

Nine Element Feeder Board

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External Connectors

- J59: Atmel JTAG
- J61: ReaderIO
- J62: SPI Output
- J63: SPI Input
- J64: LED FFC Connector
- J65: DB9 Serial
- J1: RF input SMA
- J18-J52: Test Connectors SMA

Revision History

- Rev 01 Initial Design November 2014 Renesas BSU
Finished -Jan 27 Paste Mask Revised March 3, 2015
- Rev 02 Atmel micro on board Finished -May 2015
Body Centered Changes June 25, 2015
- Rev 03 RF Adjustments and flatness improvement
Cable Routing Finished - July 22, 2015

PCB Stackup

FR408HR

Dk=3.55

Df=0.0091

Total Finish Height 77 mil - 0.077"

PLATED UP 1.0 oz TO APPROX 1.5mil

Total Height No Plating 73 mil - 0.073"

Top 0.5oz Cu

Layer2-3.3V 0.5oz Cu

Layer3- Route 0.5oz Cu

Bottom-GND 0.5oz Cu

FR408HR Core (14mil H/H)

2113 FR4 Prepreg (7mil)

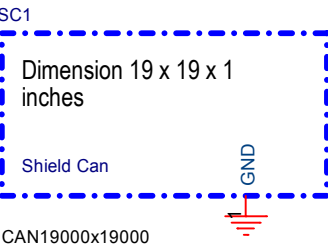
FR4 Core (28mil 0/0)

2113 FR4 Prepreg (7mil)

FR4 Core (14mil H/H)

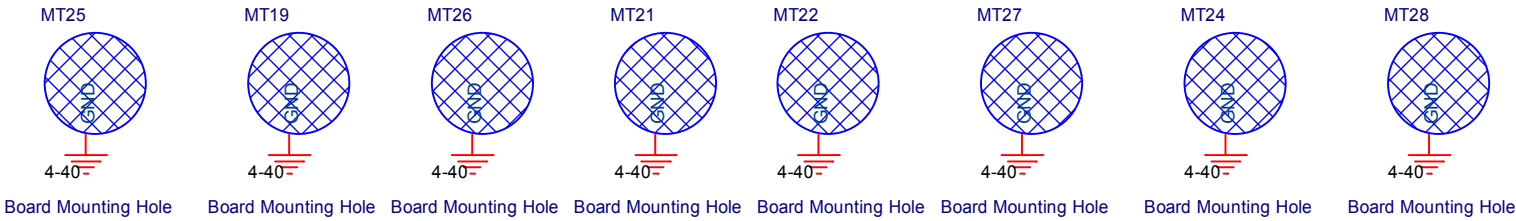
PLATED UP 1.0 oz TO APPROX 1.5mil

Controlled Impedances



RF 50ohm
Microstrip

W= 30 mils Top
ISO= 50 mil - 0.050"



RF-Controls, LLC

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Title

9 Element Feeder Board

Size

Document Number

Rev

B

11001-126

03

Date:

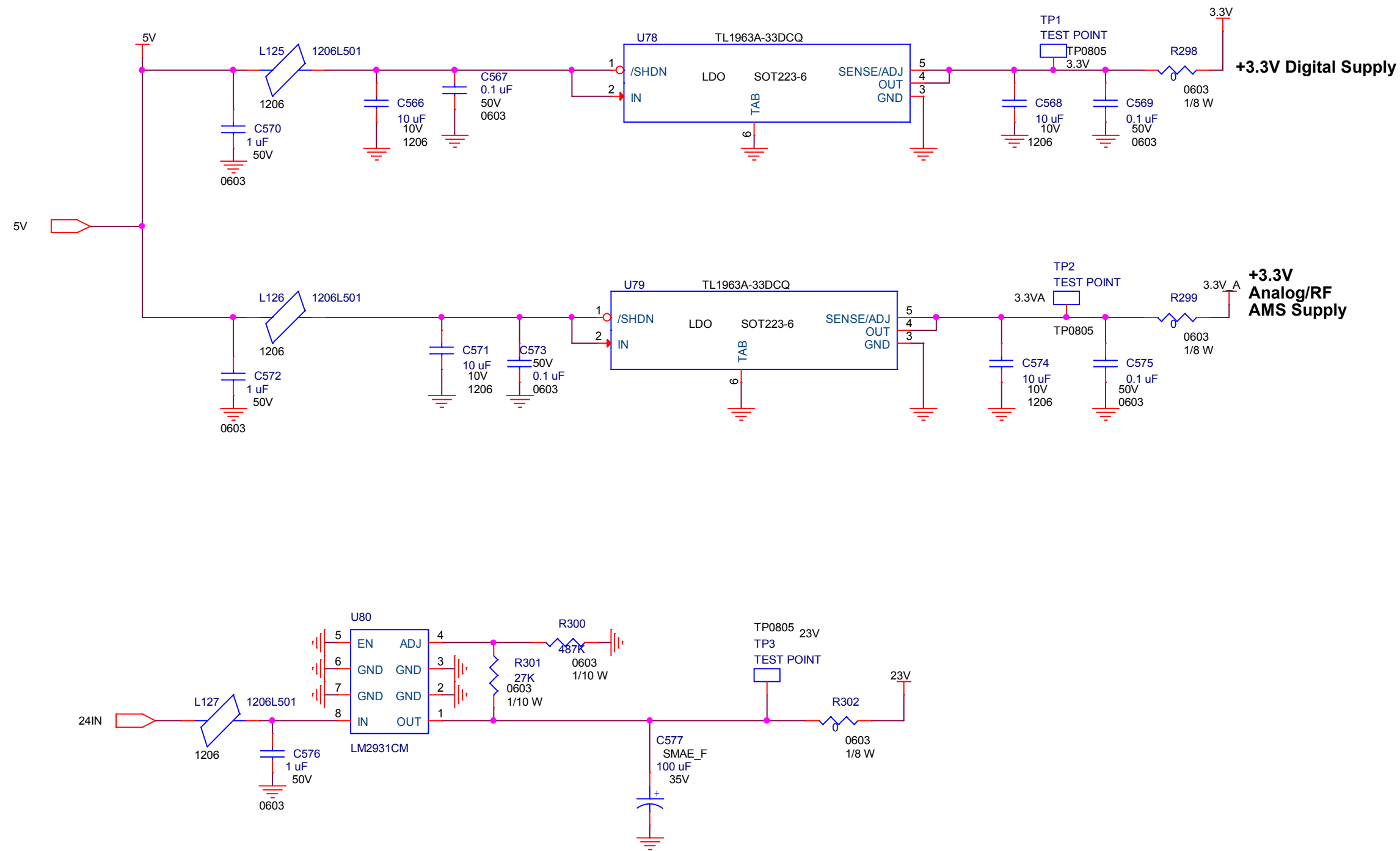
Friday, July 24, 2015

Sheet

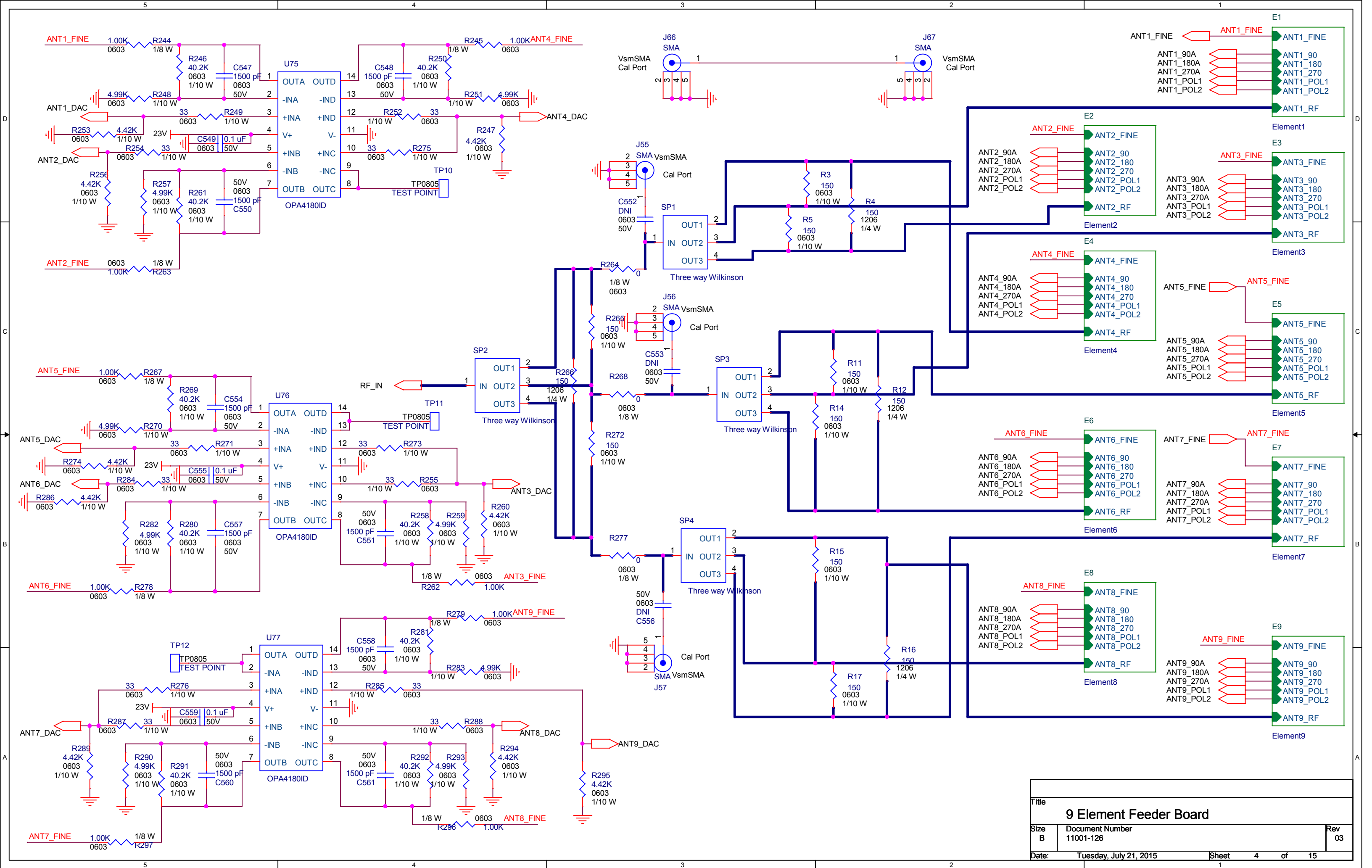
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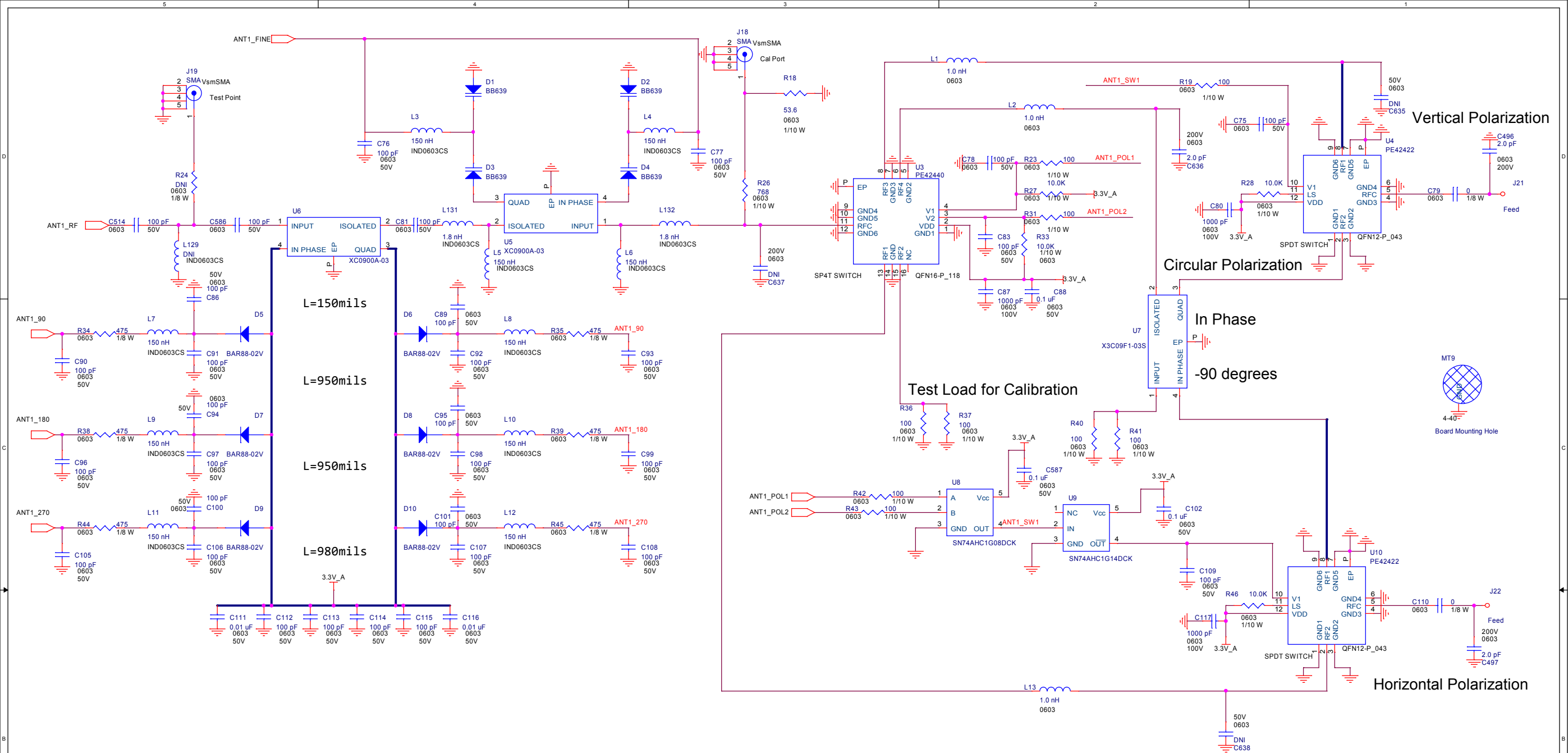
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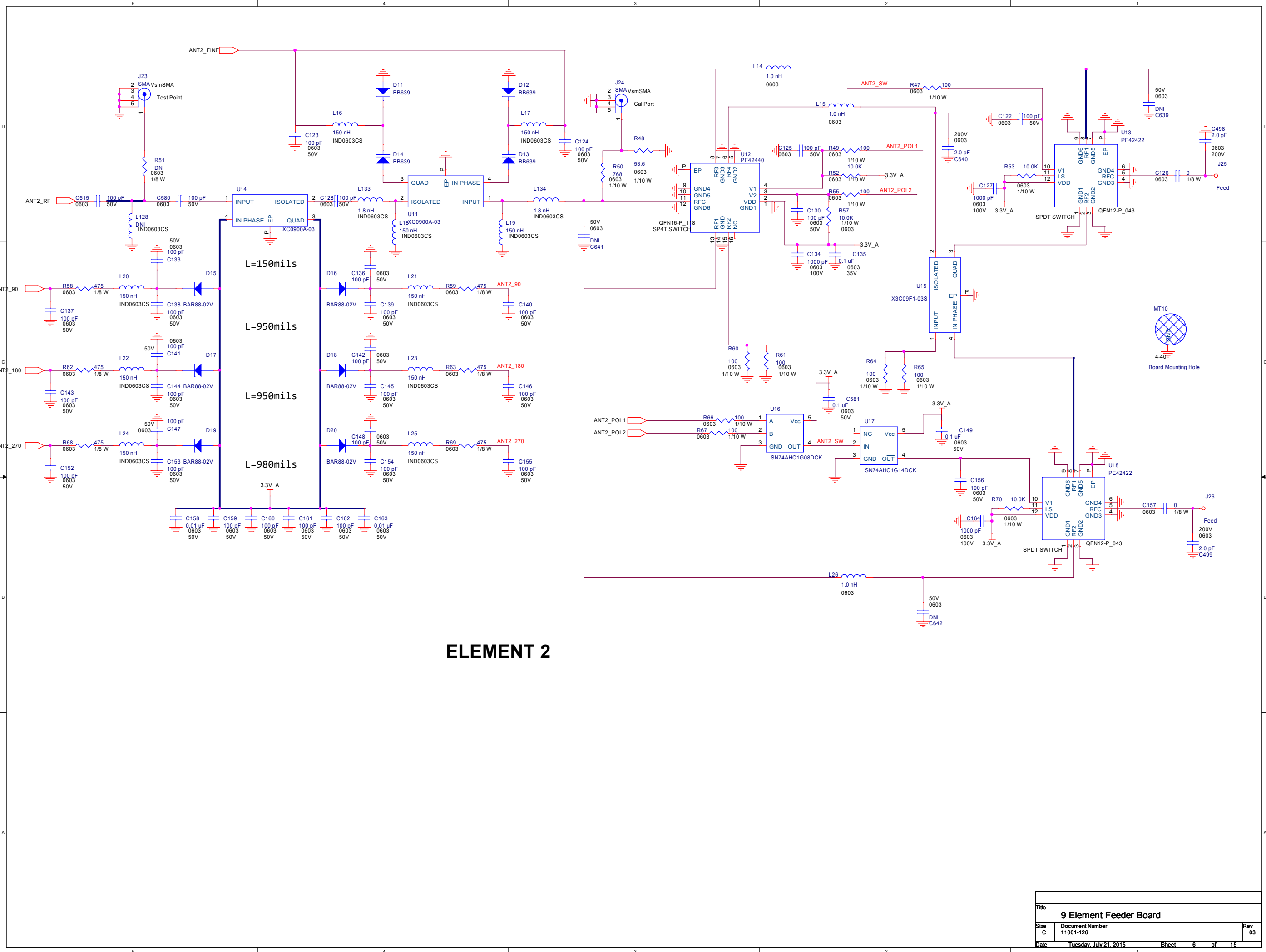


ELEMENT 1

SP4T RF#	Ant Pol	Pol1	Pol2	SW	SW_
RF1	Horiz	0	0	0	1
RF2	Test Load	0	1	0	1
RF3	Vert	1	0	0	1
RF4	LH Circ	1	1	1	0

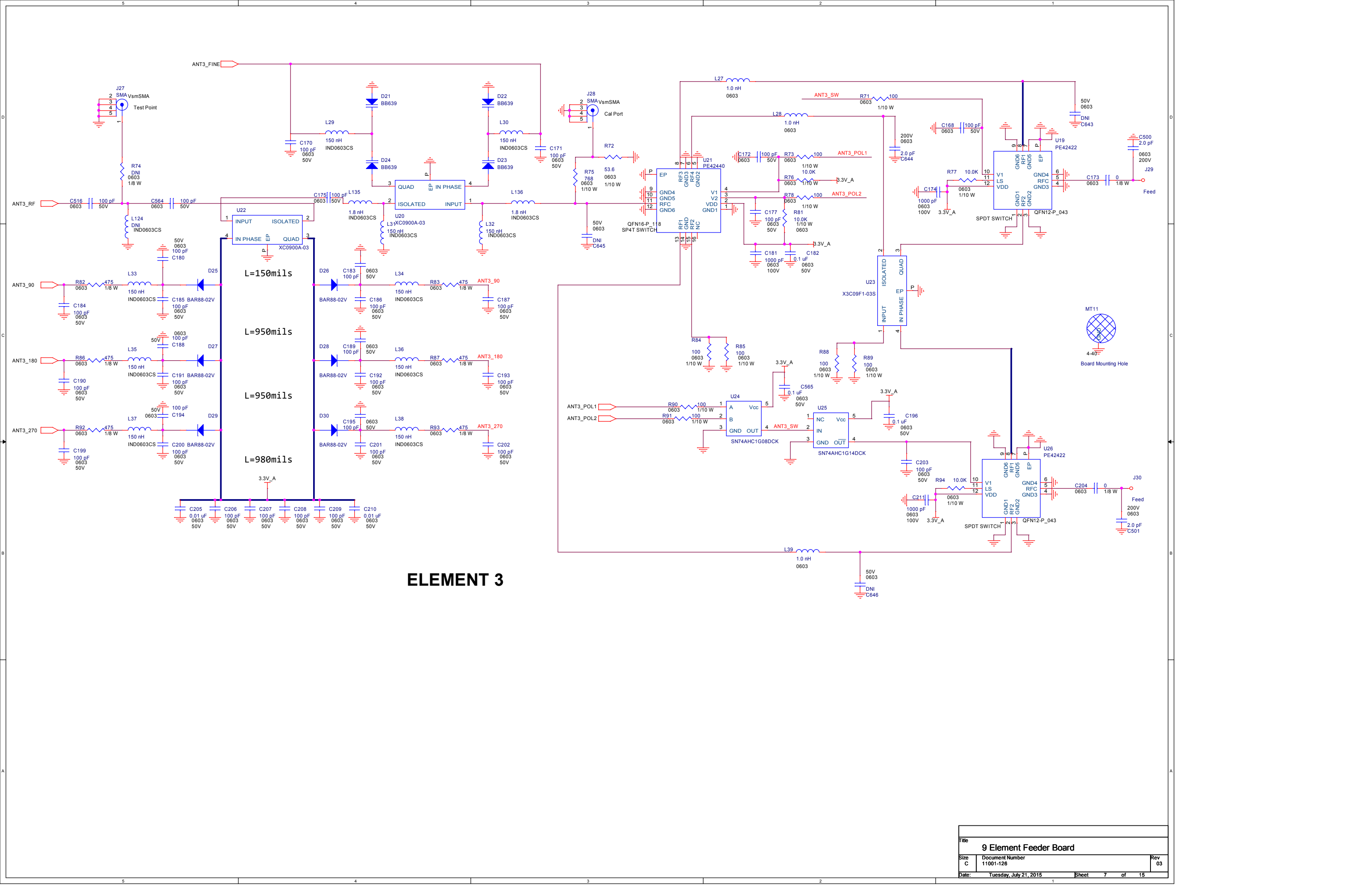
SW = AND Pol1- Pol2
SW_ = NAND Pol1- Pol2

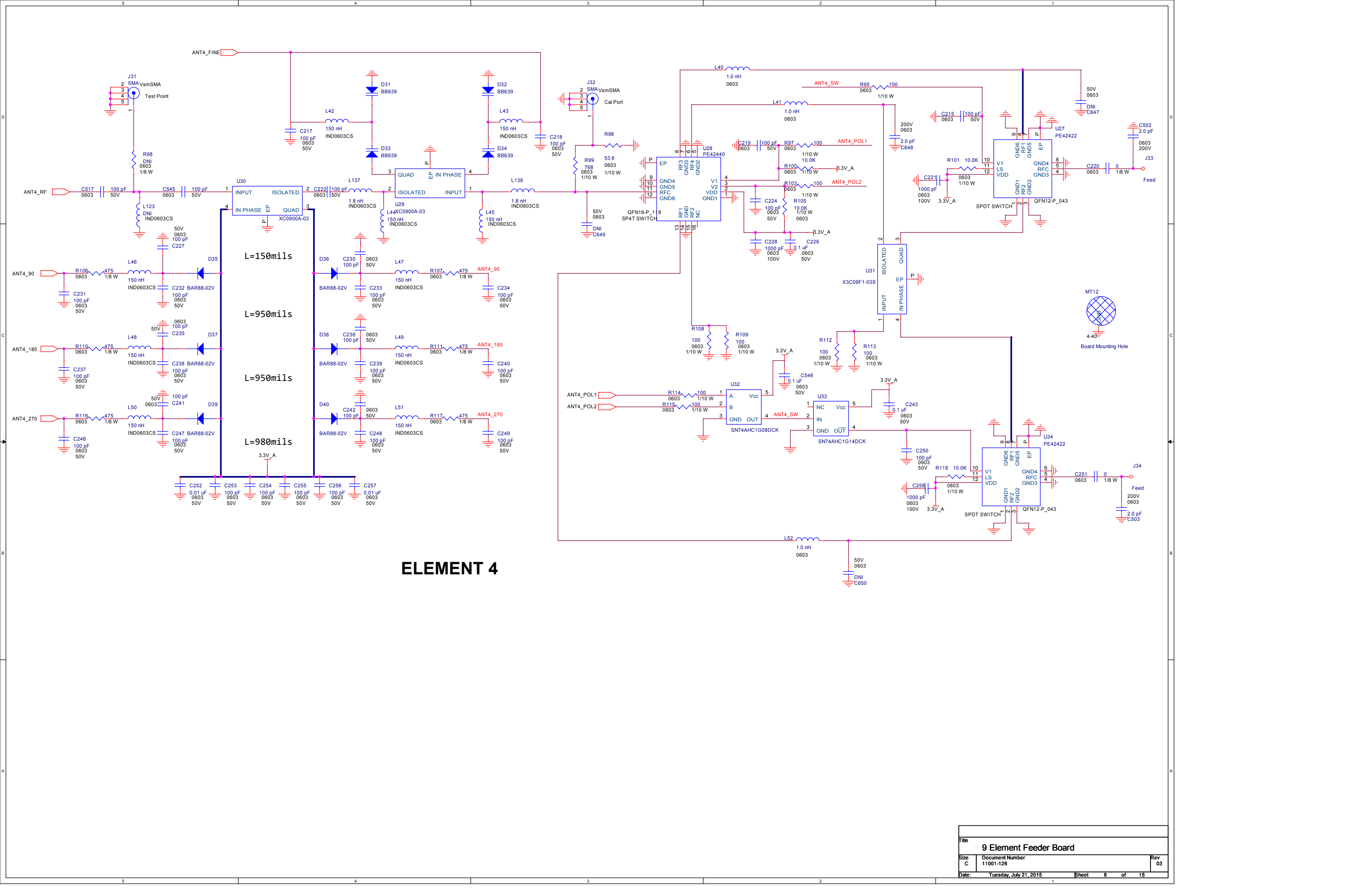
SPDT	LS=1
V1	RFC-RF#
0	RFC-RF1
1	RFC-RF2



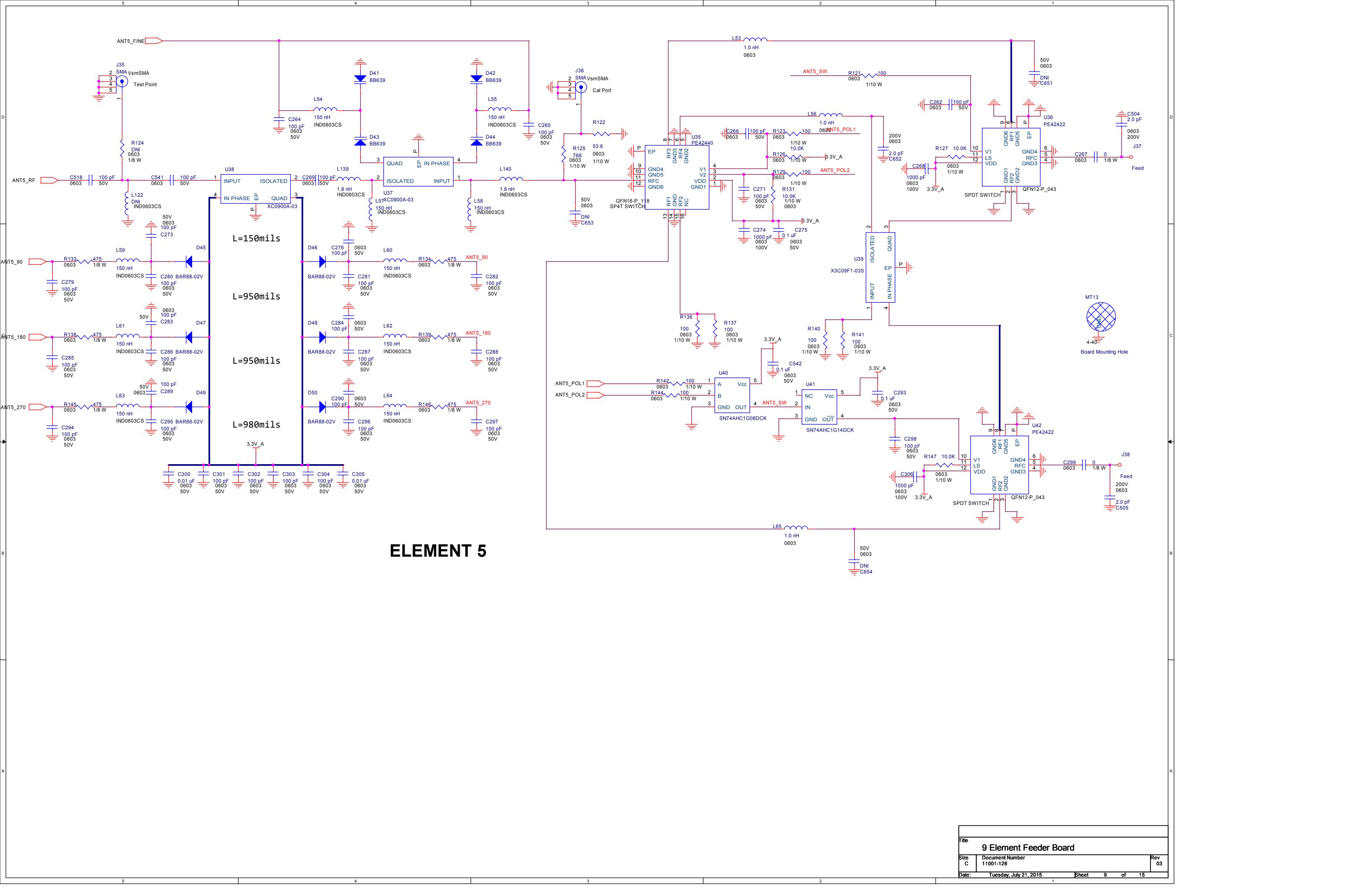
ELEMENT 2

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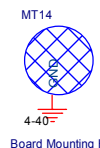


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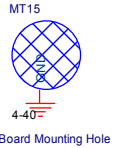


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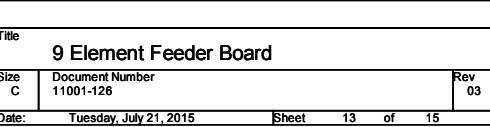
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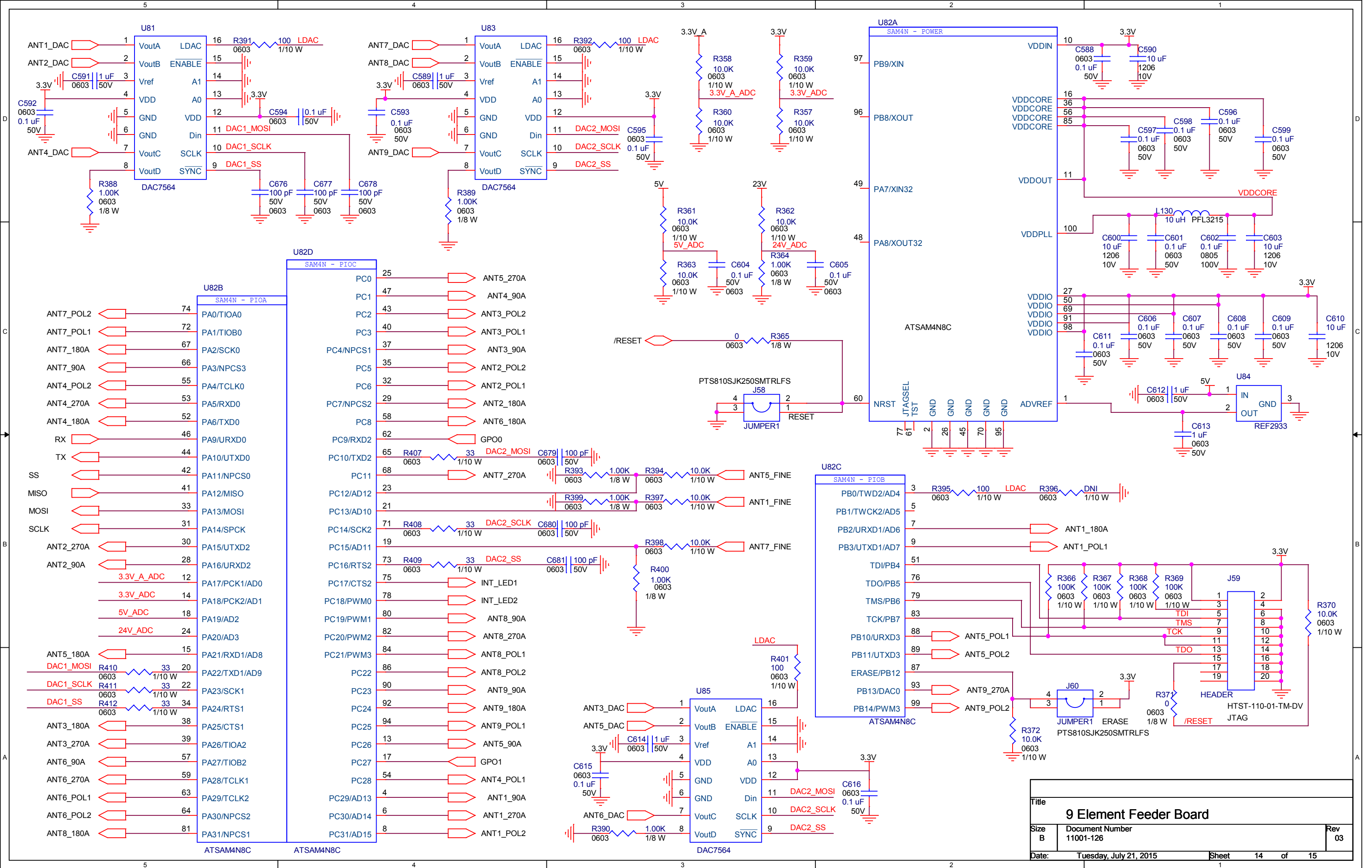


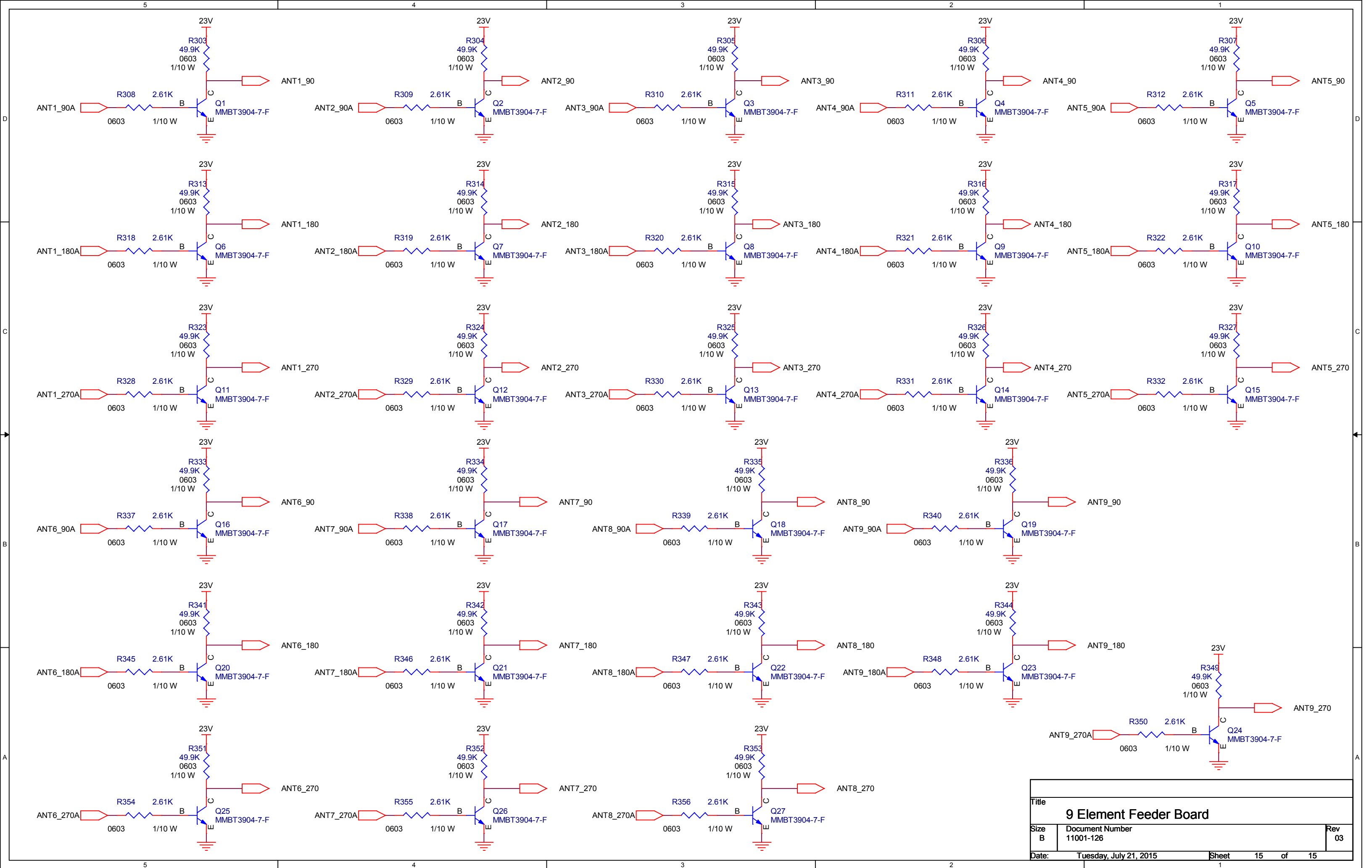
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