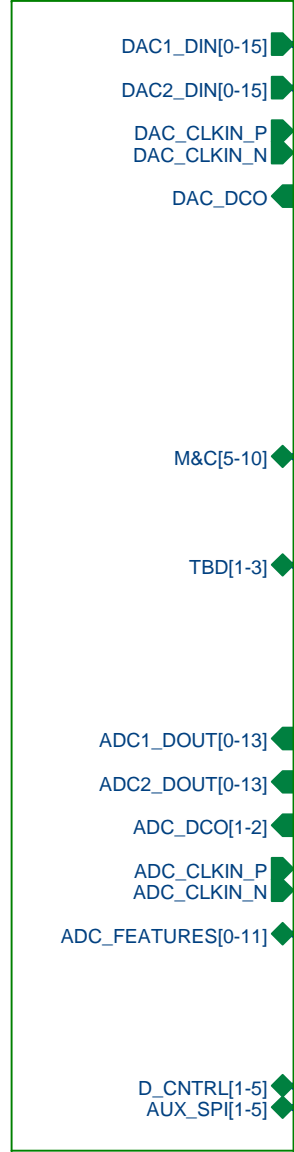
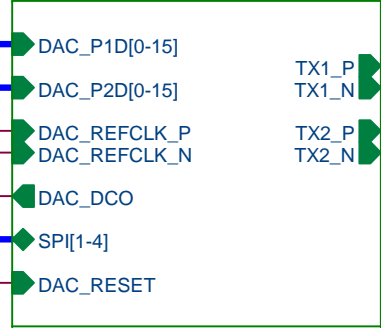


DIGITAL INTERFACE



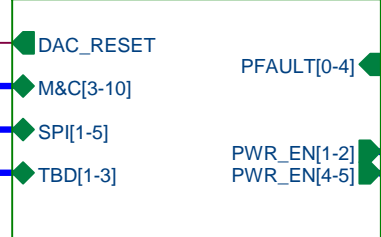
DIGITAL INTERFACE

DAC



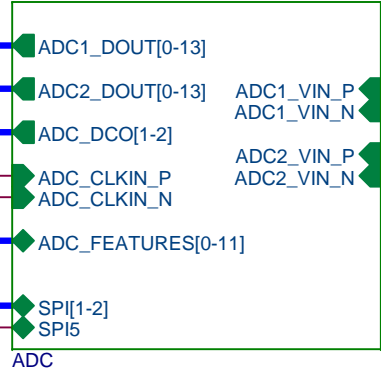
DAC

MICRO



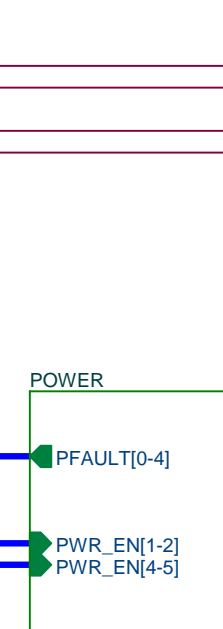
MICRO

ADC



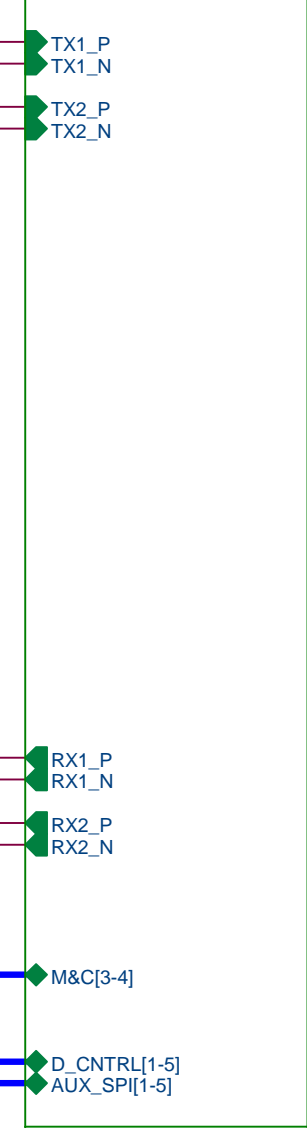
ADC

POWER



POWER

ANALOG INTERFACE



ANALOG INTERFACE

TABLE OF CONTENTS

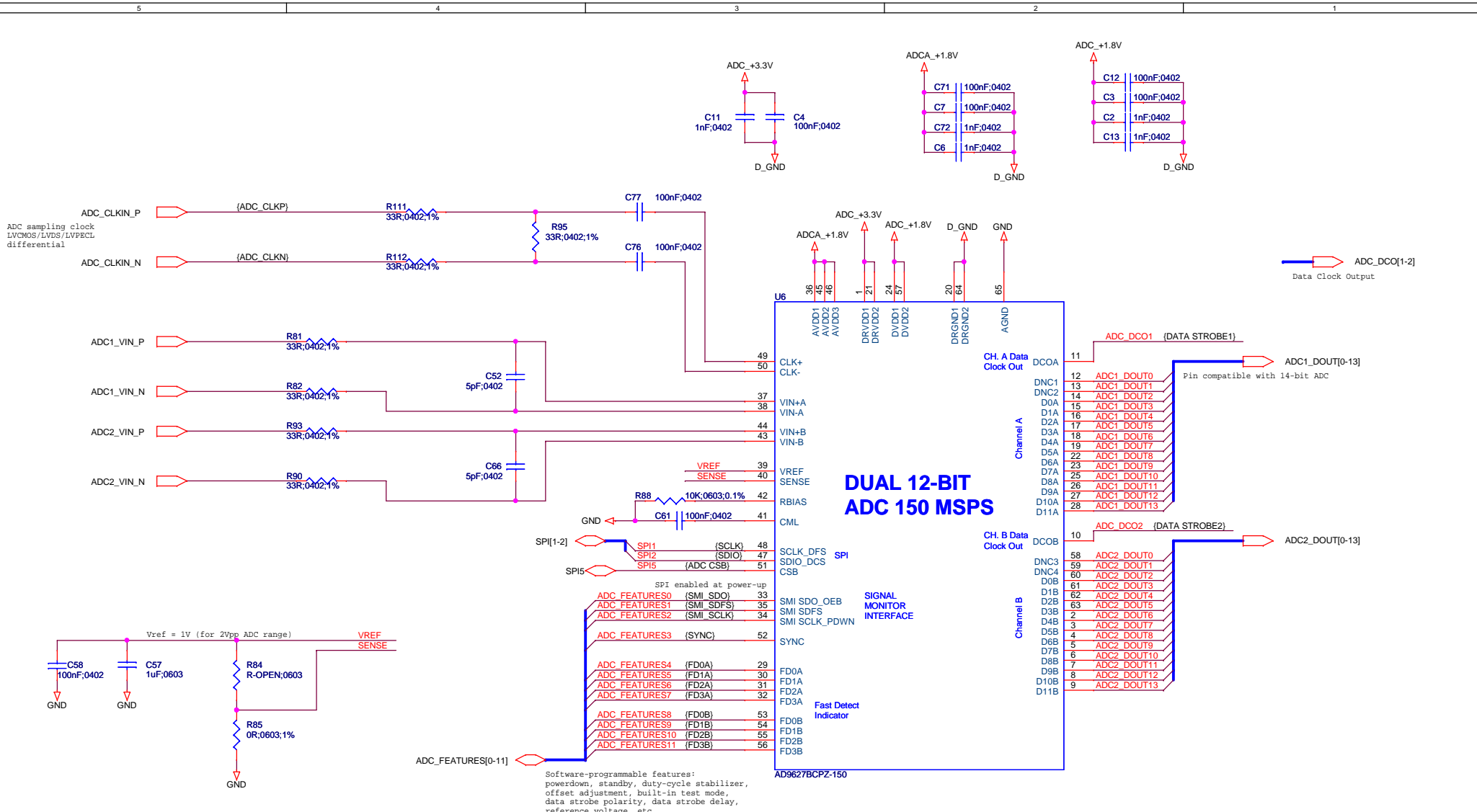
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|-----------------------|---|------------------------|---|
| MAIN..... | 1 | DIGITAL INTERFACE..... | 5 |
| ADC..... | 2 | MICRO..... | 6 |
| ANALOG INTERFACE..... | 3 | POWER..... | 7 |
| DAC..... | 4 | | |

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 USA

Title
COM-3504 / MAIN

| | | |
|-----------|----------------------------------|----------|
| Size A | Document Number Y10009 | Rev 2 |
|-----------|----------------------------------|----------|

Date: Monday, April 25, 2011 Sheet 1 of 7



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 JSA

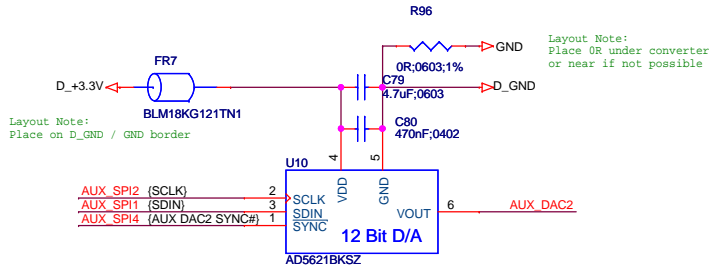
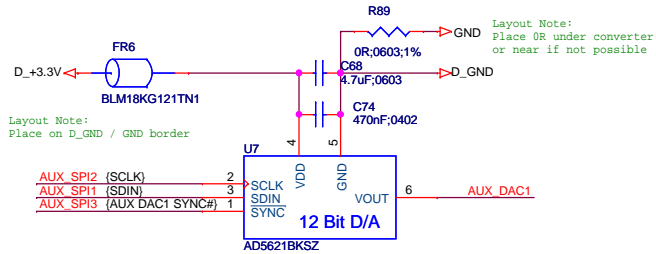
Title: **COM-3504 / ADC**

| | | |
|--------|-----------------|-------|
| Size B | Document Number | Rev 2 |
| | Y10009 | |

Date: Monday, April 25, 2011 Sheet 2 of 7

AUXILIARY DACS

Use for gain control etc

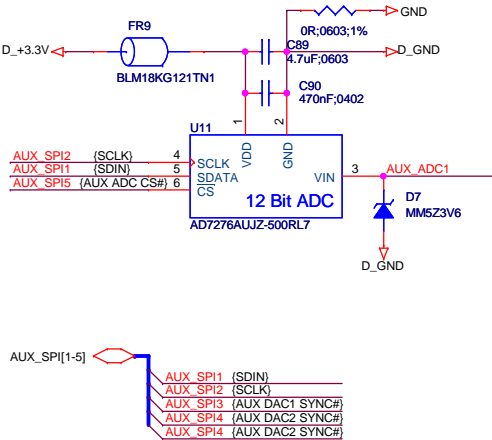


AUXILIARY ADC

Use for RF power measurement, etc.

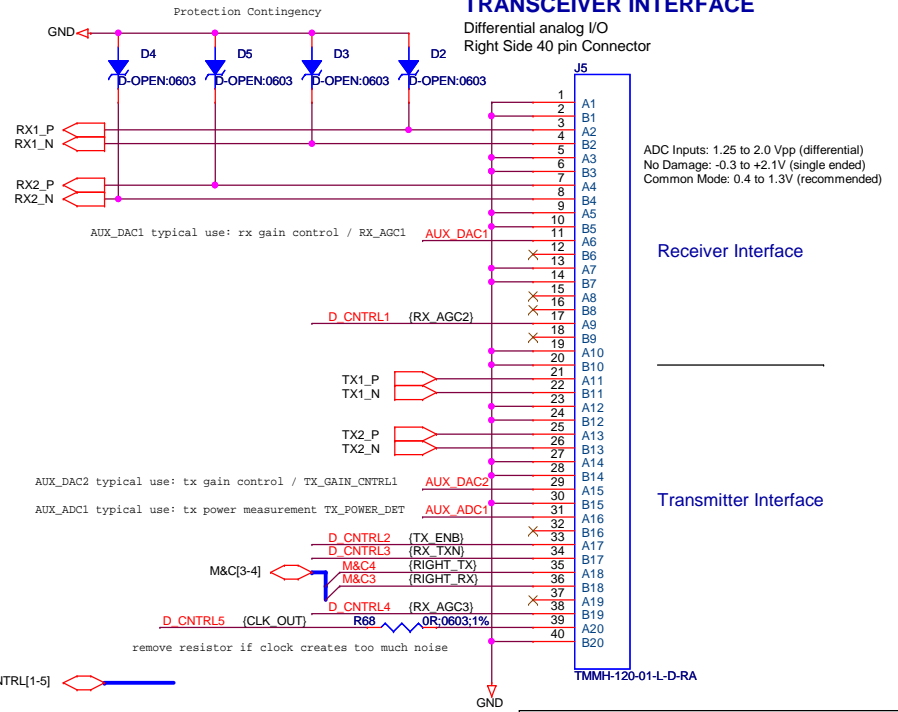
Layout Note: Place 0R under converter or near if not possible

Layout Note: Place on D_GND / GND border



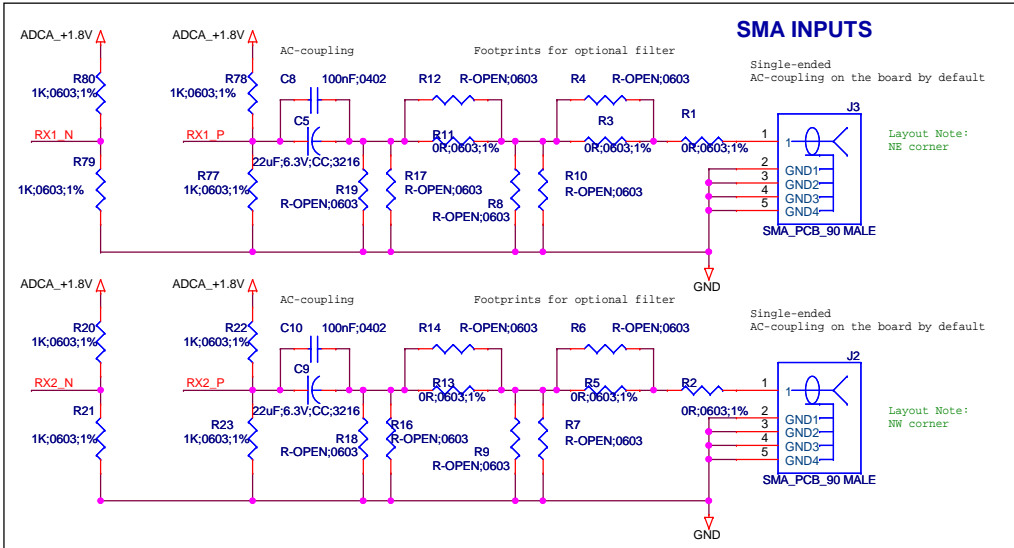
TRANSCEIVER INTERFACE

Differential analog I/O
Right Side 40 pin Connector



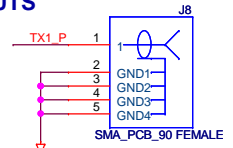
SMA INPUTS

Single-ended
AC-coupling on the board by default

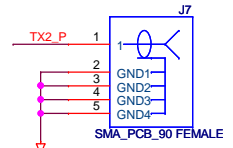


SMA OUTPUTS

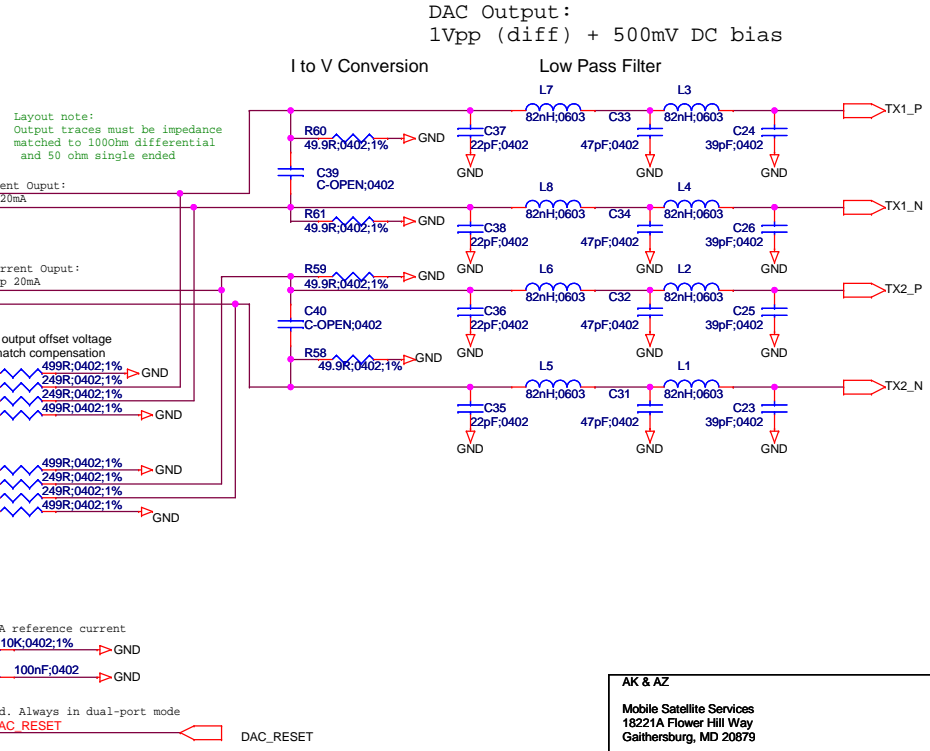
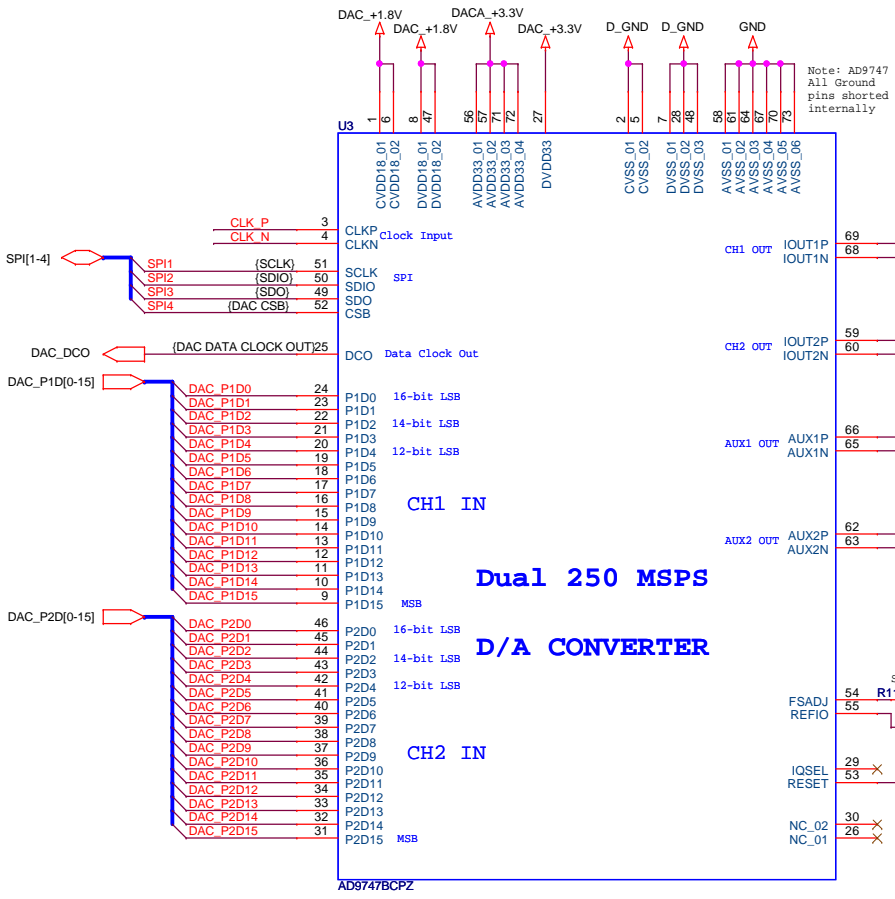
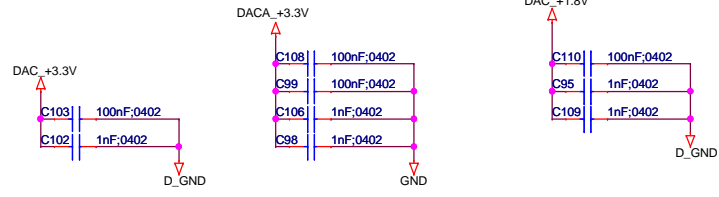
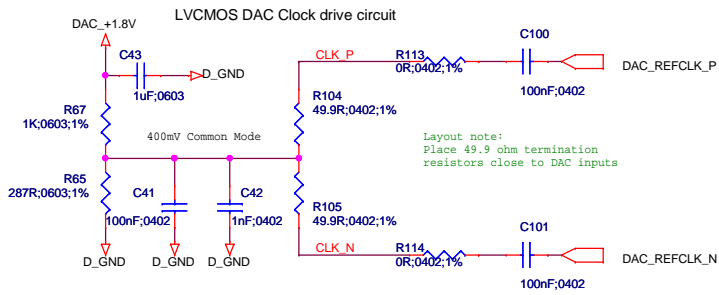
Layout Note: SE corner



Layout Note: SW corner



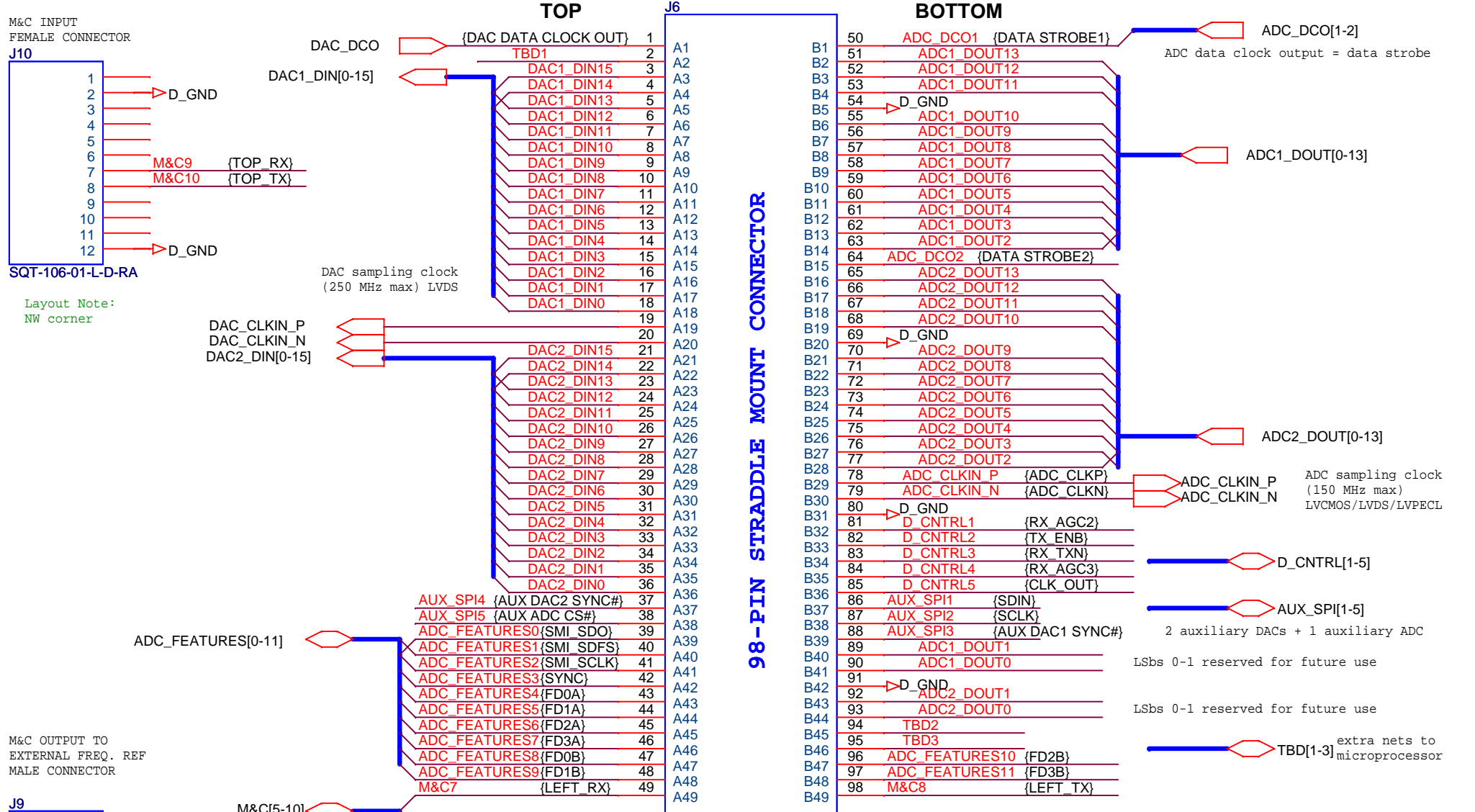
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|--------------------------------------------------------------------------------------------|----------------------------------|----------|
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| Title COM-3504 / ANALOG INTERFACE | | |
| Size B | Document Number Y10009 | Rev 2 |
| Date: Monday, April 25, 2011 | Sheet 3 | of 7 |



DAC Output:
1V_{pp} (diff) + 500mV DC bias

| | | |
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| Size B | Document Number Y10009 | Rev 2 |
| Date: Wednesday, August 28, 2013 | Sheet 4 | of 7 |

Digital I/Os - Left Side 98-Pin Connector



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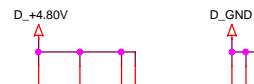
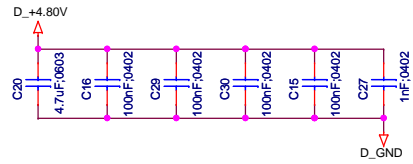
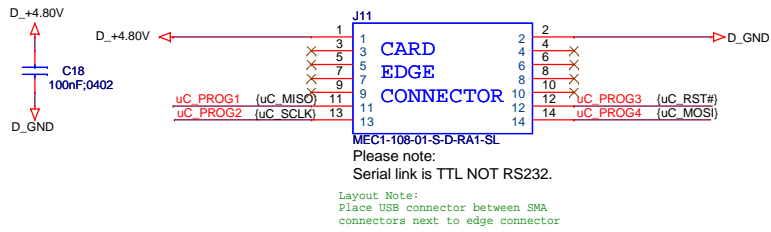
Title

COM-3504 / DIGITAL INTERFACE

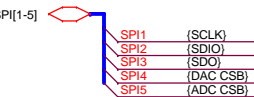
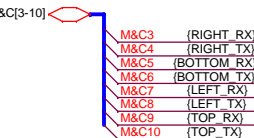
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|-----------|----------------------------------|----------|
| Size A | Document Number Y10009 | Rev 2 |
|-----------|----------------------------------|----------|

Date: Monday, April 25, 2011

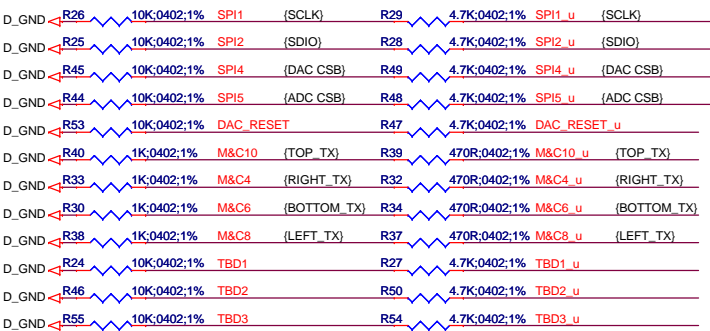
Sheet 5 of 7



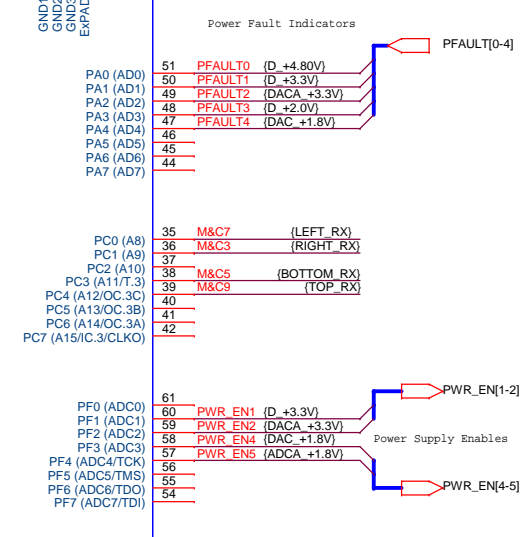
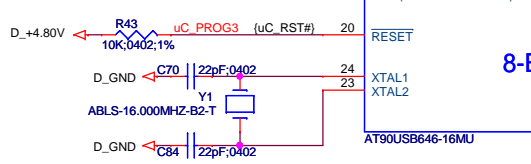
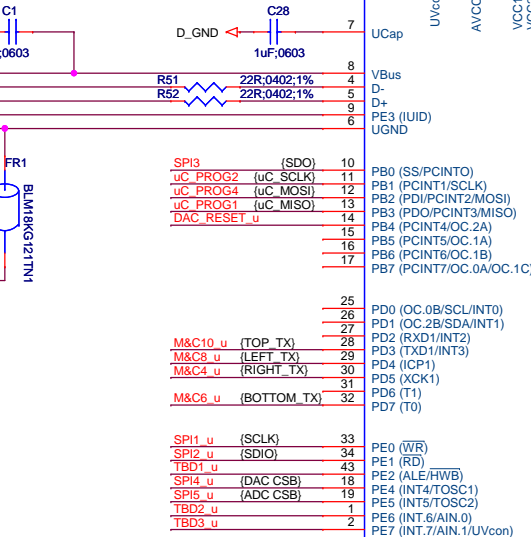
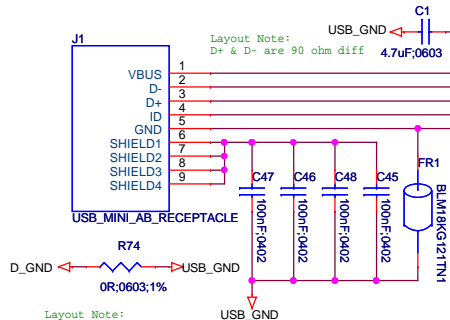
extra nets to J6, 98 pin digital connector



Microcontroller Output Voltage Translation (4.8V to 3.3V)



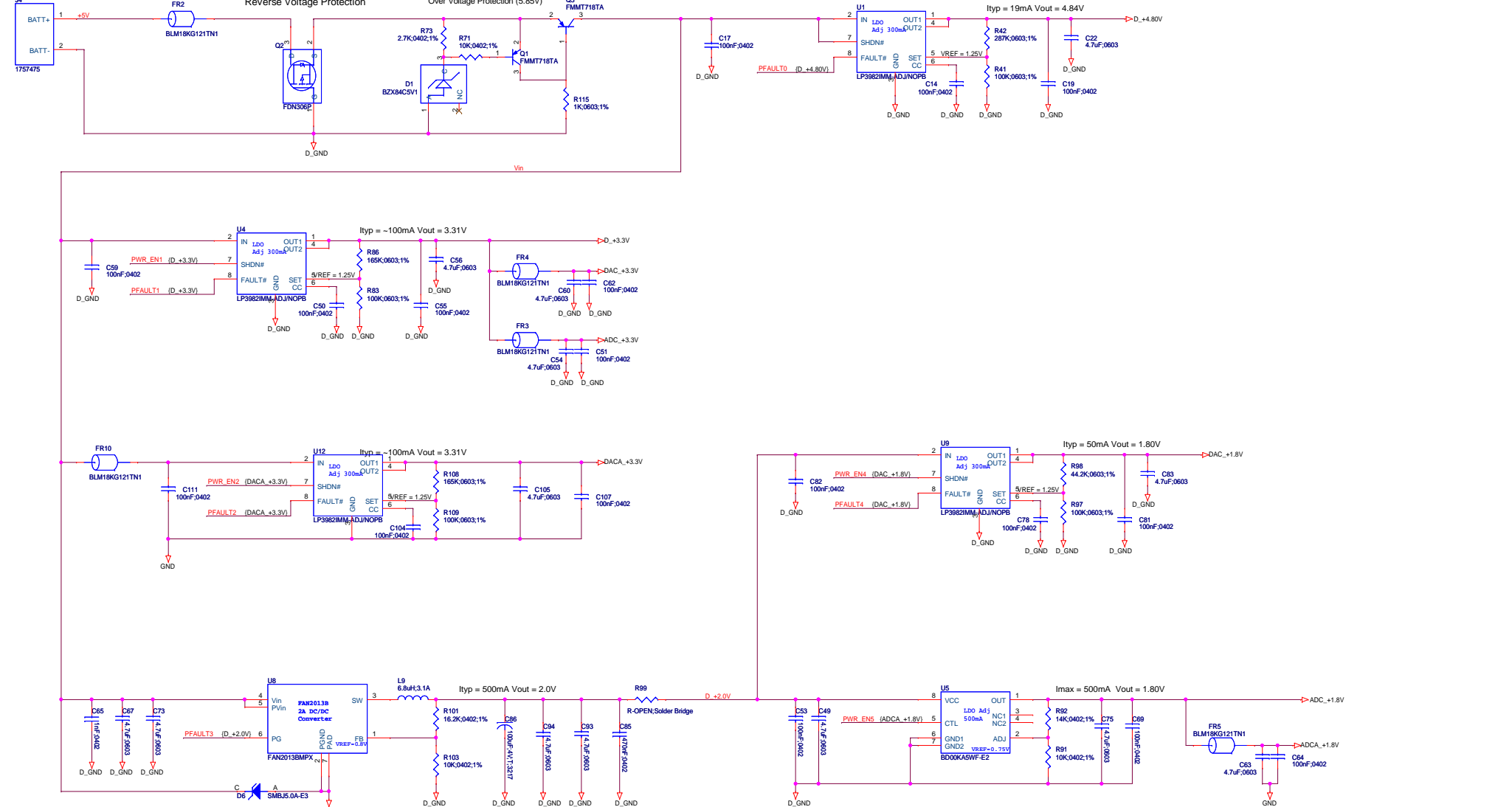
Layout Note:
 Voltage Translation resistors should be a low priority placement near the Atmel



| | | |
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| Title COM-3504 / MICRO | | |
| Size B | Document Number Y10009 | Rev 2 |
| Date: Monday, April 25, 2011 | Sheet 6 | of 7 |

+5V Supply

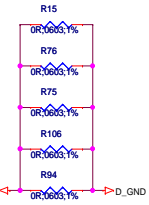
OPERATIONAL RANGE: 5.00 - 5.75V



Layout Note:
TVS component placed near DC/DC Converter
in ground return path to terminal block

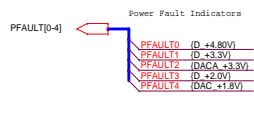
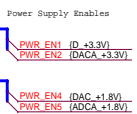
Layout Note:
Place OR between D_GND & GND caps to minimize
the length of the ground return path

Ground Bridge Resistors

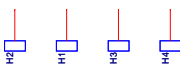


| Power Requirements | COMP | V | mA |
|--------------------|------|-----|----|
| MICRO | +3.3 | 90 | |
| DAC | +3.3 | 76 | |
| DAC | +1.8 | 60 | |
| ADC | +1.8 | 495 | |
| ADC | +3.3 | 100 | |

Layout Note:
0 Ohm Resistors placed
underneath these components
- MICRO



PCB Mounting Holes



| | |
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| Title COM-3504 / POWER | |
| Size C | Document Number Y10009 |
| Date Wednesday, August 28, 2013 | Sheet 7 of 7 |
| | Rev 2 |