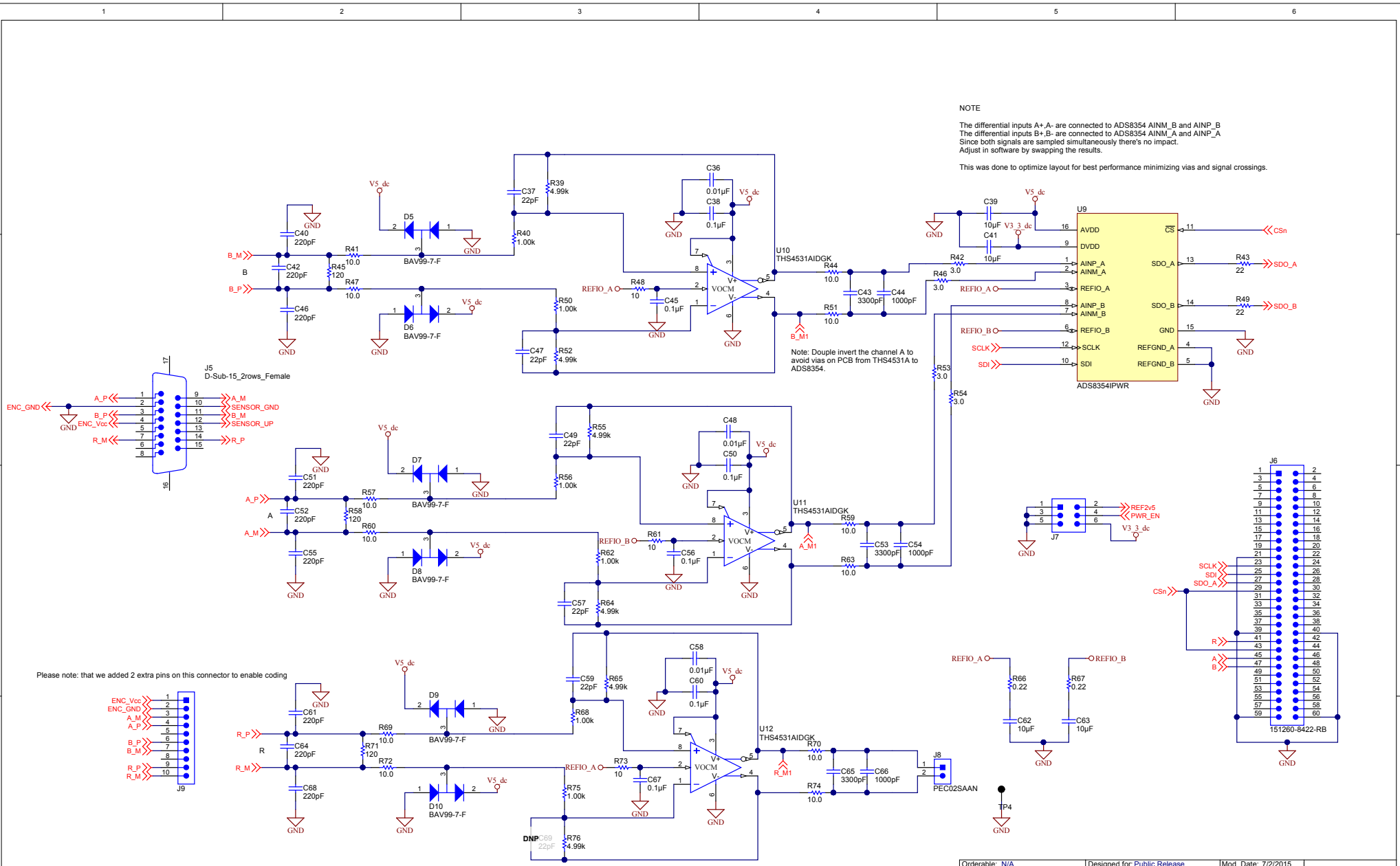
NOTE
The differential inputs A+,A- are connected to ADS8354 AINM_B and AINP_B
The differential inputs B+,B- are connected to ADS8354 AINM_A and AINP_A
Since both signals are sampled simultaneously there's no impact.
Adjust in software by swapping the results.
This was done to optimize layout for best performance minimizing vias and signal crossings.
Note: Douple invert the channel A to avoid vias on PCB from THS4531A to ADS8354.
Please note: that we added 2 extra pins on this connector to enable coding
J5
D-Sub-15_2rows_Female
ENC_GND
A_P
B_P
ENC_Vcc
R_M
A_M
SENSOR_GND
B_M
SENSOR_UP
R_P
U9
ADS8354IPWR
AVDD
DVDD
AINP_A
AINM_A
REFIO_A
AINP_B
AINM_B
REFIO_B
SCLK
SDI
GND
CS
SDO_A
SDO_B
REFGND_A
REFGND_B
CSn
U10
U11
U12
THS4531AIDGK
VOCM
V+
V-
B_M1
A_M1
R_M1
D5
D6
D7
D8
D9
D10
BAV99-7-F
V5_dc
V3_3_dc
J6
151260-8422-RB
J7
REF2v5
PWR_EN
J8
PEC02SAAN
J9
TP4
DNP
C69
22pF
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Orderable: N/A
TID #: 00178
Number: TIDA-00178
Rev: E1
SVN Rev: Version control disabled
Drawn By:
Engineer: Staebler/Mogensen
Designed for: Public Release
Mod. Date: 7/2/2015
Project Title: Interface to a SinCos Encoder
Sheet Title:
Assembly Variant: TIDA-00178_REVE1_production
Sheet: 2 of 3
File: TIDA-00178_SCLS.SchDoc
Size: B
Contact: http://www.ti.com/support
http://www.ti.com
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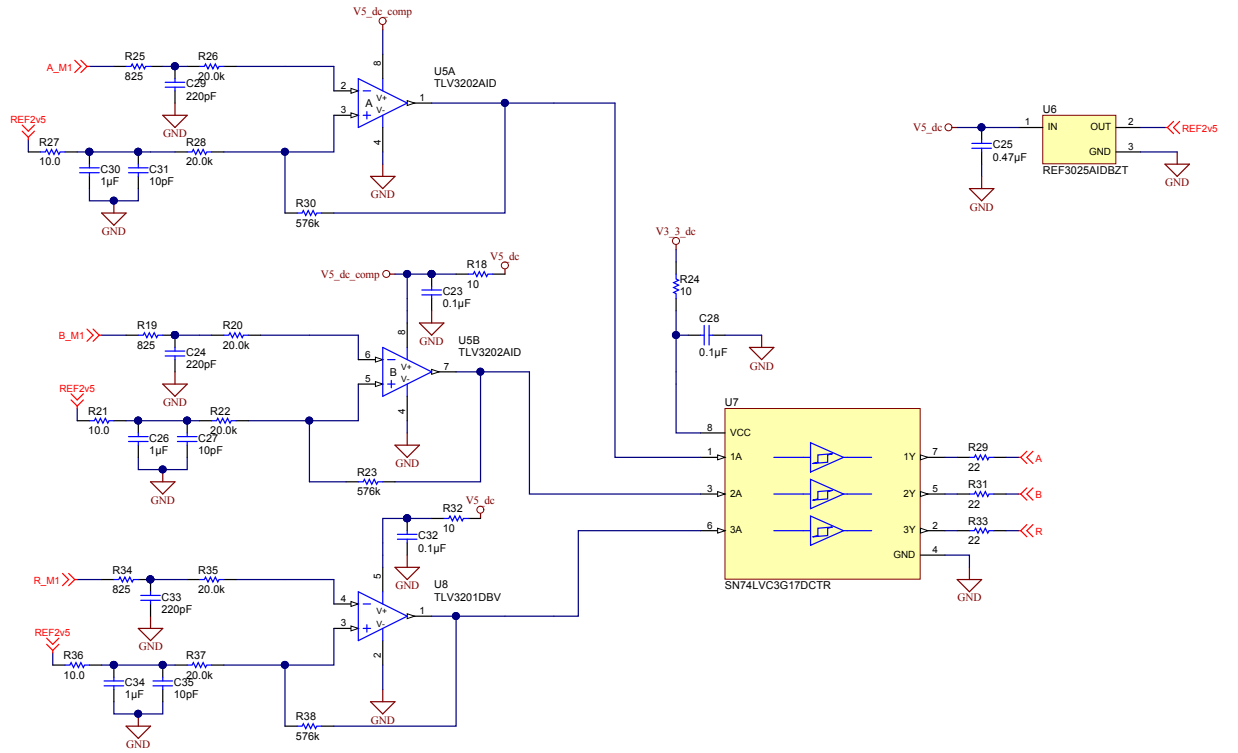
NOTE: Use negative differential signal to double invertet the signal at the comperator



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|---|---|---|
| Orderable: N/A | Designed for: Public Release | Mod. Date: 6/30/2015 |
| TID #: 00178 | Project Title: Interface to a SinCos Encoder | |
| Number: TIDA-00178 Rev: E1 | Sheet Title: | |
| SVN Rev: Version control disabled | Assembly Variant: TIDA-00178_REVE1_production | Sheet: 2 of 3 |
| Drawn By: | File: TIDA-00178_SCHS.SchDoc | Size: B |
| Engineer: Staebler/Mogensen | Contact: http://www.ti.com/support | |

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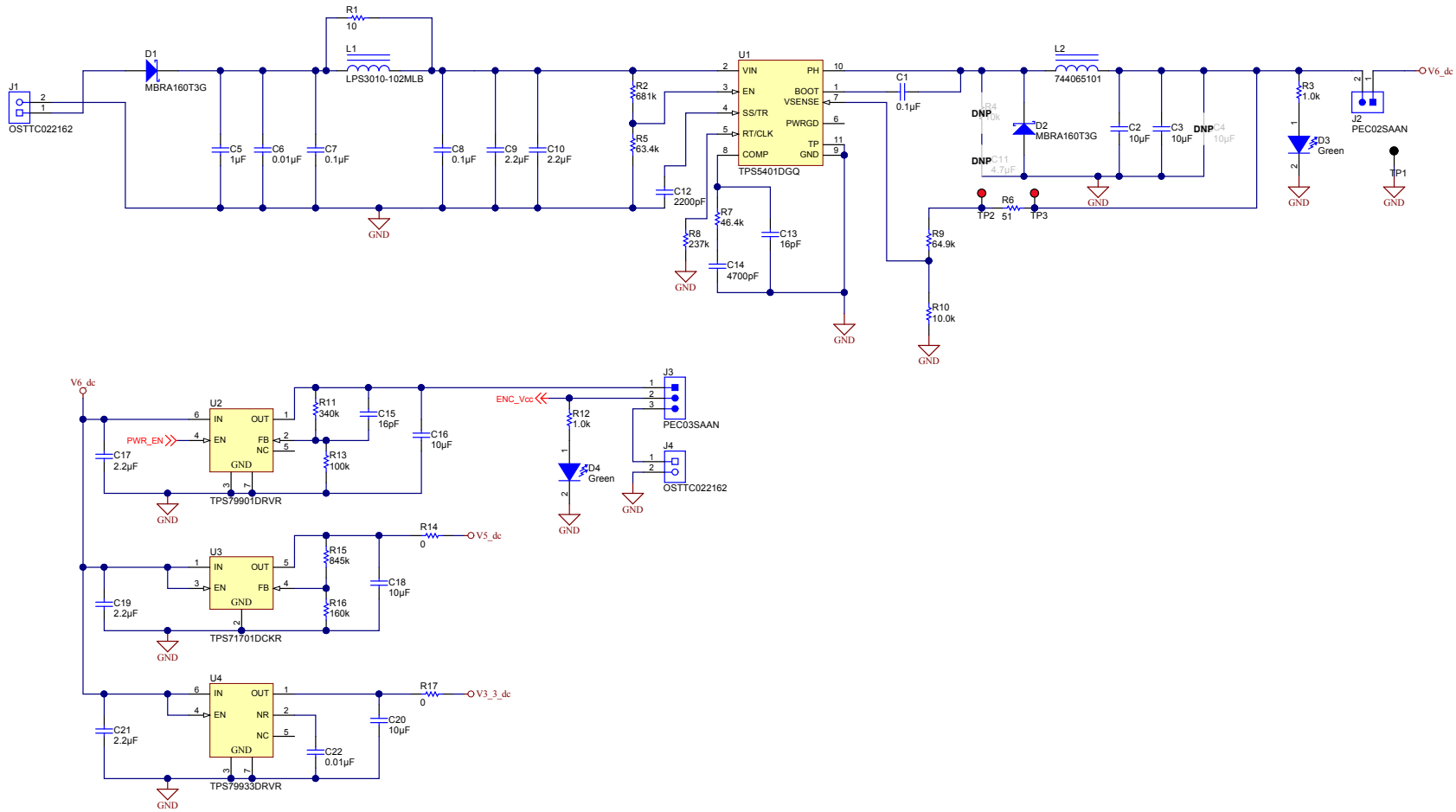


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|---|---|---|---|
| Orderable: N/A | | Designed for: Public Release | Mod. Date: 6/25/2015 |
| TID #: 00178 | | Project Title: Interface to a SinCos Encoder | |
| Number: TIDA-00178 | Rev: E1 | Sheet Title: | |
| SVN Rev: Version control disabled | | Assembly Variant: TIDA-00178_REVE1_production | Sheet: 2 of 3 |
| Drawn By: | | File: TIDA-00178_PS.SchDoc | Size: B |
| Engineer: Staebler/Mogensen | | Contact: http://www.ti.com/support | |

H1
NY PMS 440 0025 PH

H2
NY PMS 440 0025 PH

H3
1902C

H4
1902C

DNP FID1 DNP FID2 DNP FID3 FID4 FID5 FID6

PCB Number: TIDA-00178
PCB Rev: Rev E1

PCB
LOGO
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| | | | |
|---|---|---|---|
| Orderable: N/A | | Designed for: Public Release | Mod. Date: 6/25/2015 |
| TID #: 00178 | | Project Title: Interface to a SinCos Encoder | |
| Number: TIDA-00178 | Rev: E1 | Sheet Title: | |
| SVN Rev: Version control disabled | | Assembly Variant: TIDA-00178_REVE1_production | Sheet: 3 of 3 |
| Drawn By: | | File: TIDA-00178_BD.SchDoc | Size: B |
| Engineer: Staebler/Mogensen | | Contact: http://www.ti.com/support | |

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