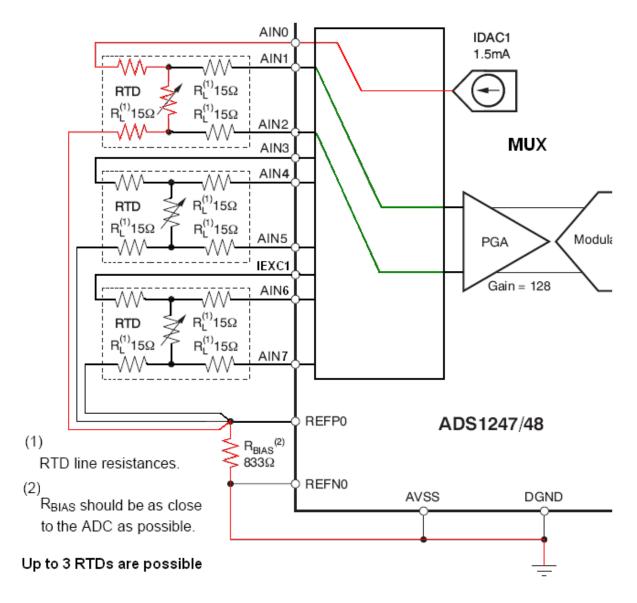
4-Wire RTD



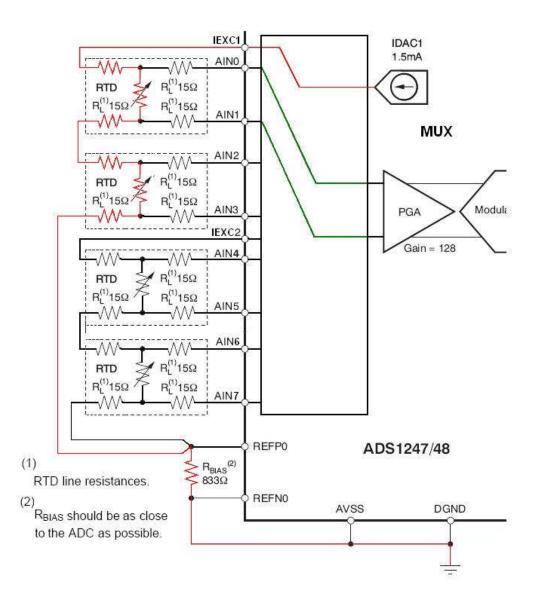
Advantage:

- IDAC generates the sensor excitation and the reference voltage.
- Noise and drift of the Ref voltage are correlated and therefore canceled.
- Voltage drop across the line resistance are compensated.
- No IDAC current mismatch because only one current path is needed.

Disadvantage:

- Four connections are used for every sensor.
- Up to 3 RTDs are possible

4-Wire RTD - Alternate



This might work to get four 4-wire measurements

Considerations:

- This also has the advantage of 4 wire measurement, but common-mode inputs are different
- This should work as long as there are no common mode issues with the input. i.e. The stack of RTDs and reference do not overrange the input

Advantage:

- IDAC generates the sensor excitation and the reference voltage.
- Noise and drift of the Ref voltage are correlated and therefore canceled.
- Voltage drop across the line resistance are compensated.
- No IDAC current mismatch because only one current path is needed.