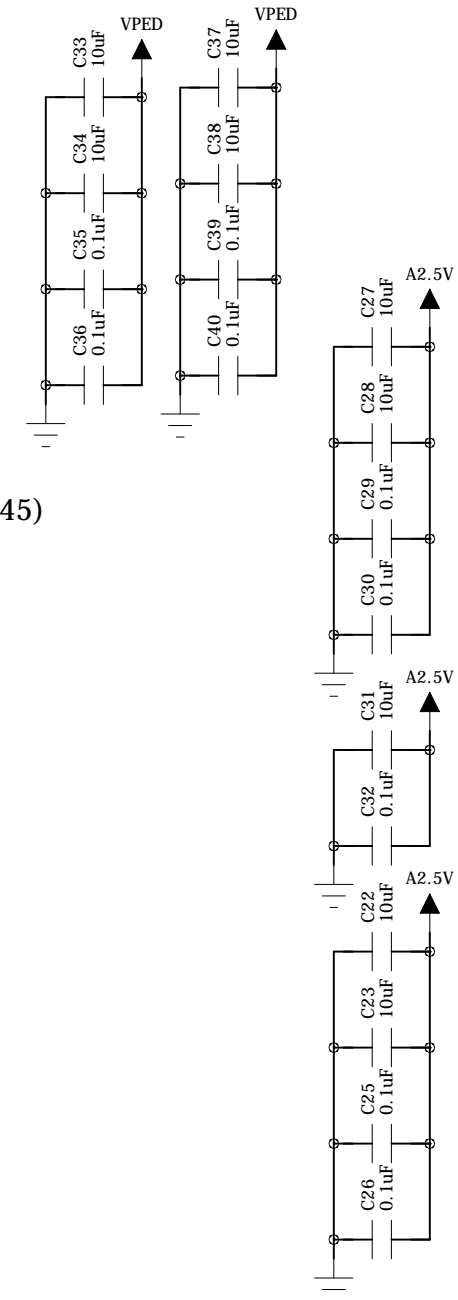
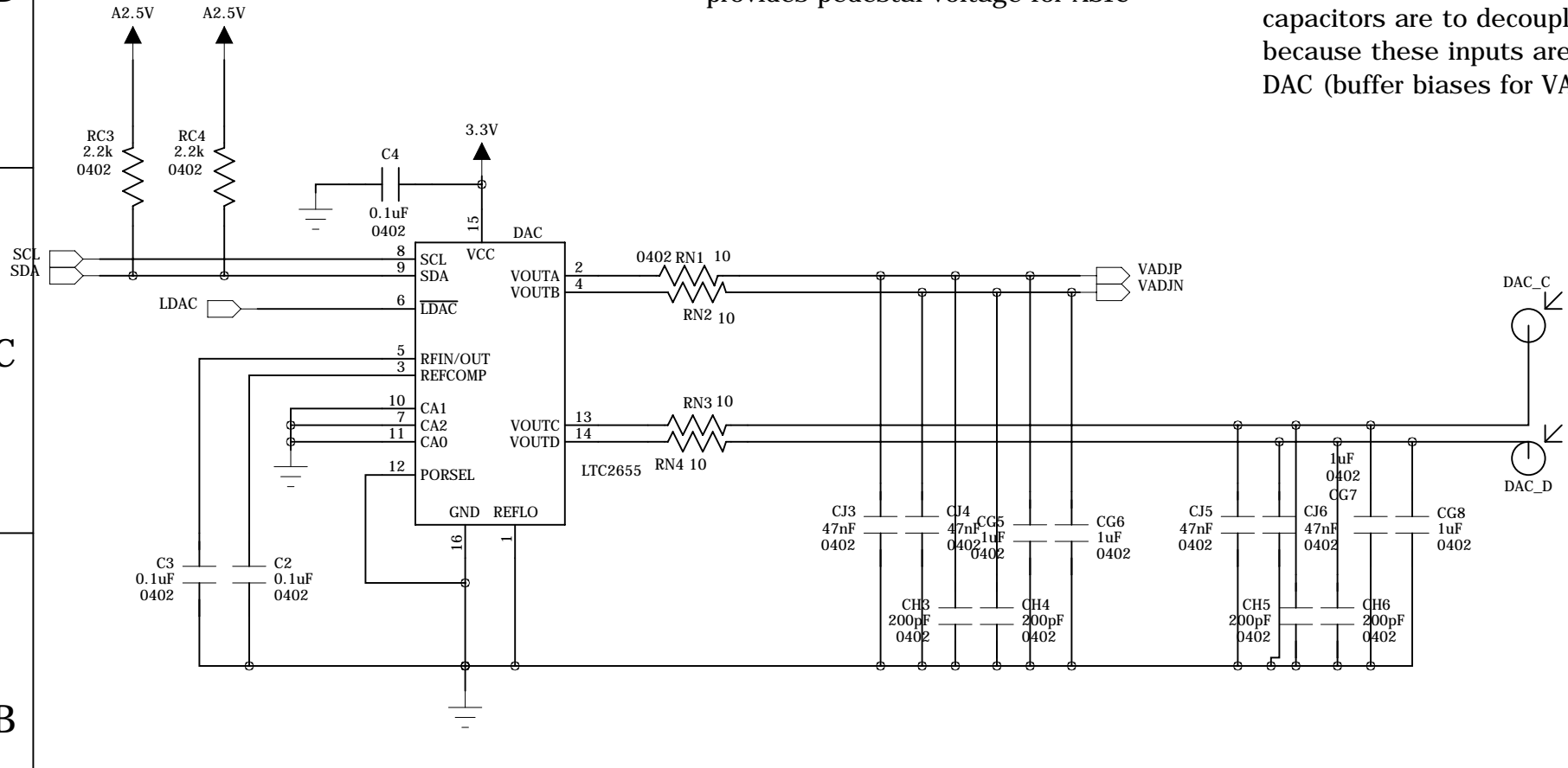
VPED set to 1.24 Volts
 $VPED = 0.41 * ((R9 + R10) / R10)$
 Keep R10 between 10k - 200k
 provides pedestal voltage for ASIC

Provides 2.5 volts to ASIC



capacitors are to decouple noise from sensitive ASIC inputs
 because these inputs are driven, be sure to disable ASIC internal
 DAC (buffer biases for VADJP and VADJN are registers #43 and #45)

DACs to control ASIC sampling rate
 i2c address = 0010000



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title:	DC_IRS3C
revision:	A
IDLAB design #:	IDL_13_038
circuit design:	JM
PCB design:	JM
sheet #:	3 of 3
sheet description:	Power
date last modified:	5-October-2013