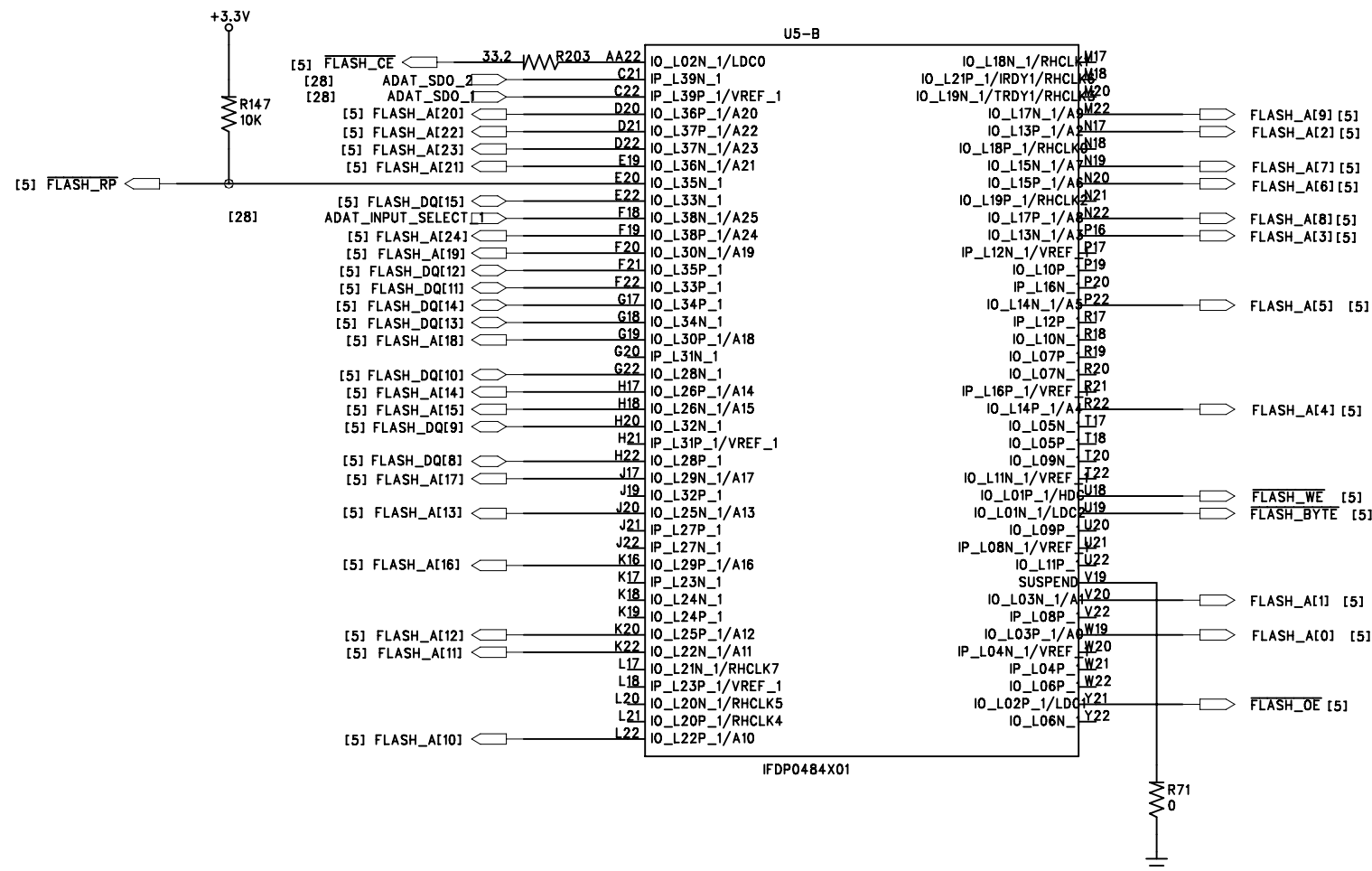
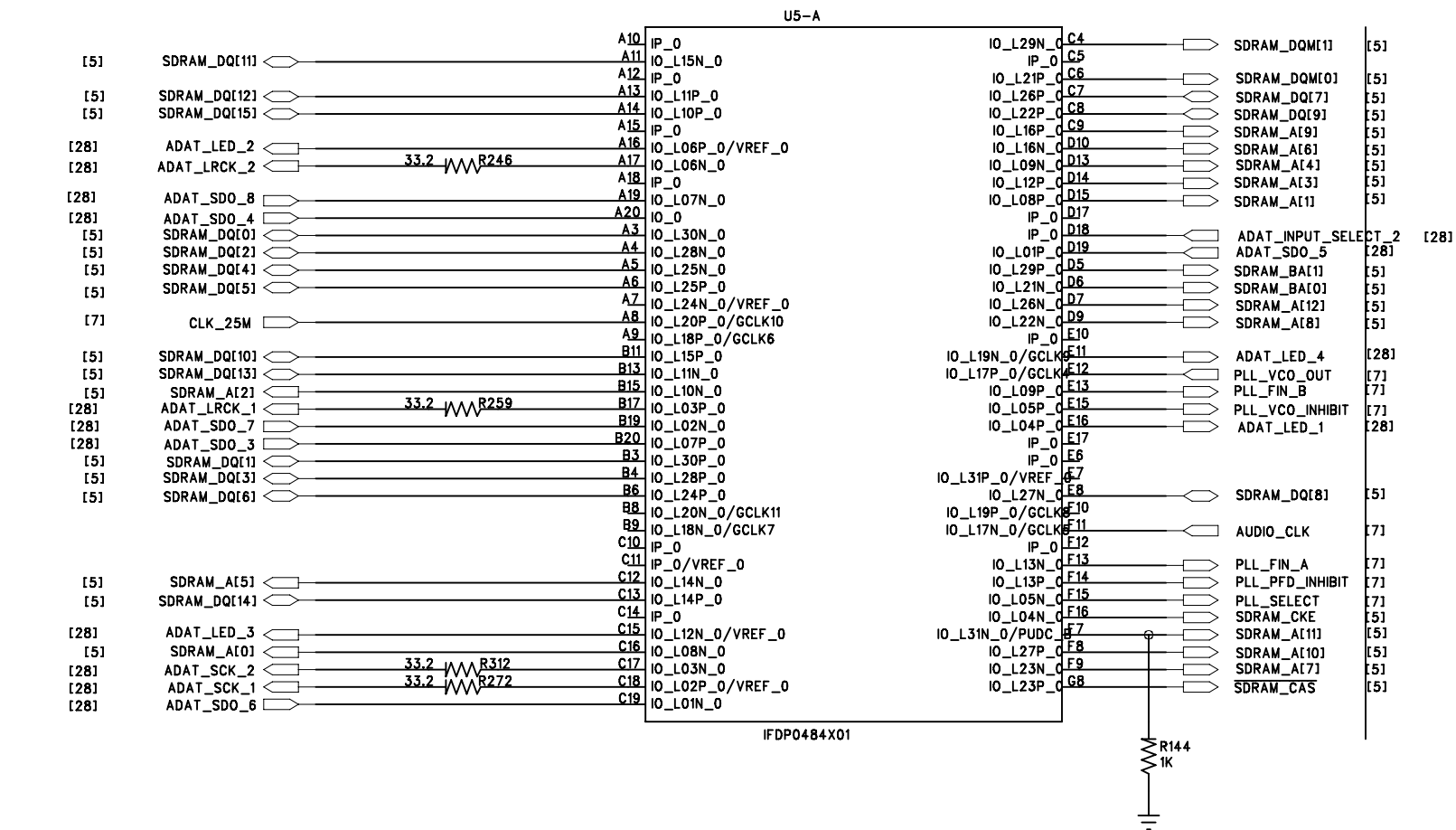


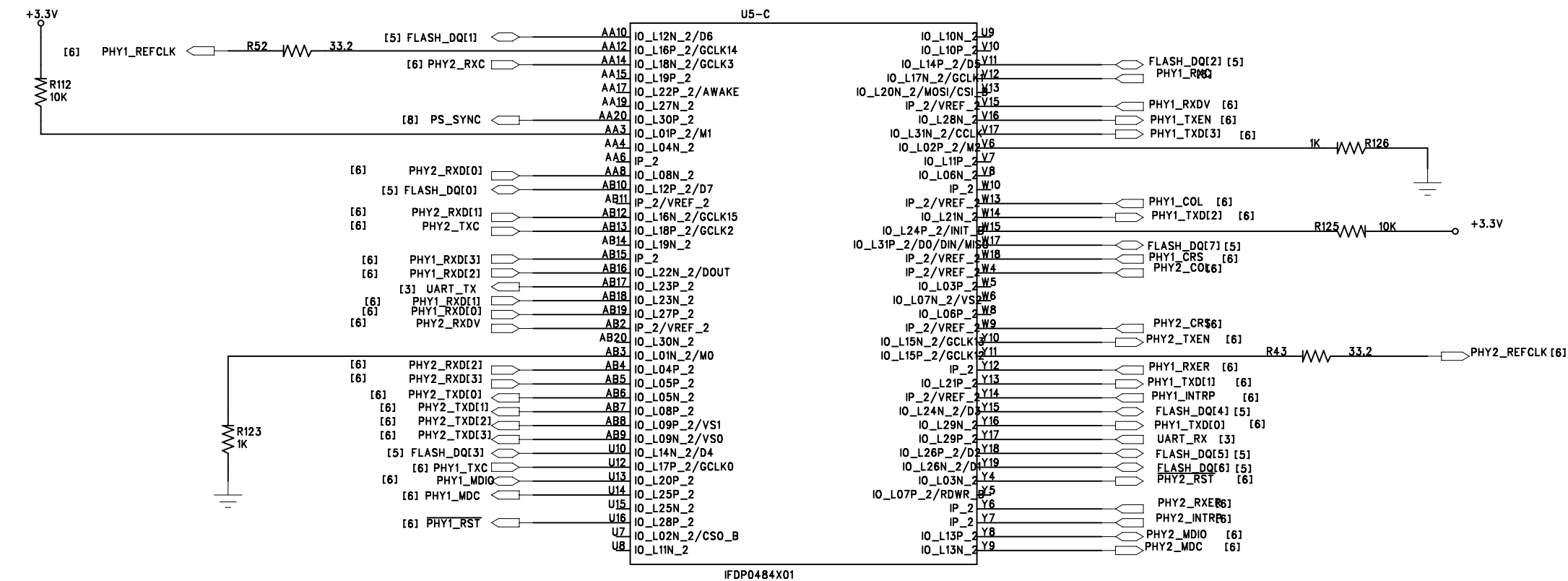
Lab X Technologies, LLC.	
IEX-16L 4 0.sch	
TITLE_PAGE	3/29/2011
	REV. - 4.0
	Drawn By: RIK
	PAGE 1 OF 28

This drawing is not to be copied, reproduced, or disclosed, in part or whole, to a third party without written permission of the Copyright owner.

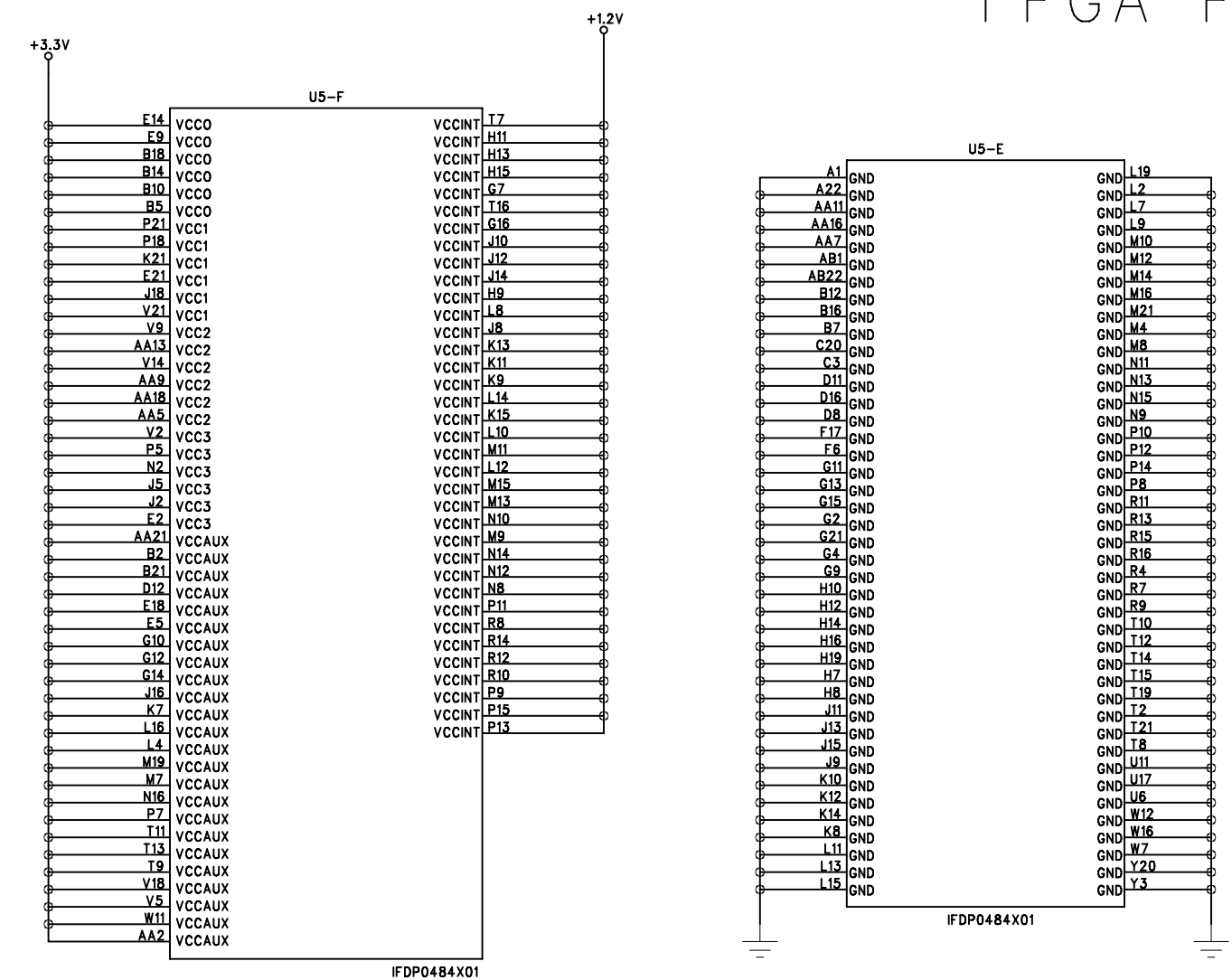


Lab X Technologies, LLC.	
IEX-16L 4 0.sch	
FPGA_BANK_0/1	3/29/2011
REV. - 4.0	
Drawn By: RIK	
PAGE 2 OF 28	

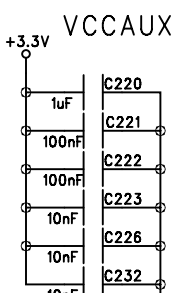
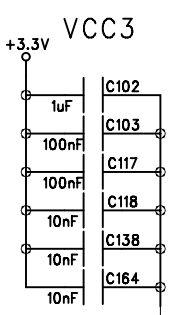
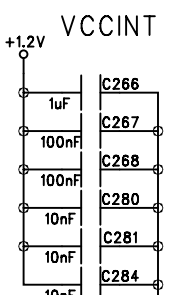
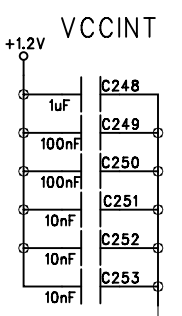
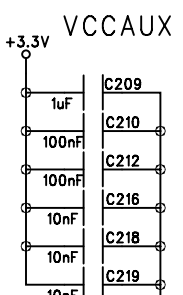
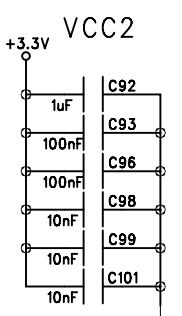
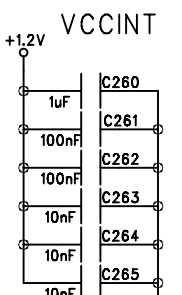
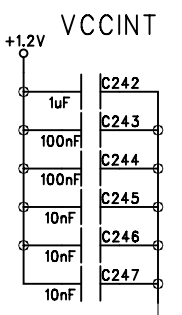
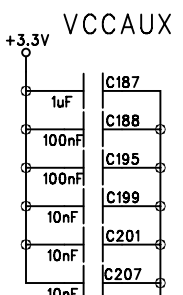
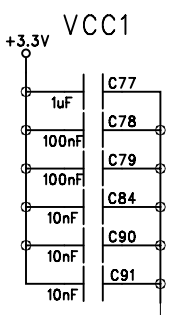
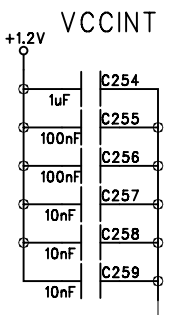
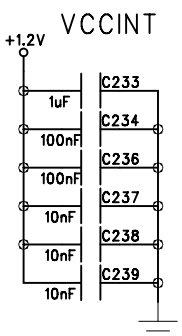
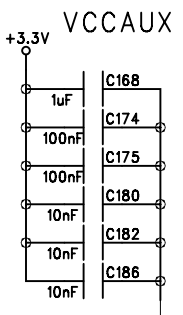
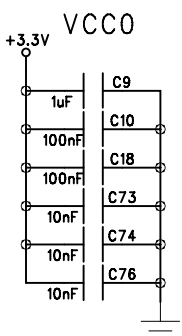
This drawing is not to be copied, reproduced, or disclosed, in part or whole, to a third party without written permission of the Copyright owner.



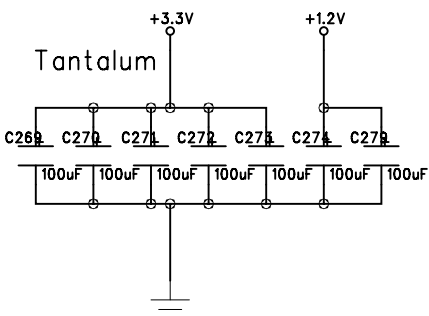
FPGA Power and Ground



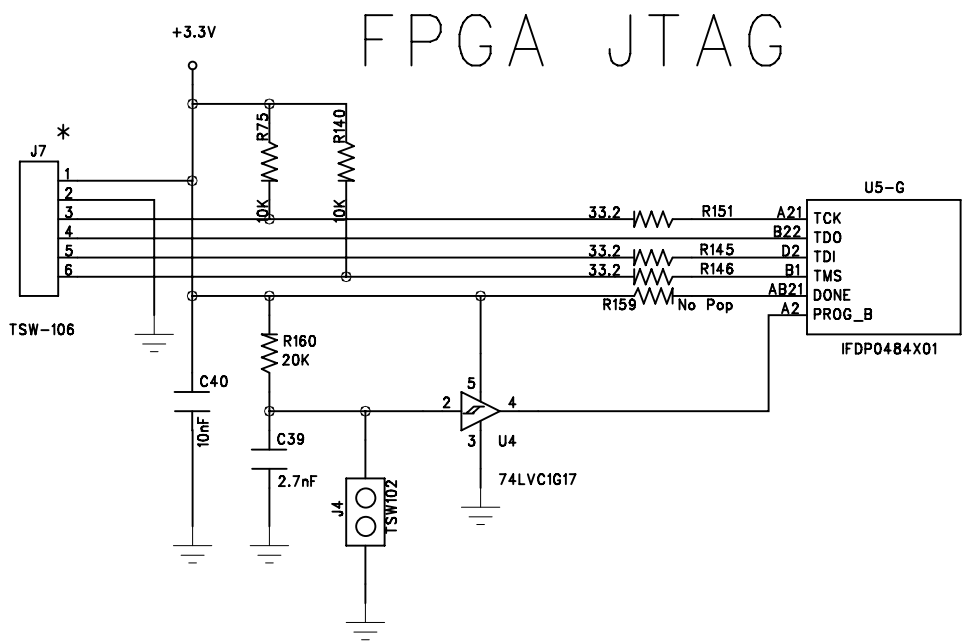
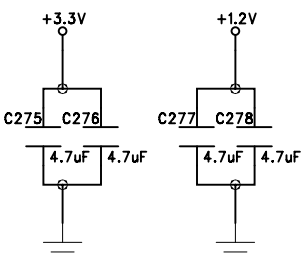
0402 Ceramic



Two per 1.2 VCC bank



0603 Ceramic



Lab X Technologies, LLC.

LEX-16L 4 0.sch

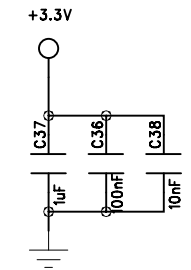
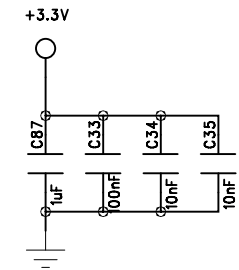
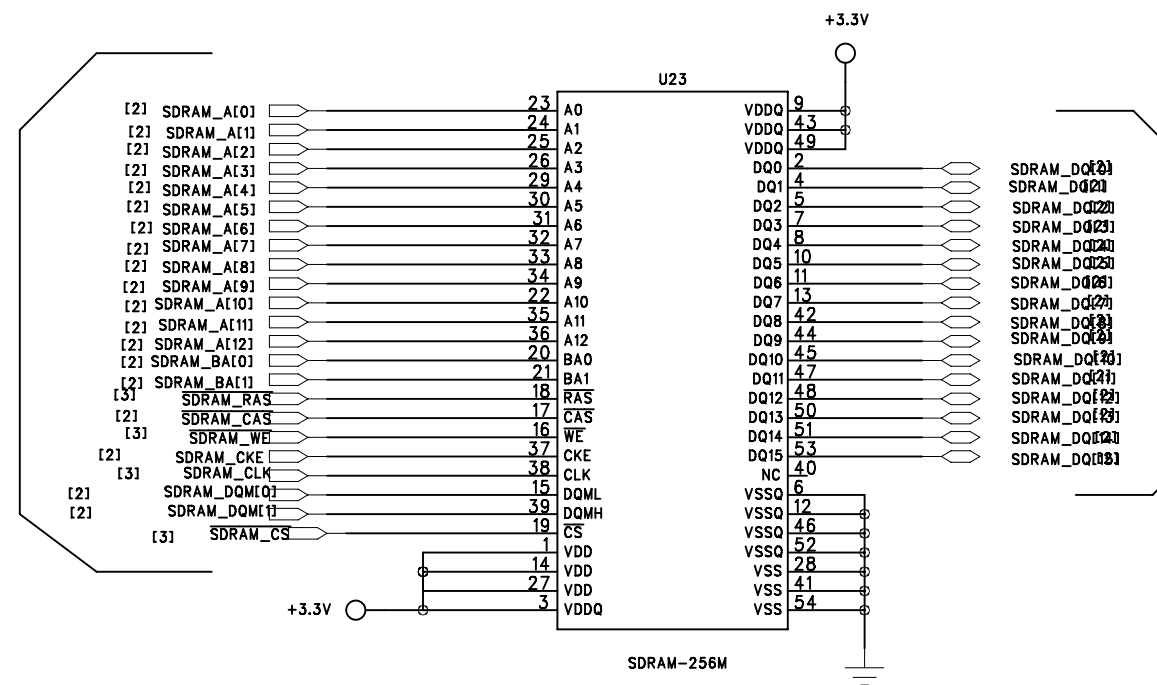
POWER-GATES 3/29/2011

REV. - 4.0

Drawn By: RIK

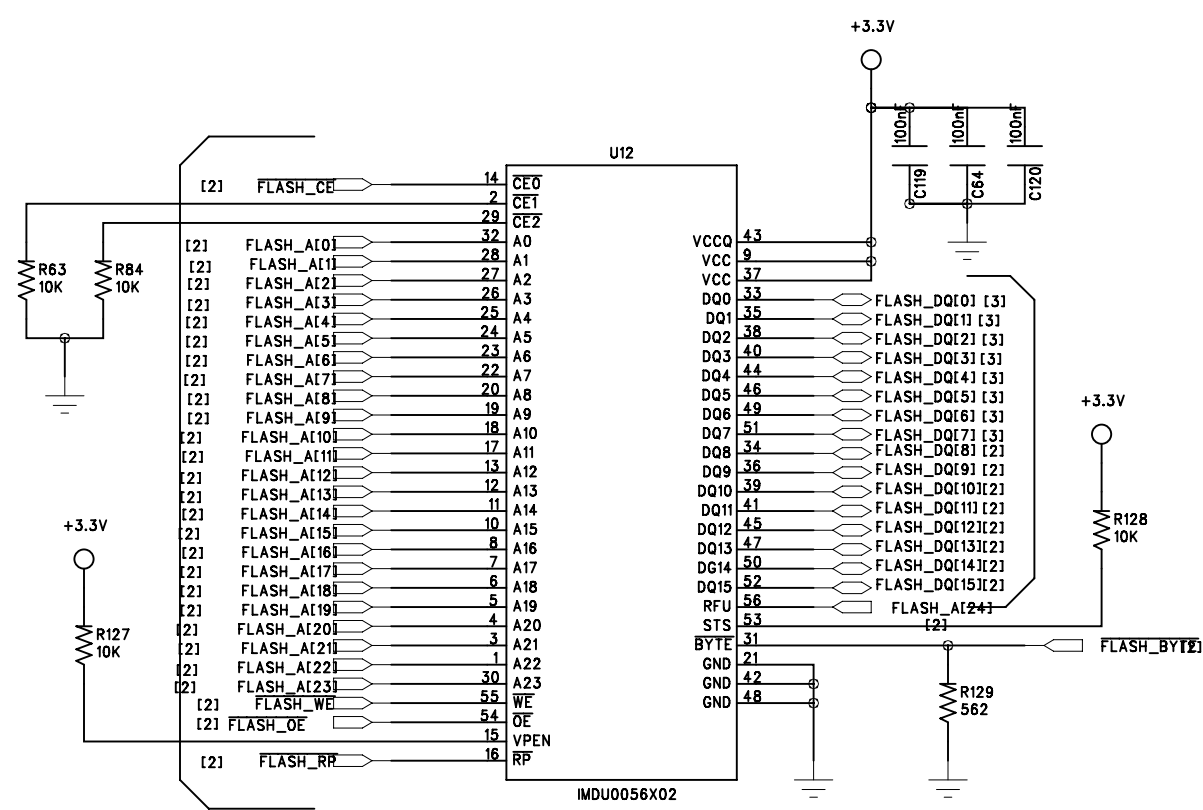
PAGE 4 OF 28

This drawing is not to be copied, reproduced, or disclosed, in part or whole, to a third party without written permission of the Copyright owner.



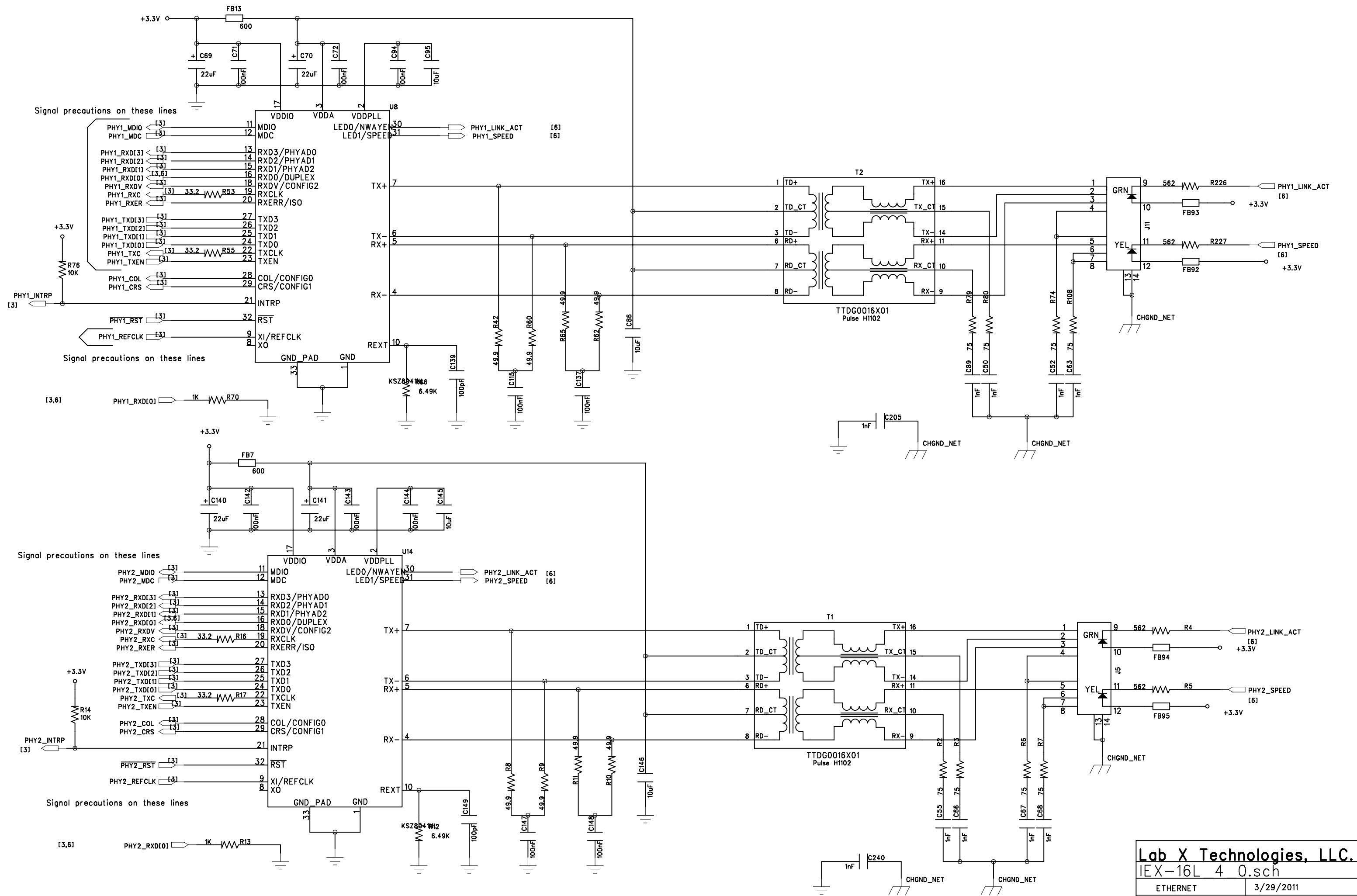
Minimize vias.
Keep on inner layer whenever possible.
Drop a ground via anywhere these signals have a via transition.

Check voltages after the flash chip change



Lab X Technologies, LLC.	
IEX-16L 4 0.sch	
SDRAM_FLASH	3/29/2011
REV. - 4.0	
Drawn By: RIK	
PAGE 5 OF 28	

This drawing is not to be copied, reproduced, or disclosed, in part or whole, to a third party without written permission of the Copyright owner.



Lab X Technologies, LLC.

LEX-16L 4 0.sch

ETHERNET

3/29/2011

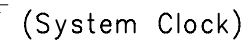
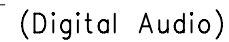
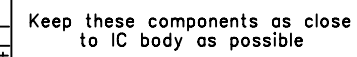
REV. - 4.0

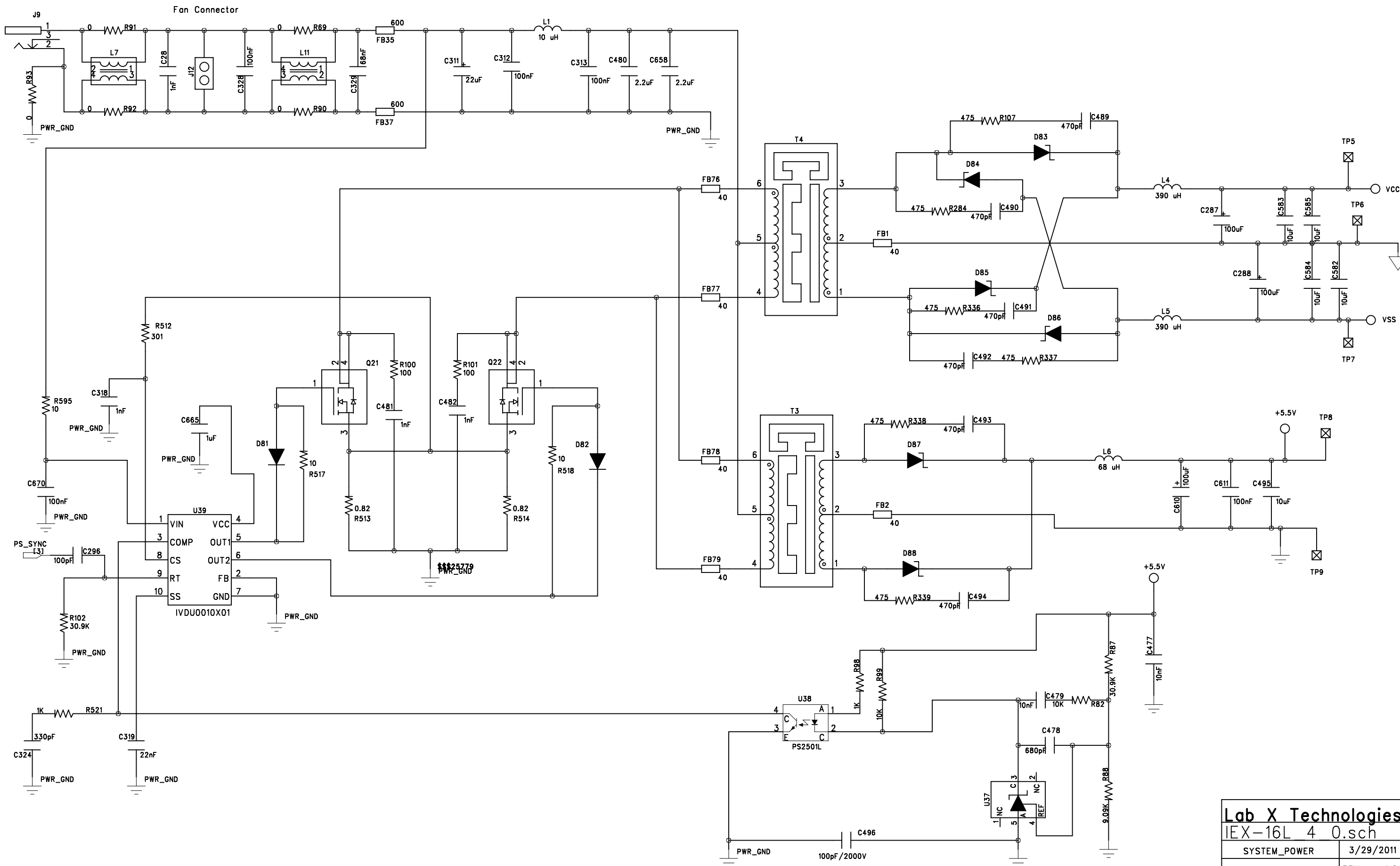
Drawn By: RIK

PAGE 6 OF 28

This drawing is not to be copied, reproduced, or disclosed, in part or whole, to a third party without written permission of the Copyright owner.

This IC gets its own power island

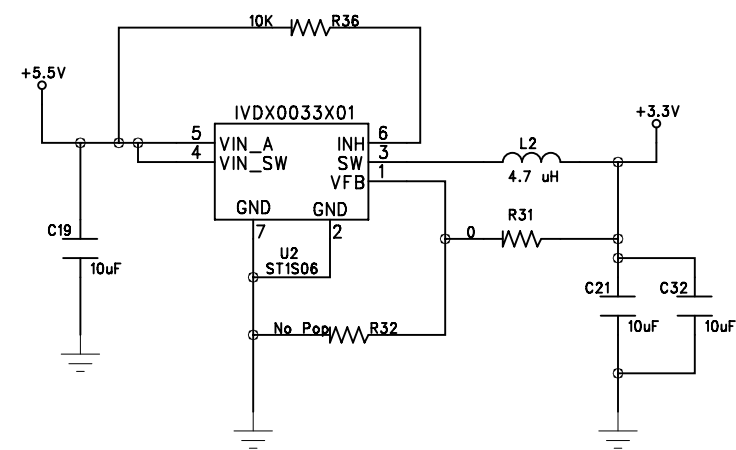




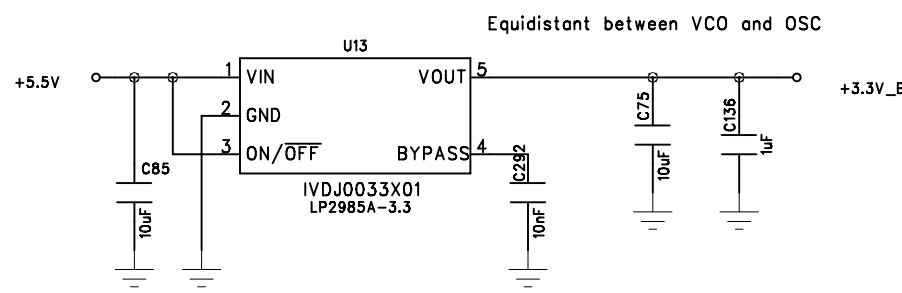
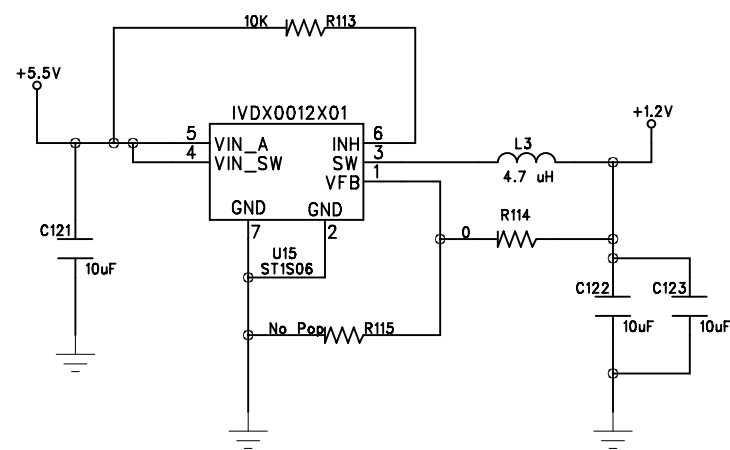
This drawing is not to be copied, reproduced, or disclosed, in part or whole, to a third party without written permission of the Copyright owner.

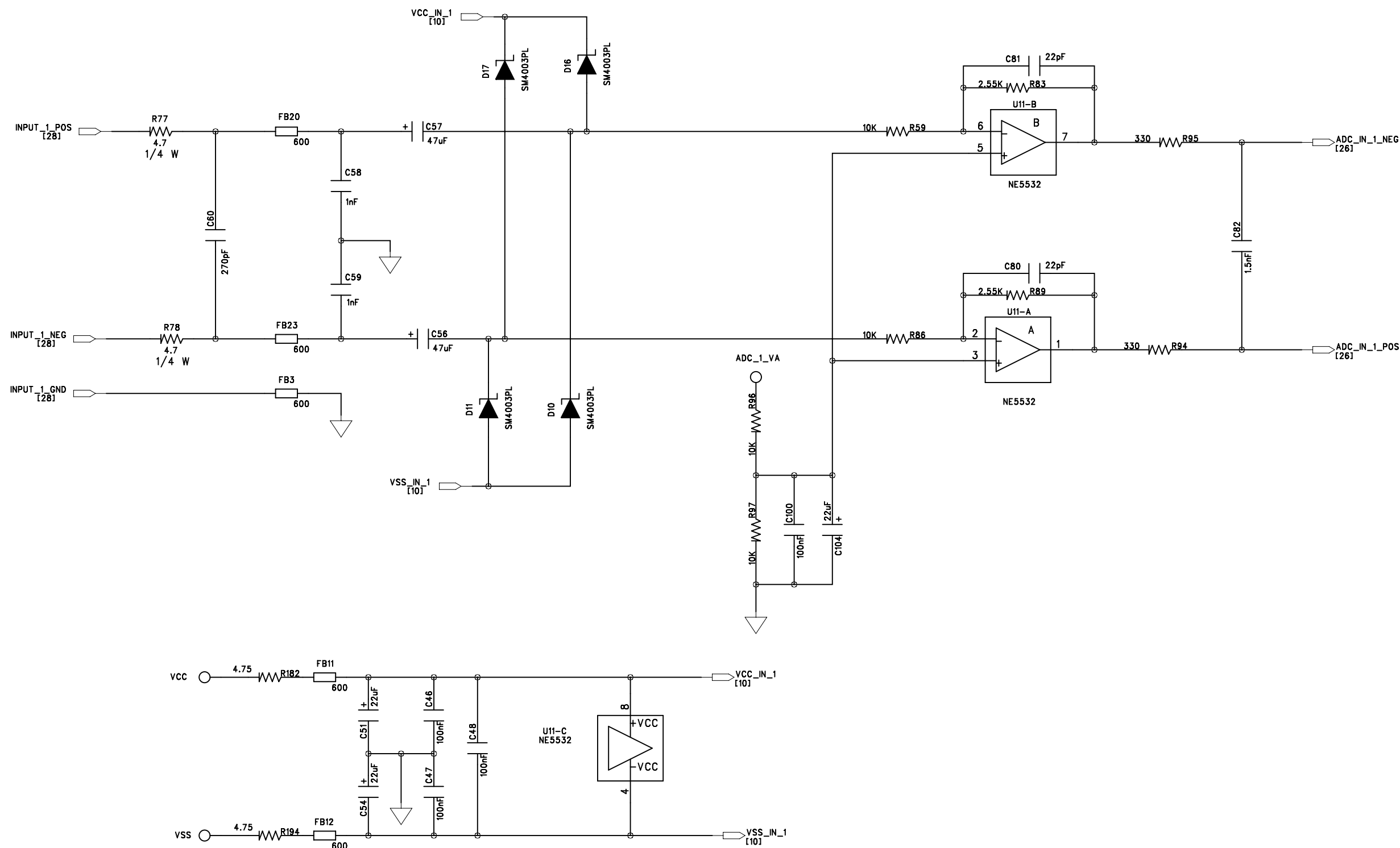
Lab X Technologies, LLC.	
IEX-16L 4 0.sch	
SYSTEM_POWER	3/29/2011
	REV. - 4.0
	Drawn By: RIK
	PAGE 8 OF 28

3.3V Supply



FPGA VINT 1.2V Supply





Lab X Technologies, LLC.

IEX-16L 4 0.sch

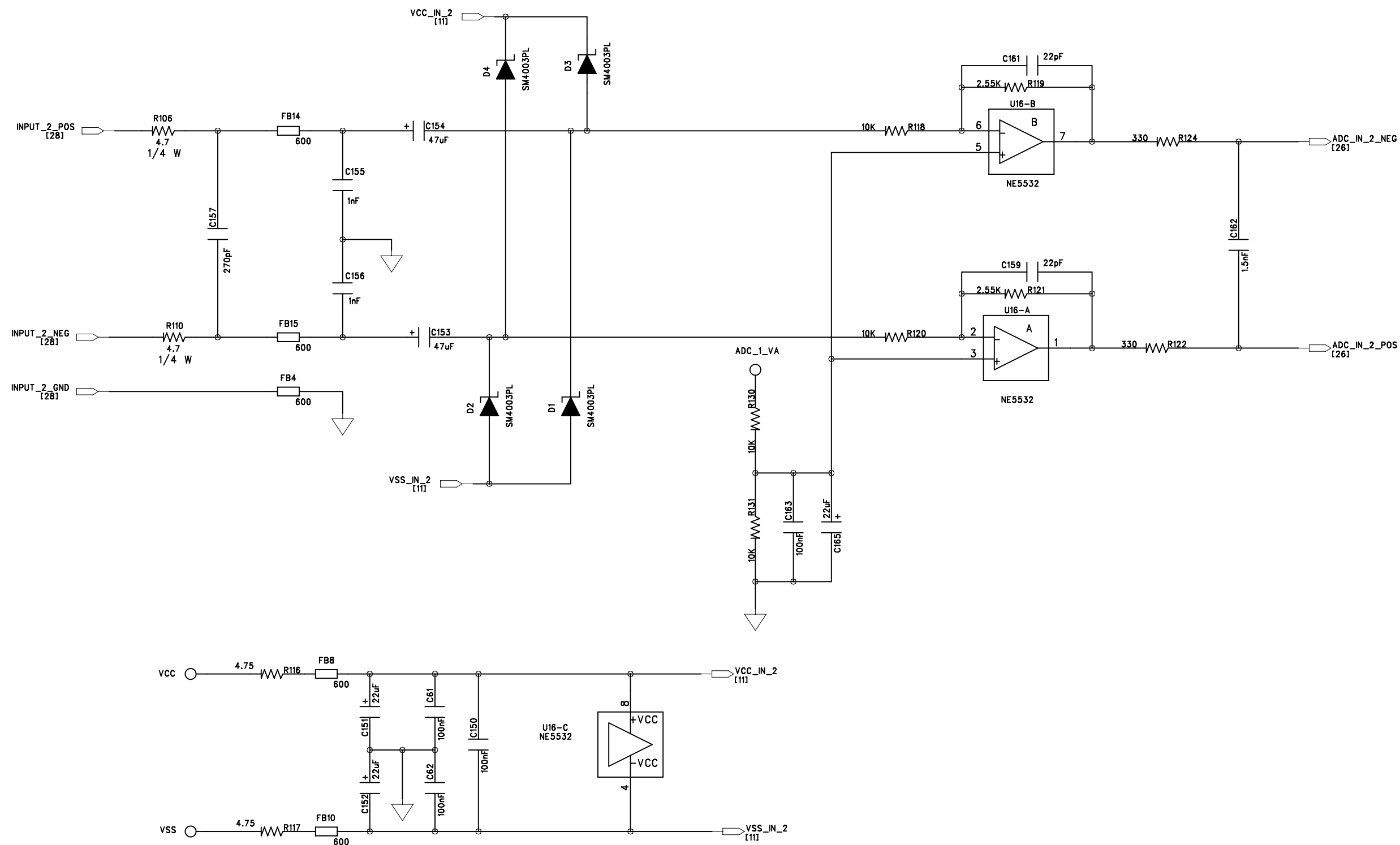
INPUT_1 3/29/2011

REV. - 4.0

Drawn By: RIK

PAGE 10 OF 28

This drawing is not to be copied, reproduced, or disclosed, in part or whole, to a third party without written permission of the Copyright owner.



Lab X Technologies, LLC.

LEX-16L 4 0.sch

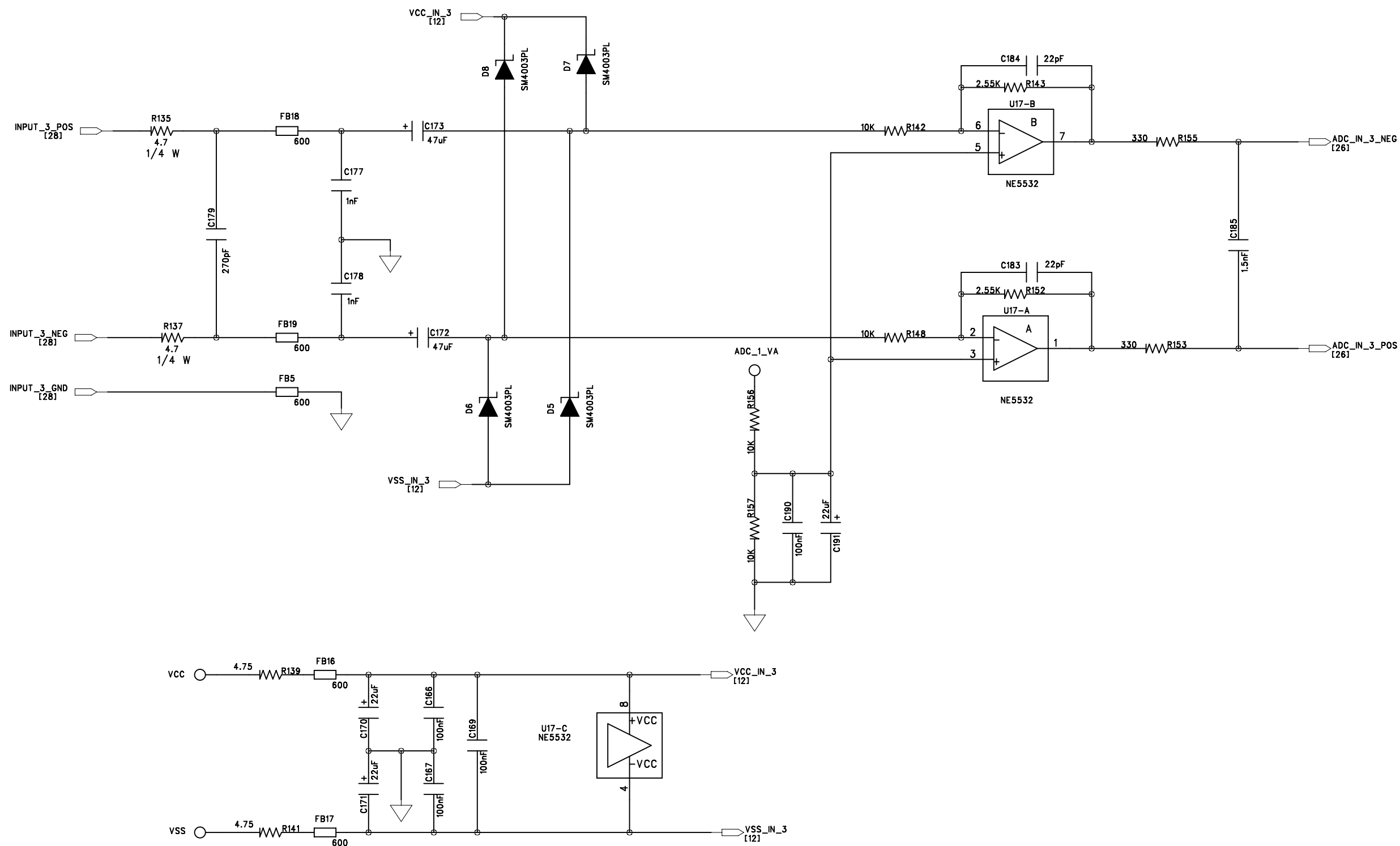
INPUT_2 3/29/2011

REV. - 4.0

Drawn By: RIK

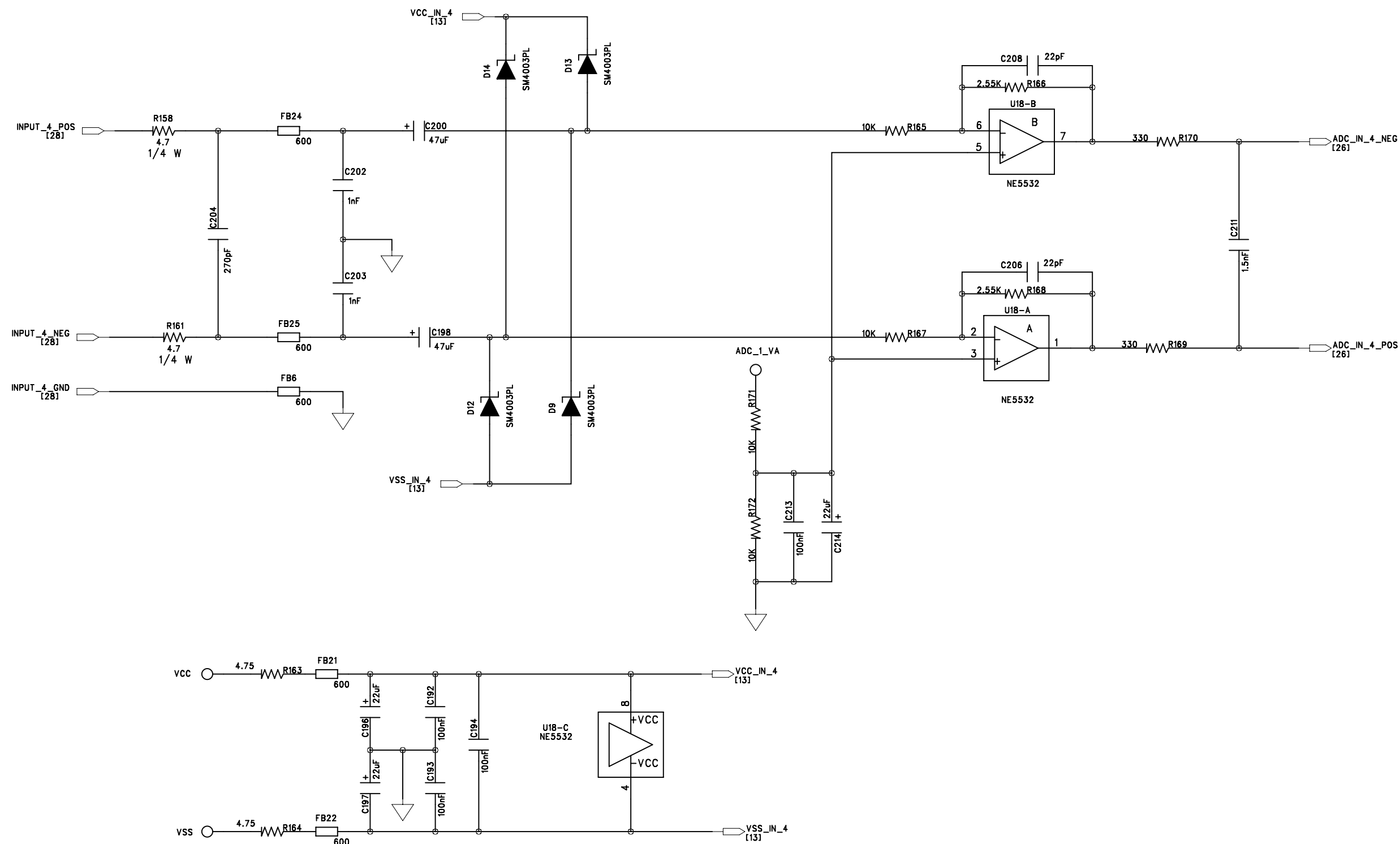
PAGE 11 OF 28

This drawing is not to be copied, reproduced, or disclosed, in part or whole, to a third party without written permission of the Copyright owner.



Lab X Technologies, LLC.	
IEX-16L 4 0.sch	
INPUT_3	3/29/2011
REV. - 4.0	
Drawn By: RIK	
PAGE 12 OF 28	

This drawing is not to be copied, reproduced, or disclosed, in part or whole, to a third party without written permission of the Copyright owner.



Lab X Technologies, LLC.

IEX-16L 4 0.sch

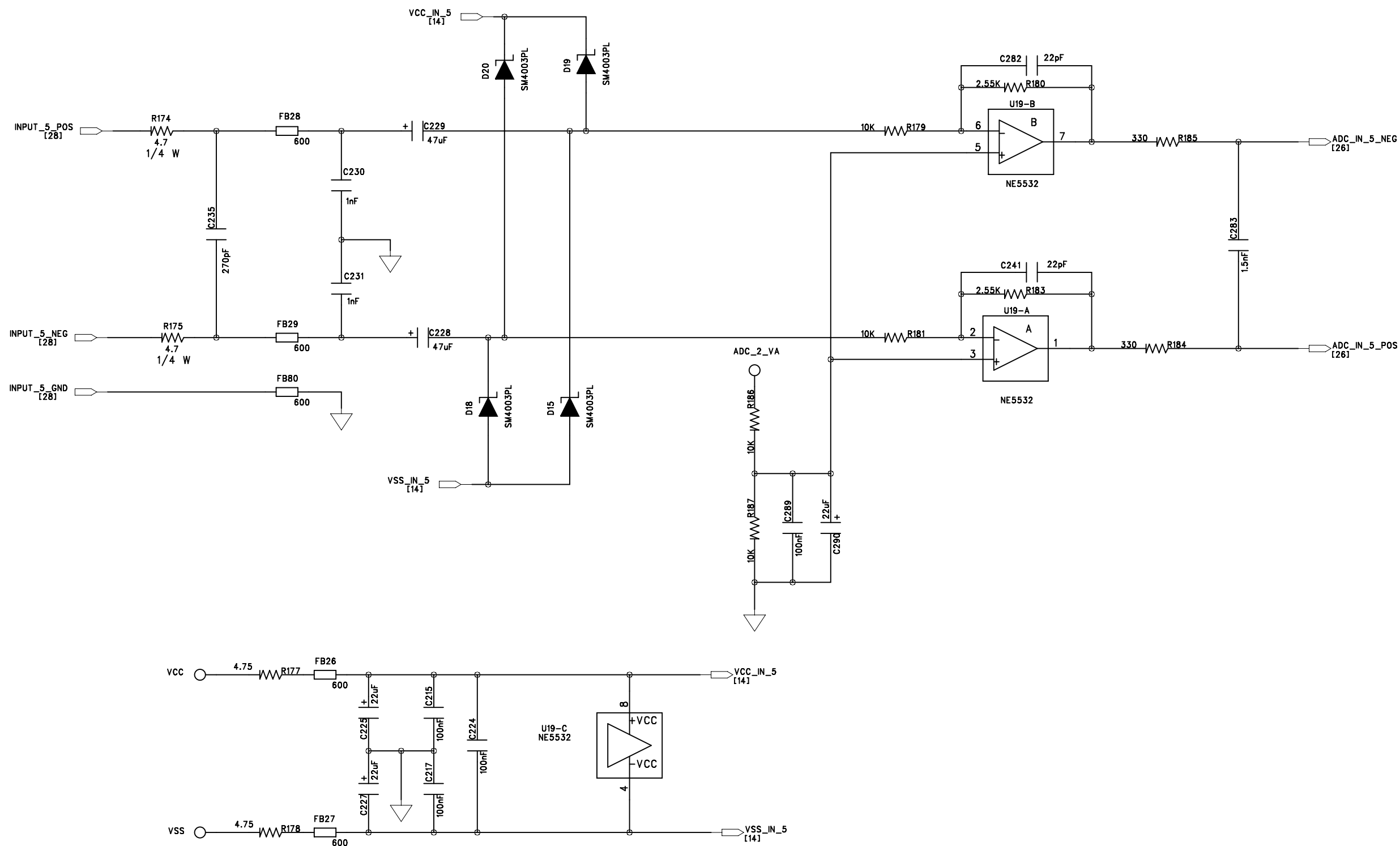
INPUT_4 3/29/2011

REV. - 4.0

Drawn By: RIK

PAGE 13 OF 28

This drawing is not to be copied, reproduced, or disclosed, in part or whole, to a third party without written permission of the Copyright owner.



Lab X Technologies, LLC.

LEX-16L 4 0.sch

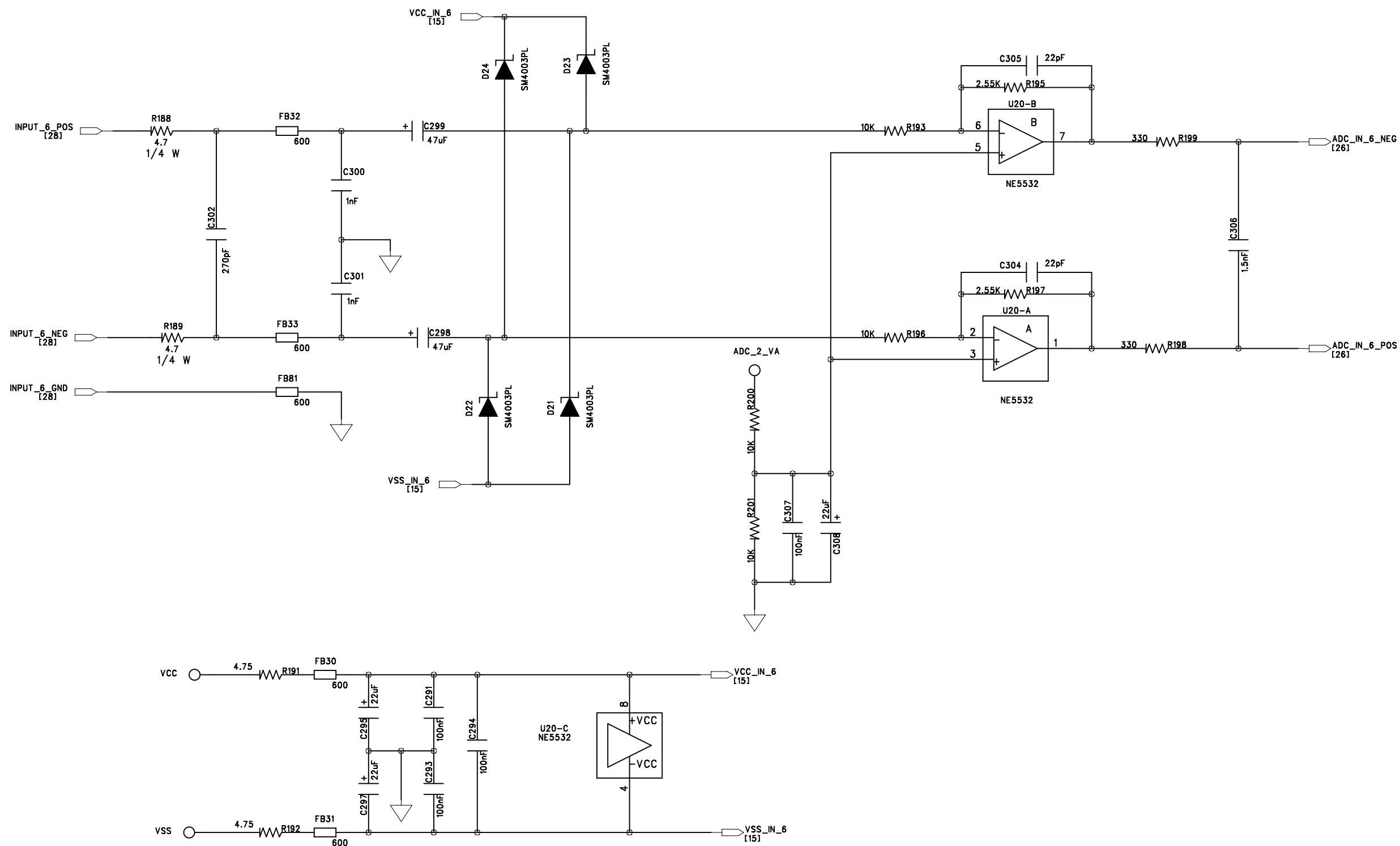
INPUT_5 3/29/2011

REV. - 4.0

Drawn By: RIK

PAGE 14 OF 28

This drawing is not to be copied, reproduced, or disclosed, in part or whole, to a third party without written permission of the Copyright owner.



Lab X Technologies, LLC.

IEX-16L 4 0.sch

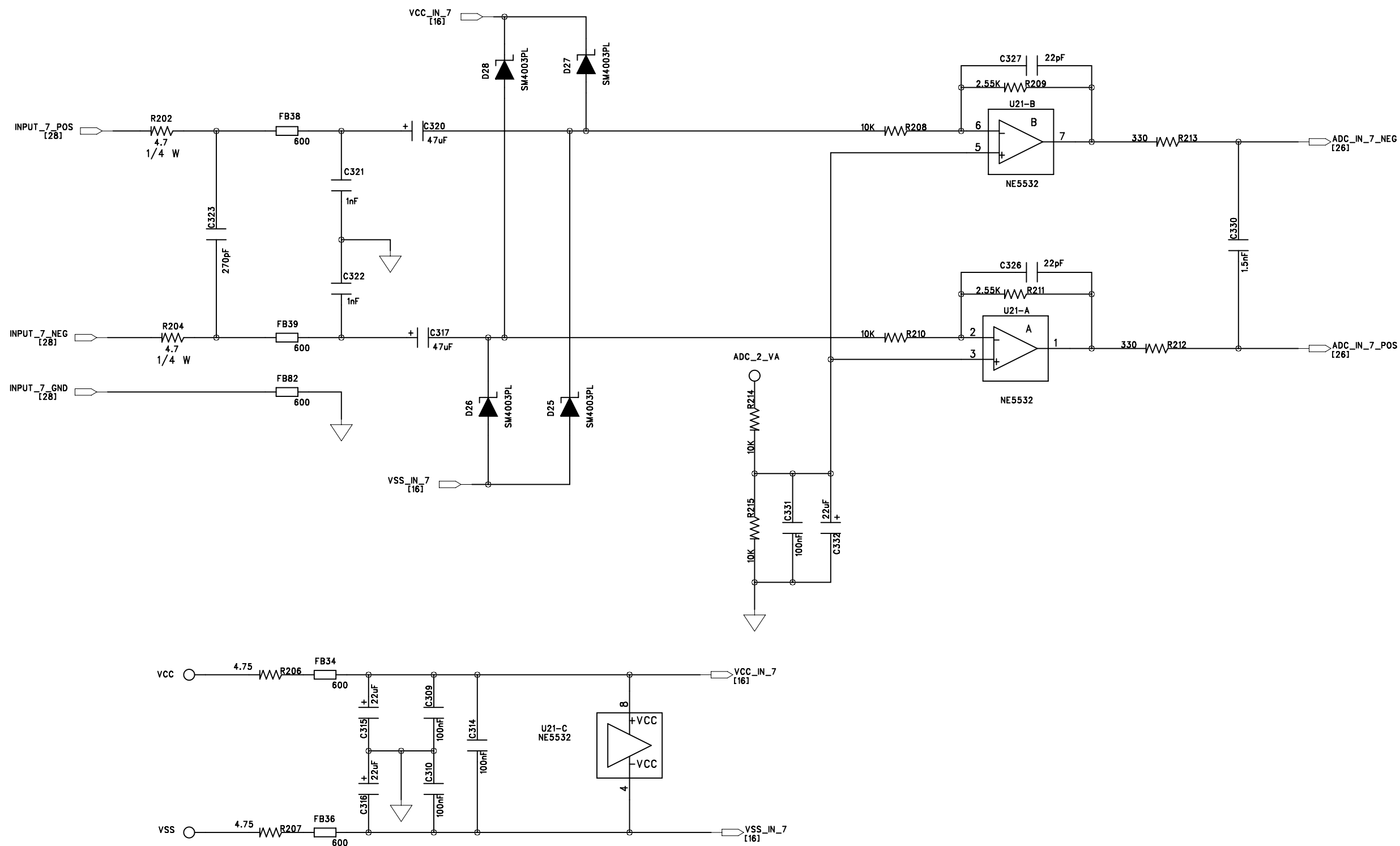
INPUT_6 3/29/2011

REV. - 4.0

Drawn By: RIK

PAGE 15 OF 28

This drawing is not to be copied, reproduced, or disclosed, in part or whole, to a third party without written permission of the Copyright owner.



Lab X Technologies, LLC.

IEX-16L 4 0.sch

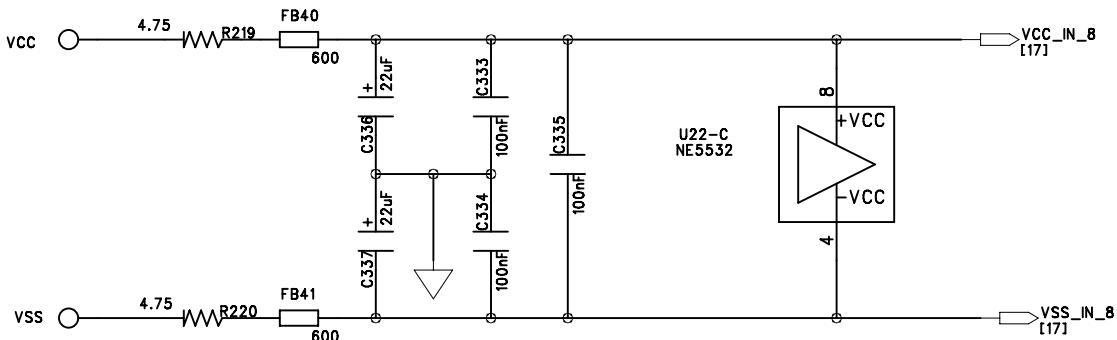
INPUT_7 3/29/2011

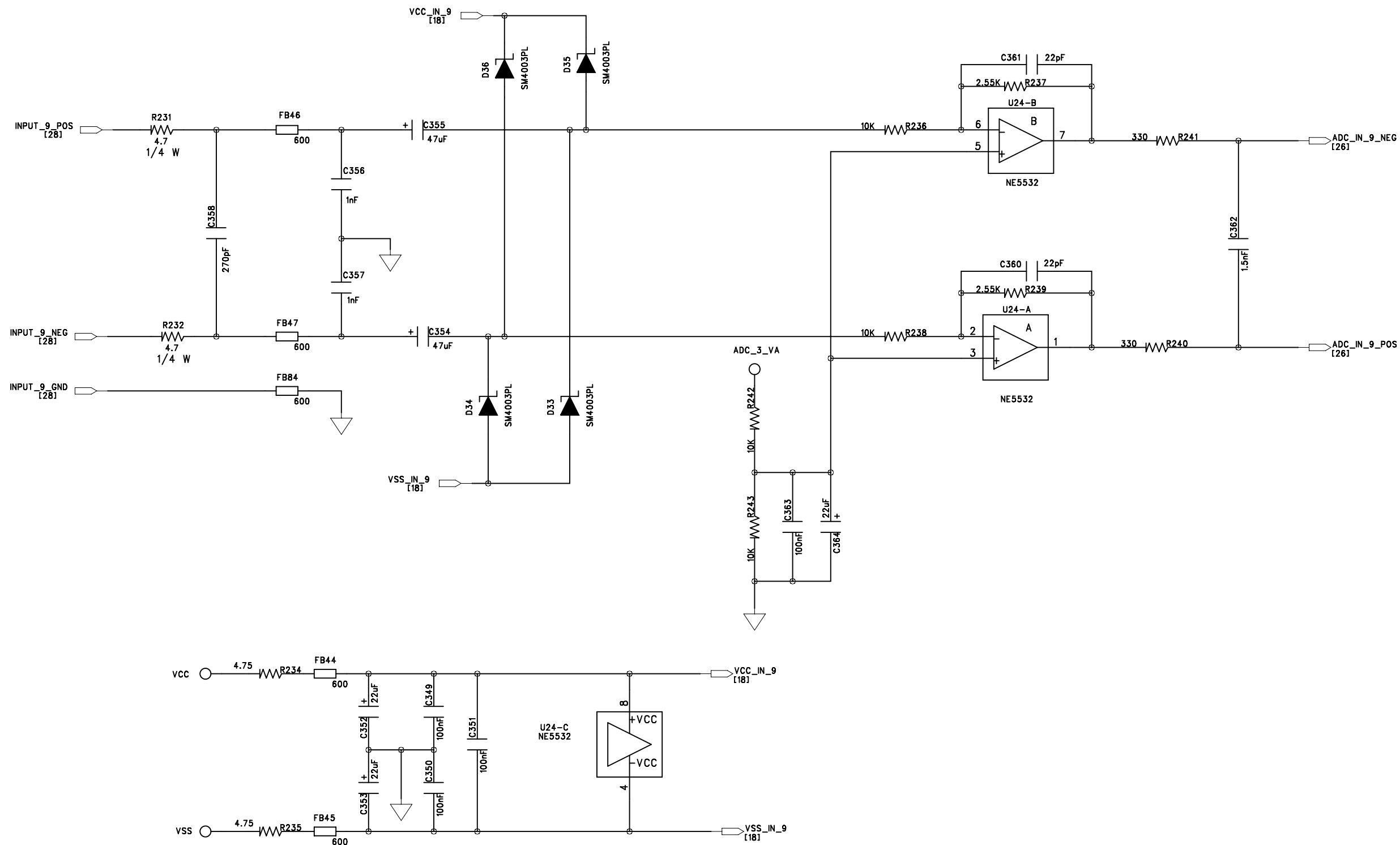
REV. - 4.0

Drawn By: RIK

PAGE 16 OF 28

This drawing is not to be copied, reproduced, or disclosed, in part or whole, to a third party without written permission of the Copyright owner.





Lab X Technologies, LLC.

IEX-16L 4 0.sch

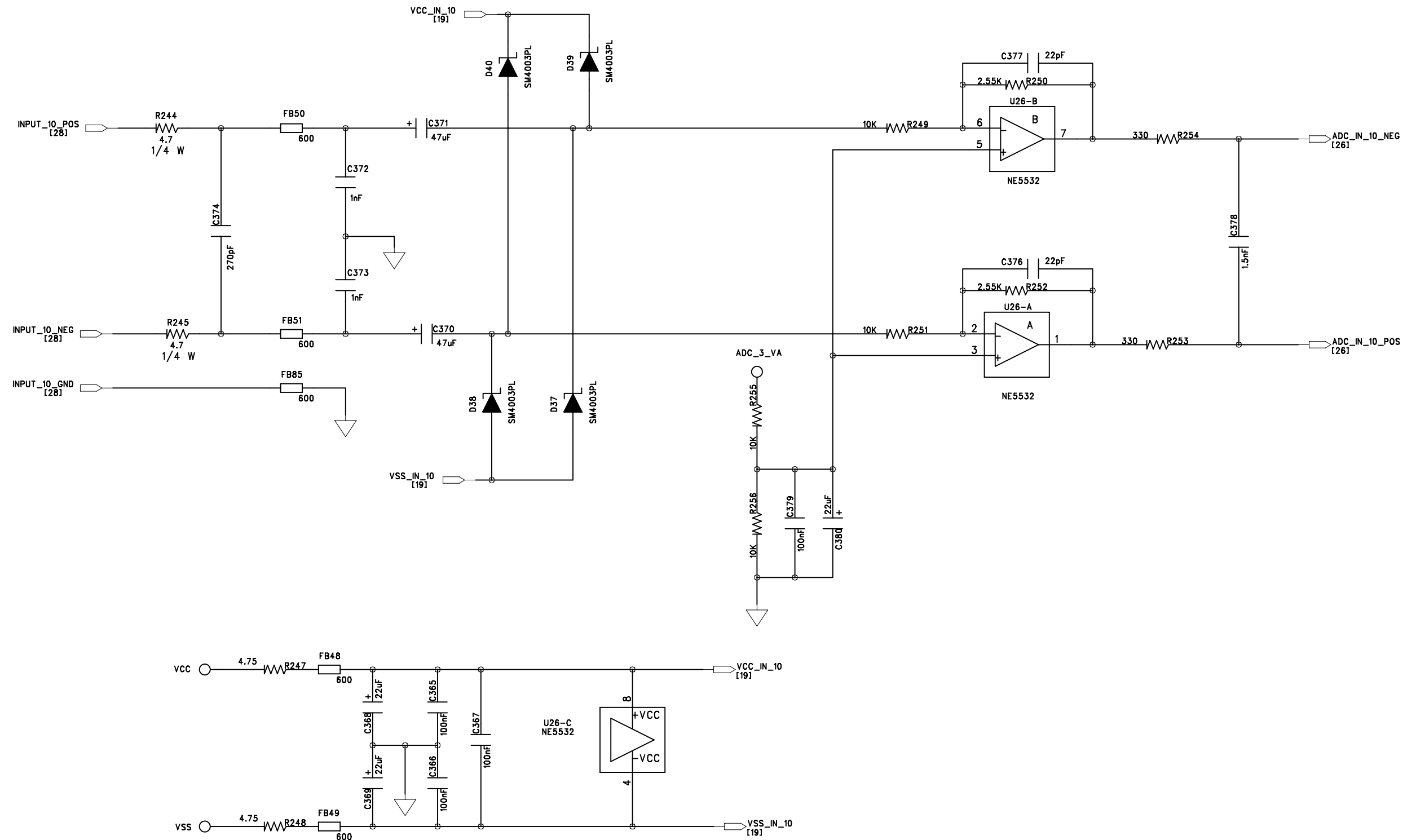
INPUT_9 3/29/2011

REV. - 4.0

Drawn By: RIK

PAGE 18 OF 28

This drawing is not to be copied, reproduced, or disclosed, in part or whole, to a third party without written permission of the Copyright owner.



Lab X Technologies, LLC.

LEX-16L 4 0.sch

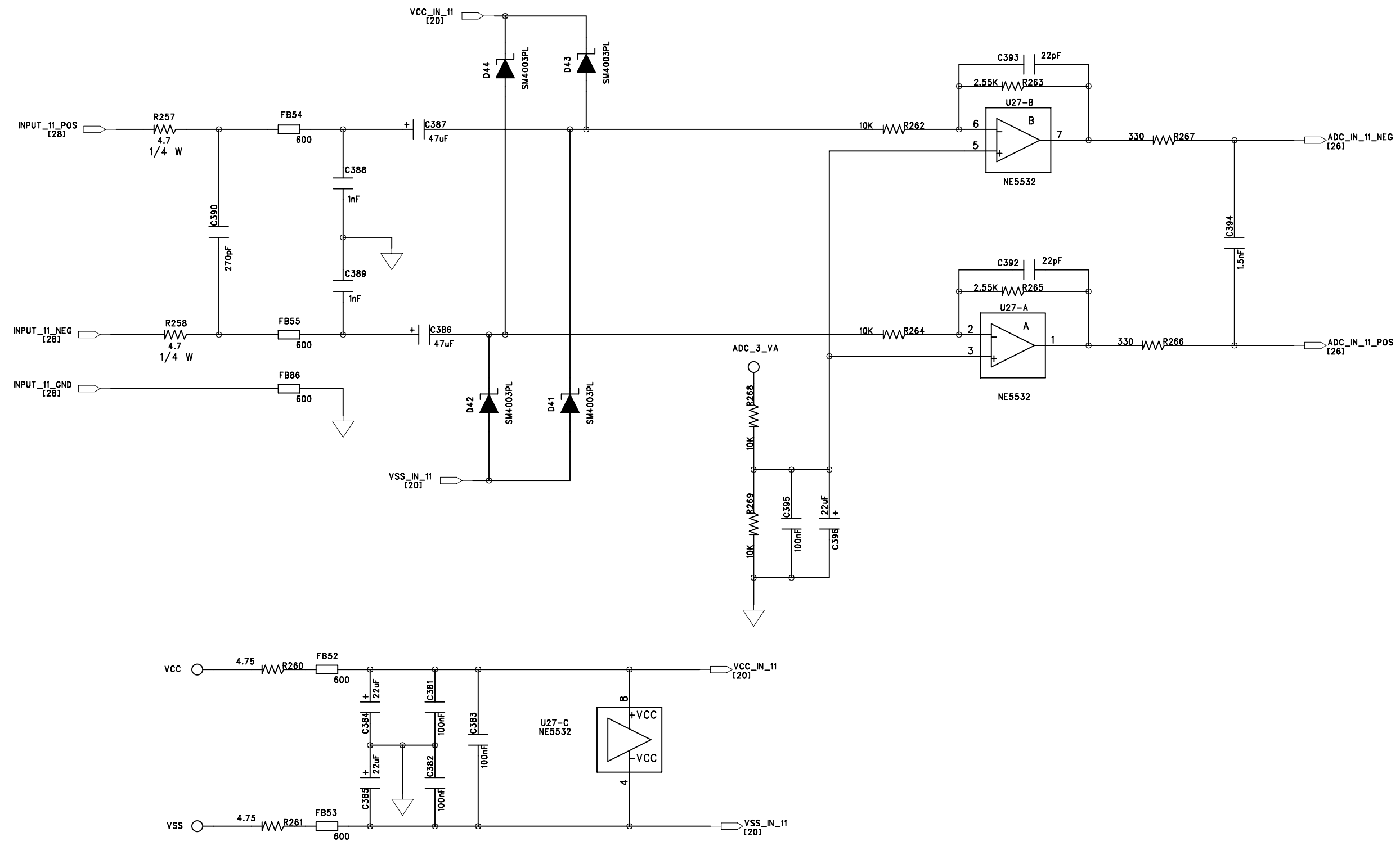
INPUT_10 3/29/2011

REV. - 4.0

Drawn By: RIK

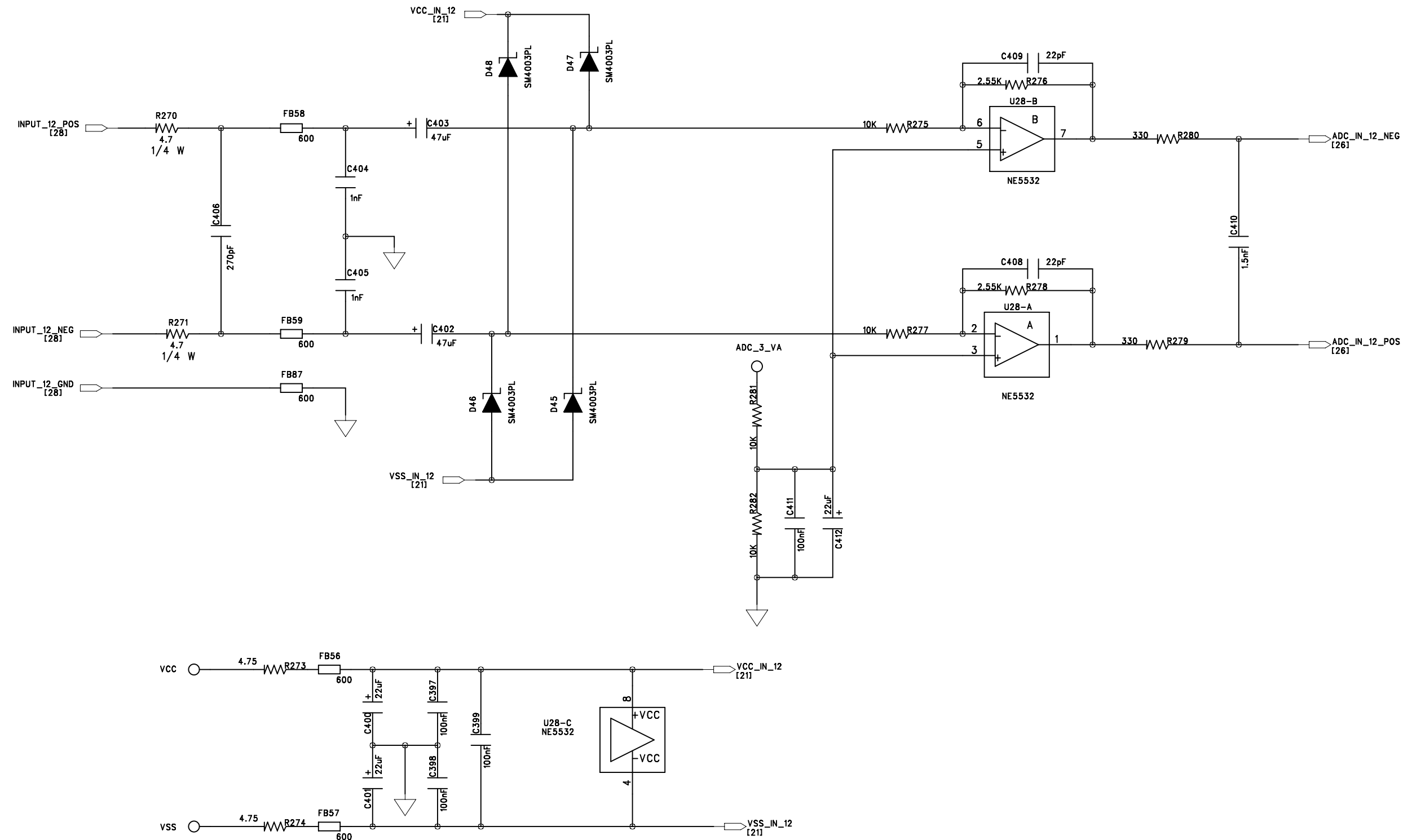
PAGE 19 OF 28

This drawing is not to be copied, reproduced, or disclosed, in part or whole, to a third party without written permission of the Copyright owner.



Lab X Technologies, LLC.	
IEX-16L 4 0.sch	
INPUT_11	3/29/2011
	REV. - 4.0
	Drawn By: RIK
	PAGE 20 OF 28

This drawing is not to be copied, reproduced, or disclosed, in part or whole, to a third party without written permission of the Copyright owner.



Lab X Technologies, LLC.

IEX-16L 4 0.sch

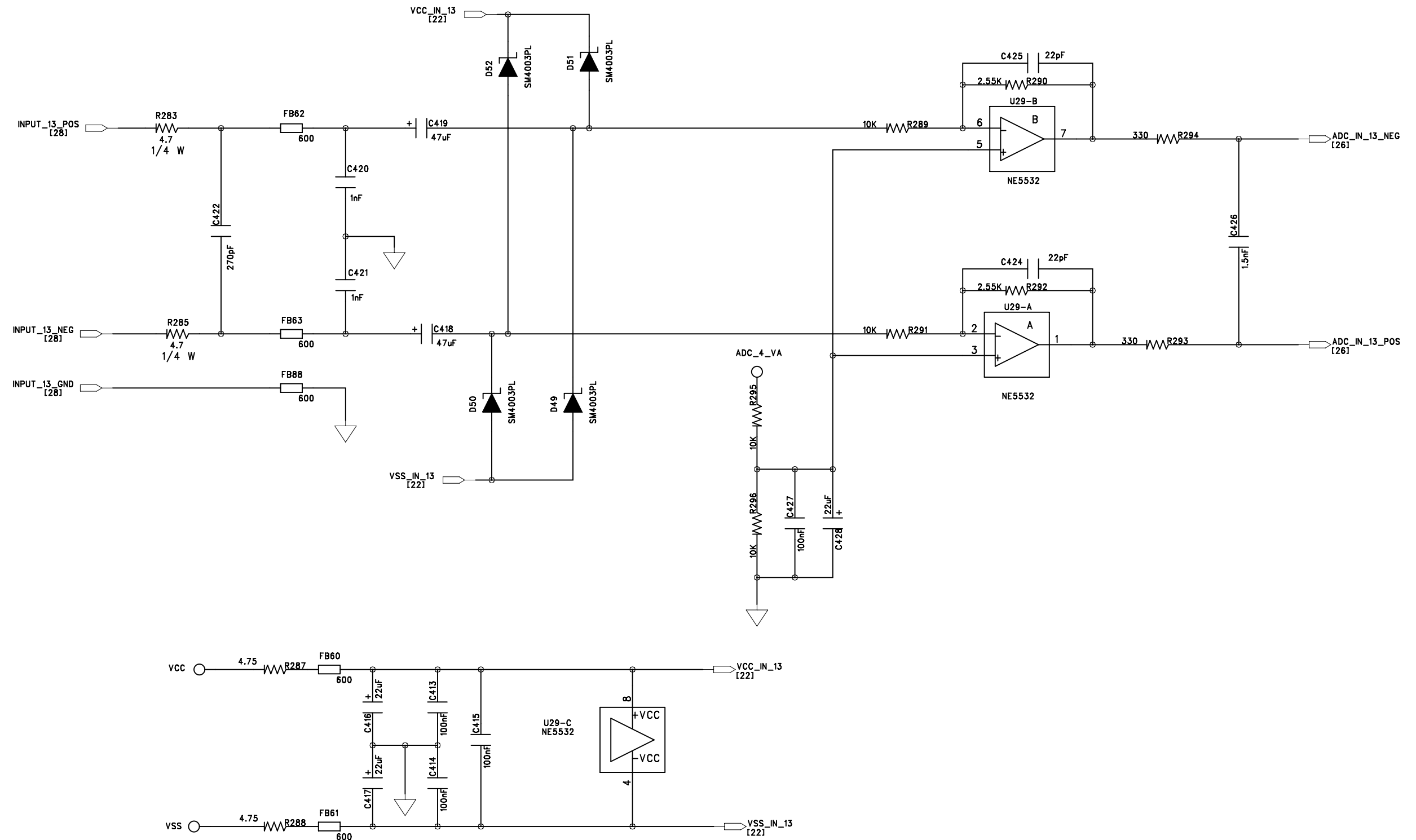
INPUT_12 3/29/2011

REV. - 4.0

Drawn By: RIK

PAGE 21 OF 28

This drawing is not to be copied, reproduced, or disclosed, in part or whole, to a third party without written permission of the Copyright owner.



Lab X Technologies, LLC.

IEX-16L 4 0.sch

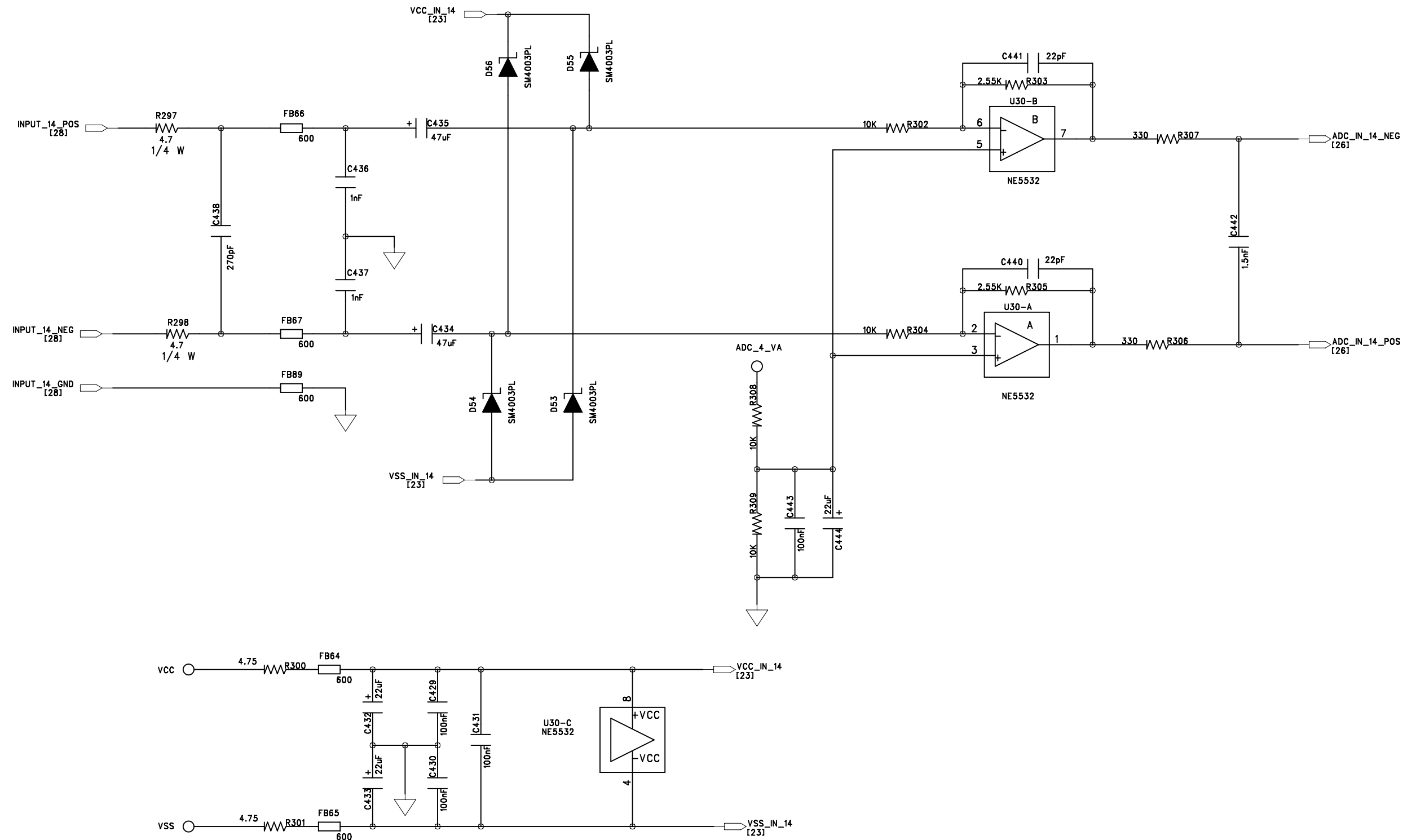
INPUT_13 3/29/2011

REV. - 4.0

Drawn By: RIK

PAGE 22 OF 28

This drawing is not to be copied, reproduced, or disclosed, in part or whole, to a third party without written permission of the Copyright owner.



Lab X Technologies, LLC.

IEX-16L 4 0.sch

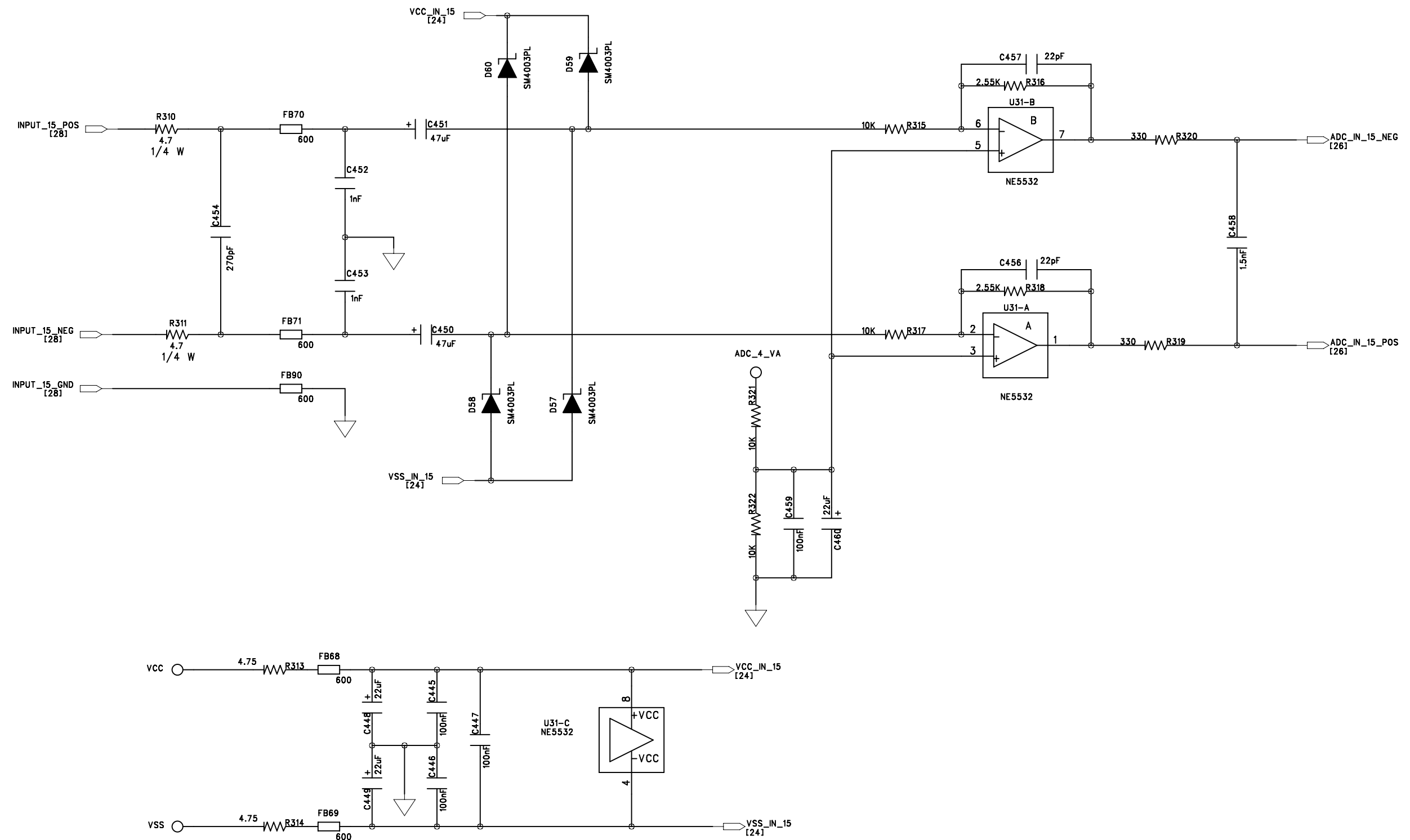
INPUT_14 3/29/2011

REV. - 4.0

Drawn By: RIK

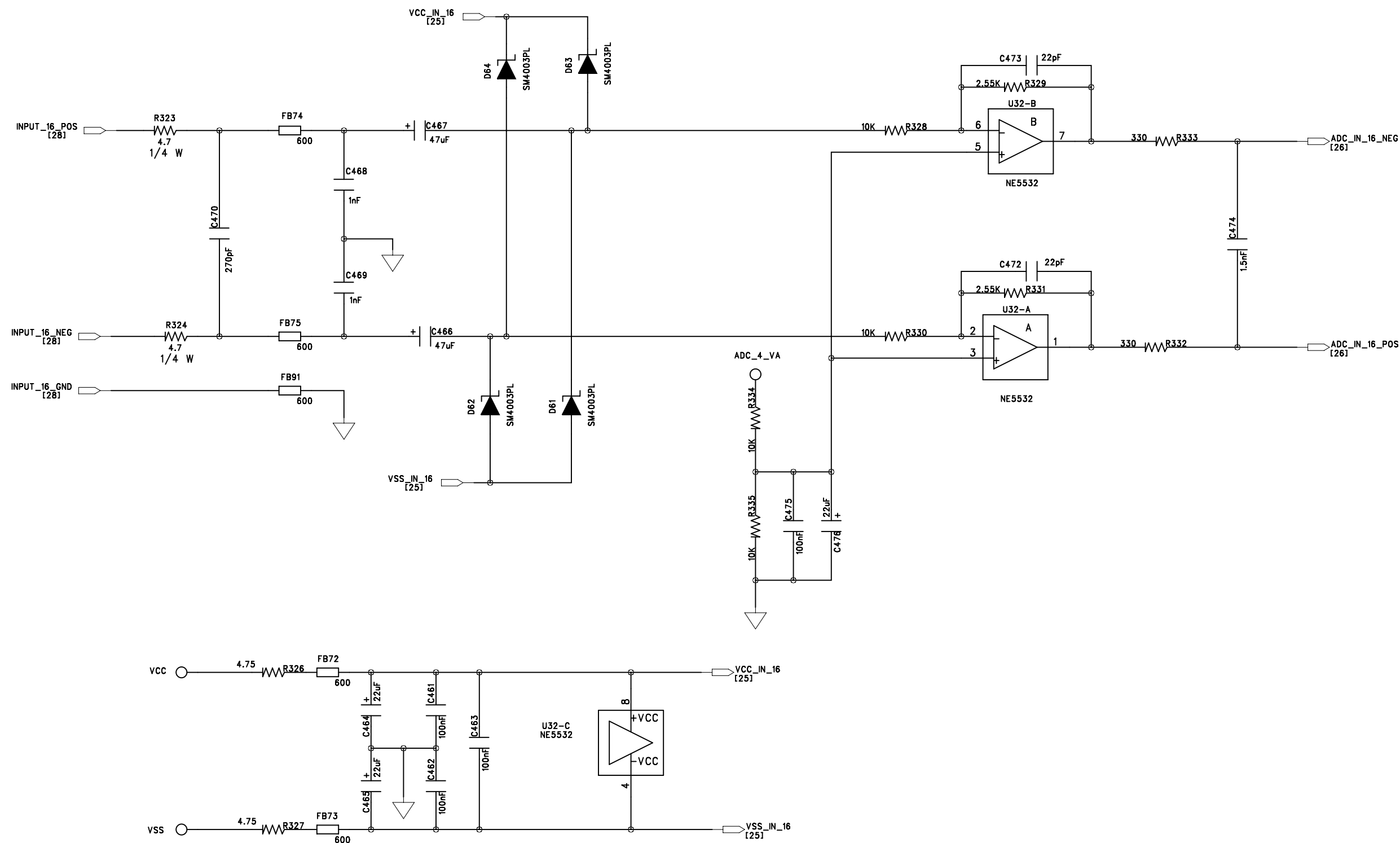
PAGE 23 OF 28

This drawing is not to be copied, reproduced, or disclosed, in part or whole, to a third party without written permission of the Copyright owner.



Lab X Technologies, LLC.	
IEX-16L 4 0.sch	
INPUT_15	3/29/2011
REV. - 4.0	
Drawn By: RIK	
PAGE 24 OF 28	

This drawing is not to be copied, reproduced, or disclosed, in part or whole, to a third party without written permission of the Copyright owner.



Lab X Technologies, LLC.

IEX-16L 4 0.sch

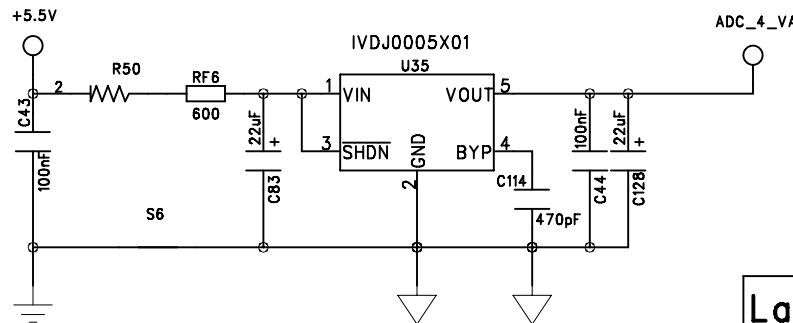
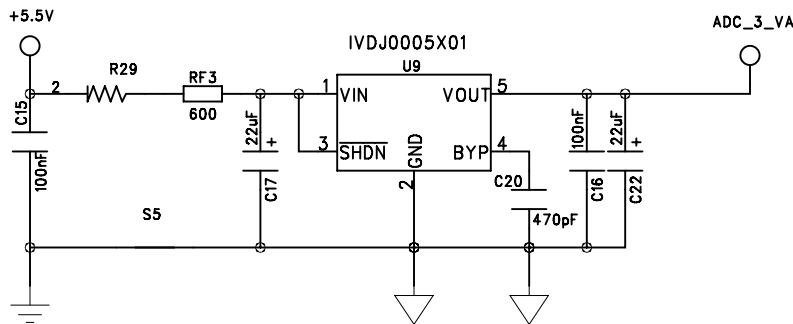
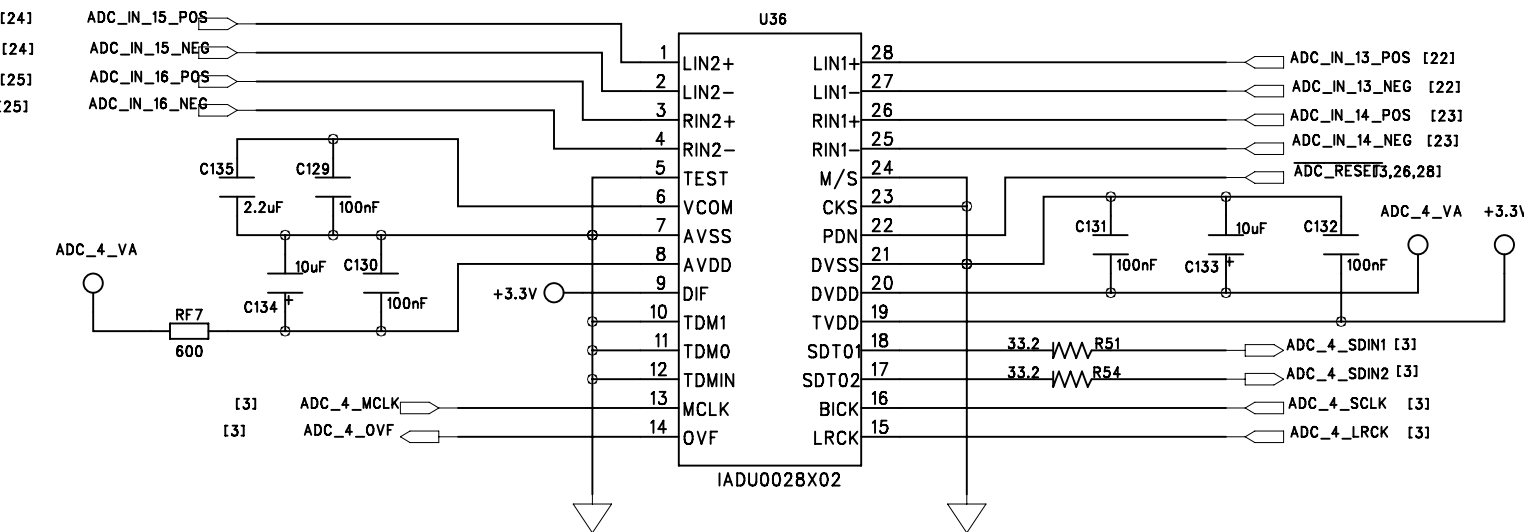
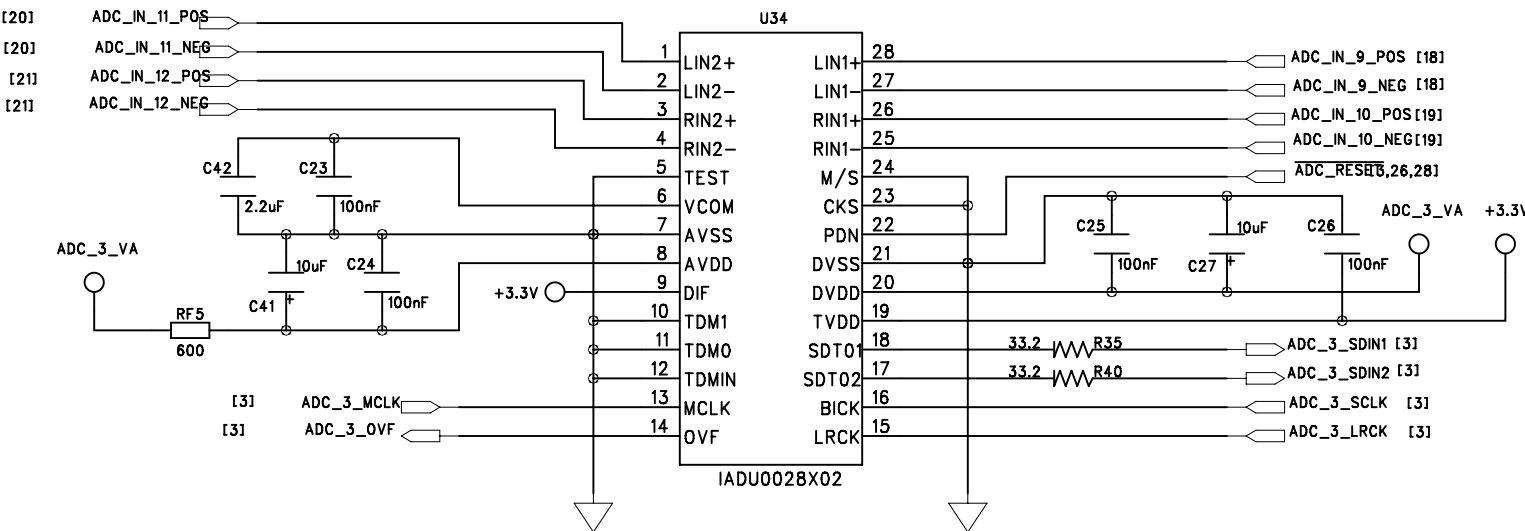
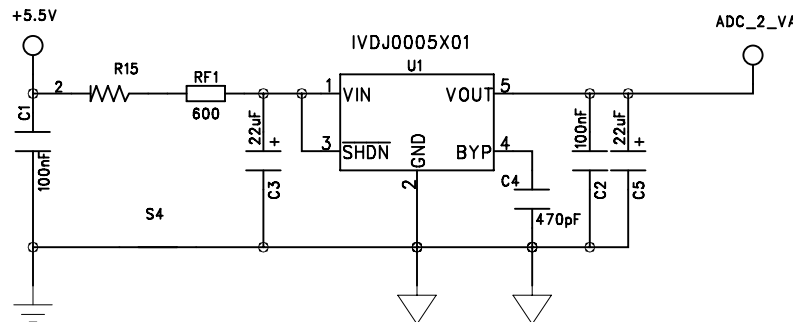
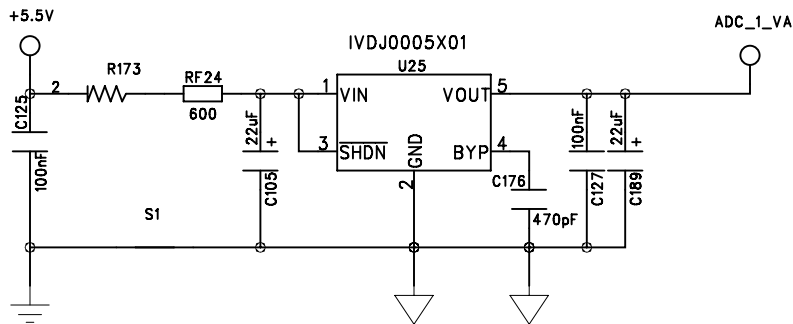
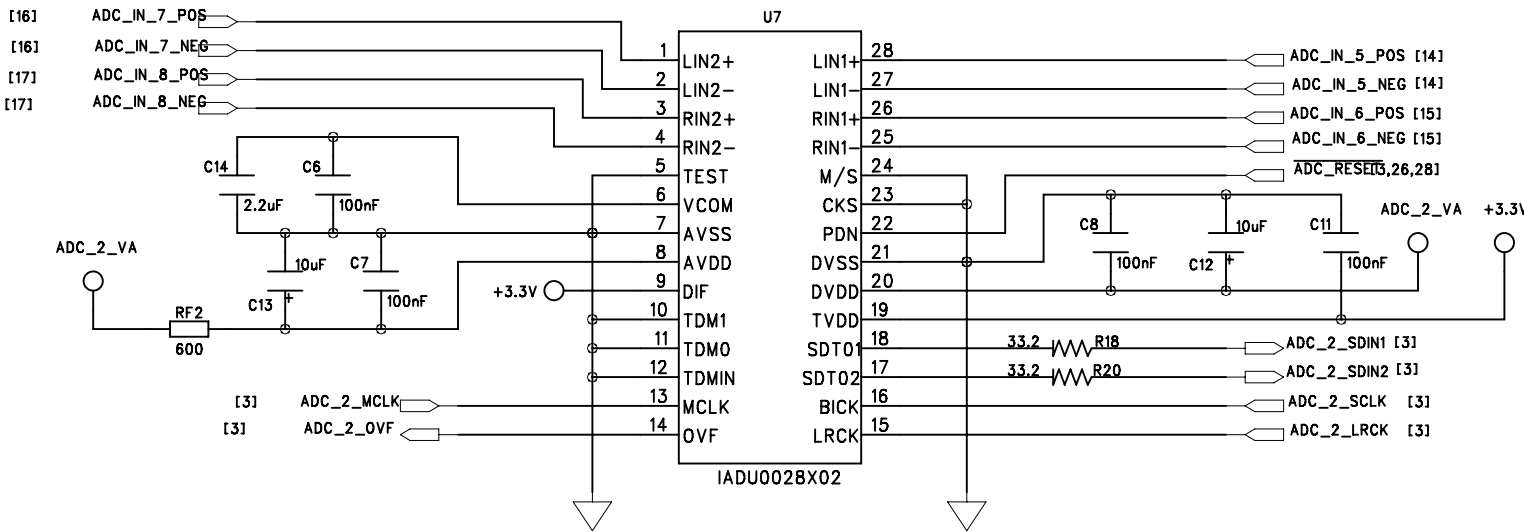
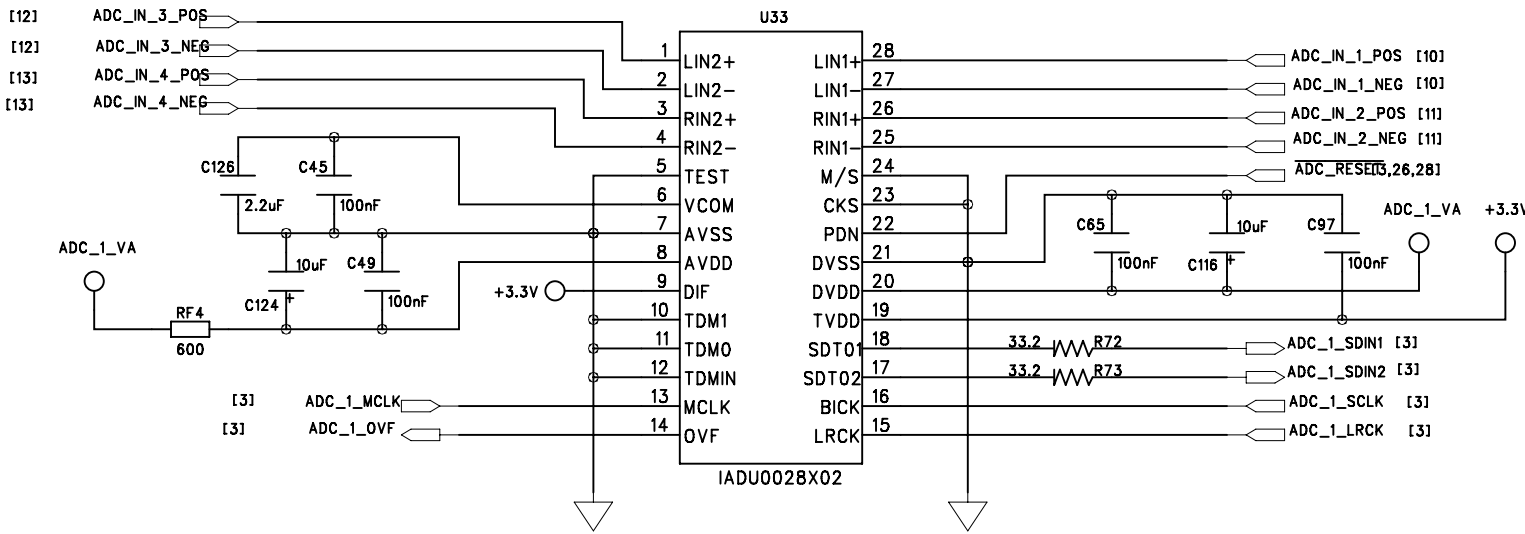
INPUT_16 3/29/2011

REV. - 4.0

Drawn By: RIK

PAGE 25 OF 28

This drawing is not to be copied, reproduced, or disclosed, in part or whole, to a third party without written permission of the Copyright owner.



Lab X Technologies, LLC.

LEX-16L 4 0.sch

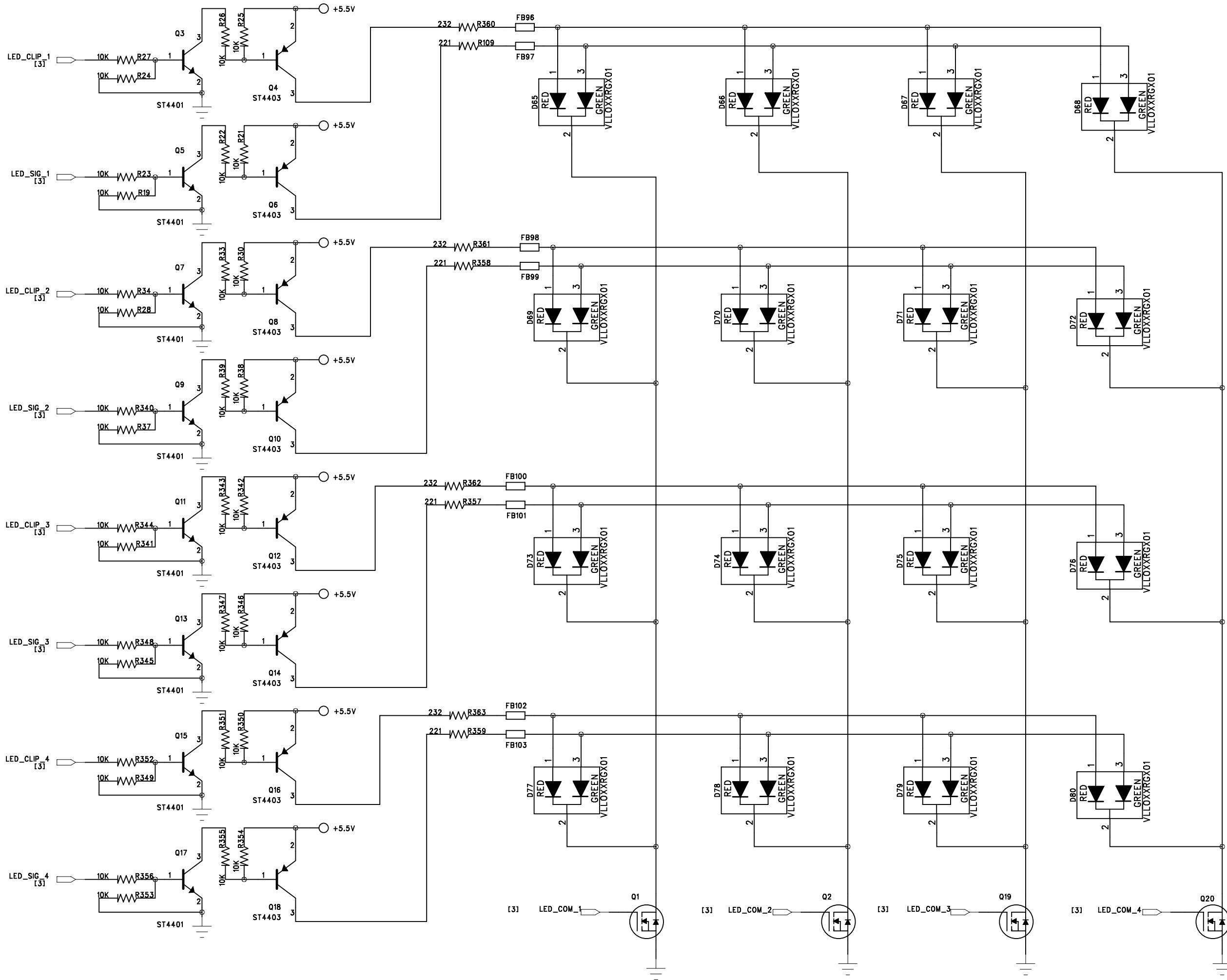
ADC 3/29/2011

REV. - 4.0

Drawn By: RIK

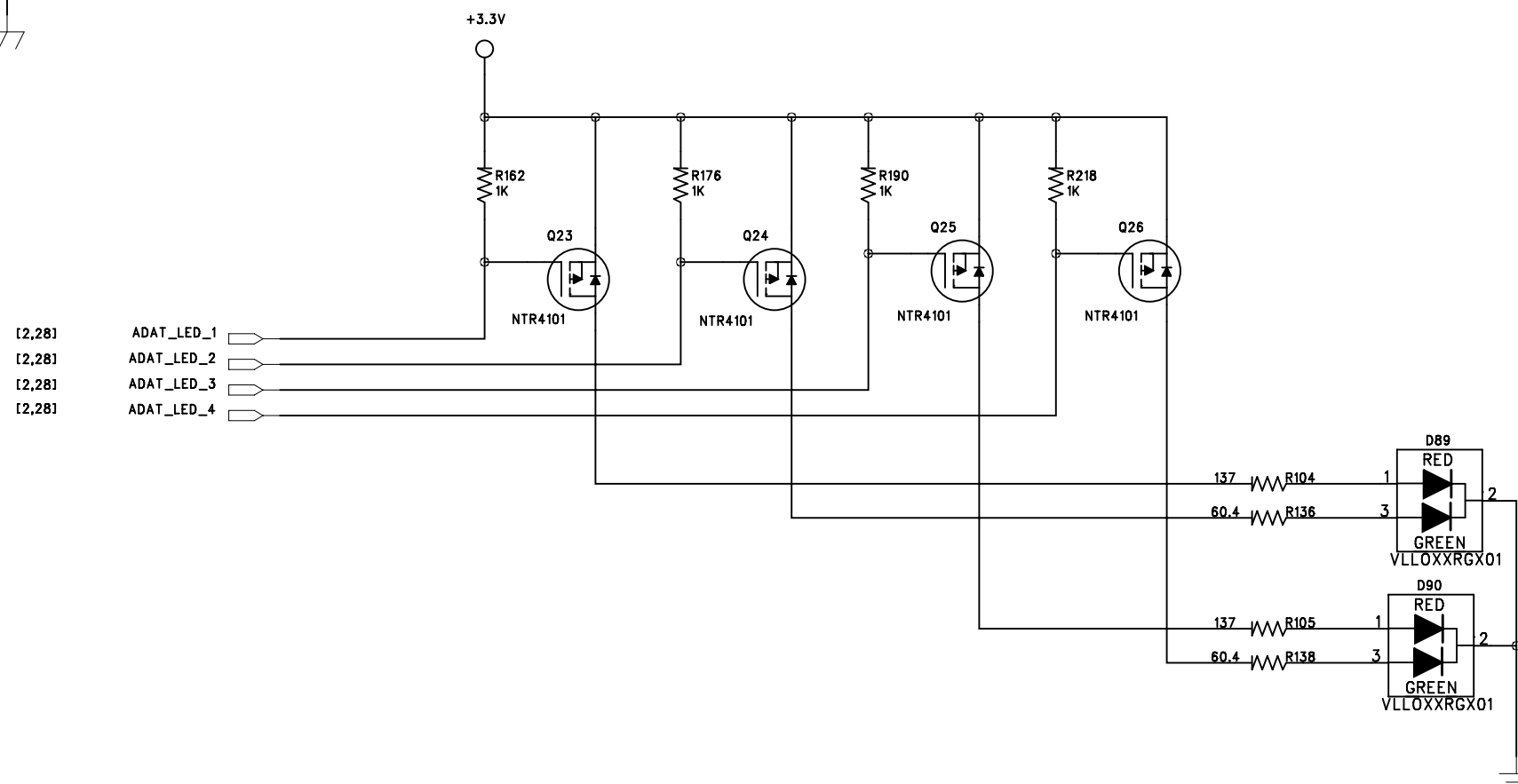
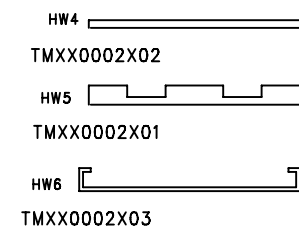
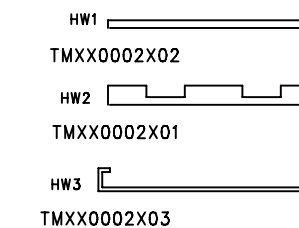
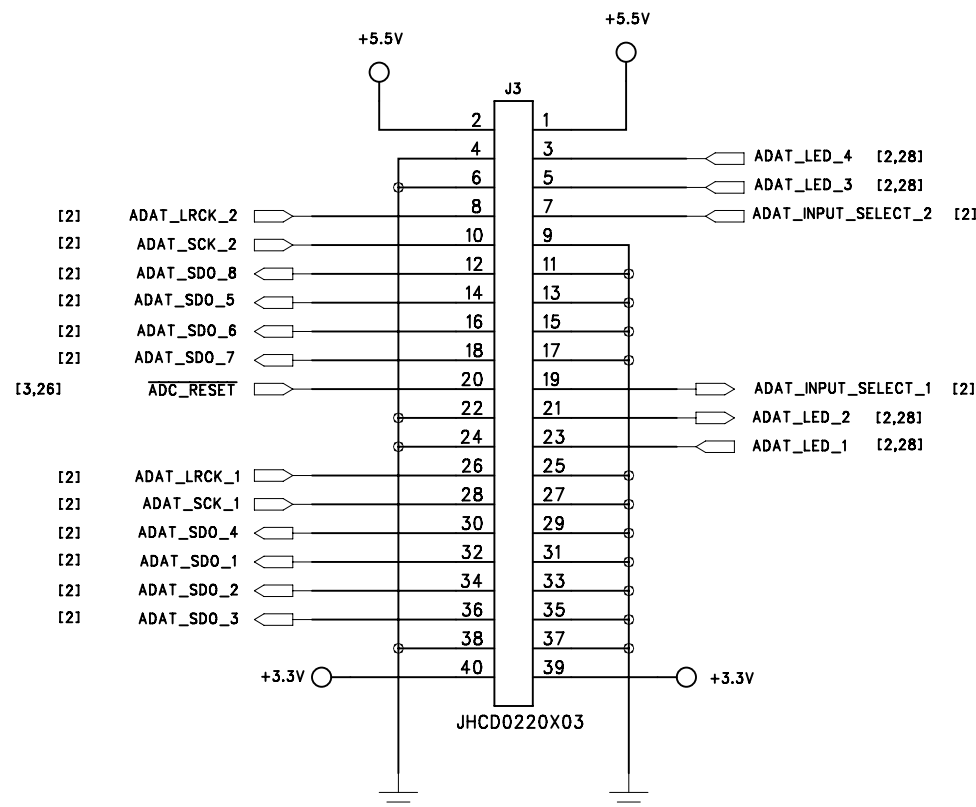
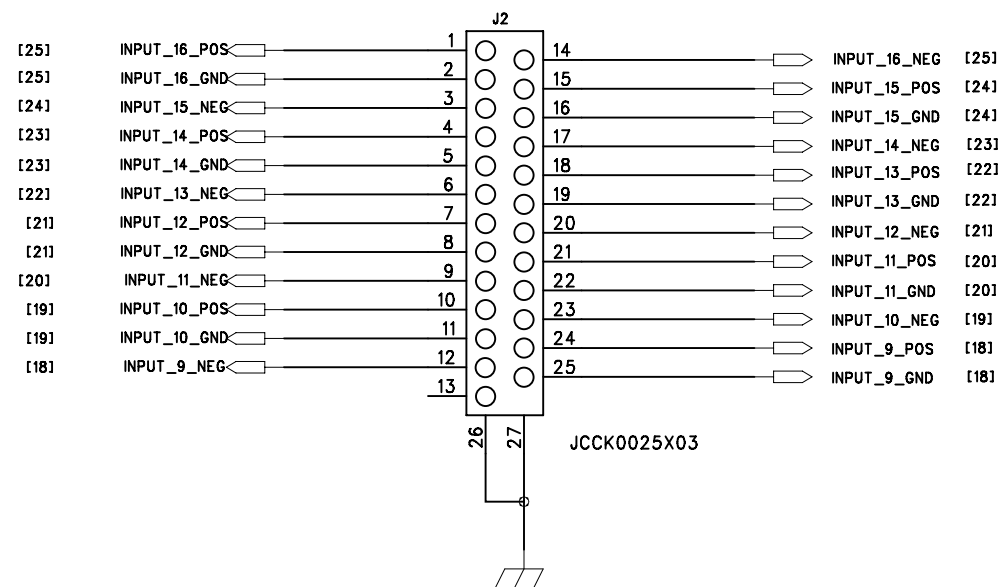
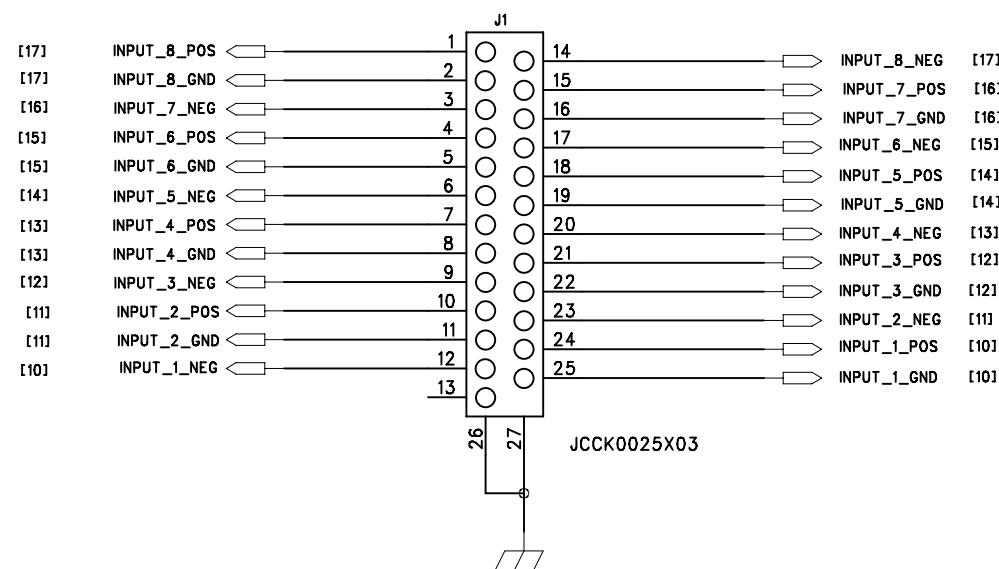
PAGE 26 OF 28

This drawing is not to be copied, reproduced, or disclosed, in part or whole, to a third party without written permission of the Copyright owner.



Lab X Technologies, LLC.	
IEX-16L 4 0.sch	
LEDS	3/29/2011
	REV. - 4.0
	Drawn By: RIK
	PAGE 27 OF 28

This drawing is not to be copied, reproduced, or disclosed, in part or whole, to a third party without written permission of the Copyright owner.



This drawing is not to be copied, reproduced, or disclosed, in part or whole, to a third party without written permission of the Copyright owner.

Lab X Technologies, LLC.	
IEX-16L 4 0.sch	
EXTRA	3/29/2011
	REV. - 4.0
	Drawn By: RIK
	PAGE 28 OF 28