Options for LTZ-High Stability Resistor:

120R: Footprint 3.81/5.08mm for S102K/J or VHP202

2x70k: Footprint 3.81/5.08/10.16mm S102 or PTF56

12K/1K: Populate either both resistors or the divider

Footprint 12k/1k: 3.81/5.08mm for S102 or VHP202
Footprint divider: 2.54mm for VSR144 or VHD200

Usable references:

LTZ1000 6.9...7.2V
6.9V / 1333R * 1000R = 5.17V -> +-10.34Vinmax
7.2V / 1333R * 1000R = 5.40V -> +-10.80Vinmax
Dont populate jumpers JP1/2!
Noise:
1.2µVpp 0.1-10Hz
Quad-LTZ: LTZ / sqrt(4) = 0.6µVpp 0.1-10Hz

ADR1000 6.62V +-50mV
6.62V / 1250R * 1000R = 5.29V -> +-10.58Vinmax
Populate jumpers JP1/2!
Noise:
0.6µVpp 0.1-10Hz
Quad-LTZ: LTZ / sqrt(4) = 0.3µVpp 0.1-10Hz
Achieving 0.3µVpp would necessitate a
lower noise OP/resistor-frontend though

7V/1250R=
5.8mA

333R or 250R
depending on
jumpersetting

42mW

1k

12.5mW

12.5mW

25mW

10.8V/2000R=
5.4mA

11.2mA

Thermal noise:
40°C BW=10Hz
100R -> 4.1nVrms/27nVpp
1k -> 13.1nVrms/90nVpp
10k -> 41.5nVrms/280nVpp

OPA388 -> 140nVpp
ADA4522 -> 117nVpp
OPA189 -> 100nVpp

Common-mode bias: 10Vref/4

Gnd-Sense variants

ca 5mA * 0.1R = 500µV
11.2mA/4 * 0.1R = 280µV
= 780µV
Assuming populated quad array and
directly connected Gnd-sense-pins

Sheet: /Voltage Reference/		
File: Voltage Reference.sch		
Title:		
Size: A2	Date:	**Rev:**
KiCad E.D.A. kicad (5.1.6)-1		Id: 3/5