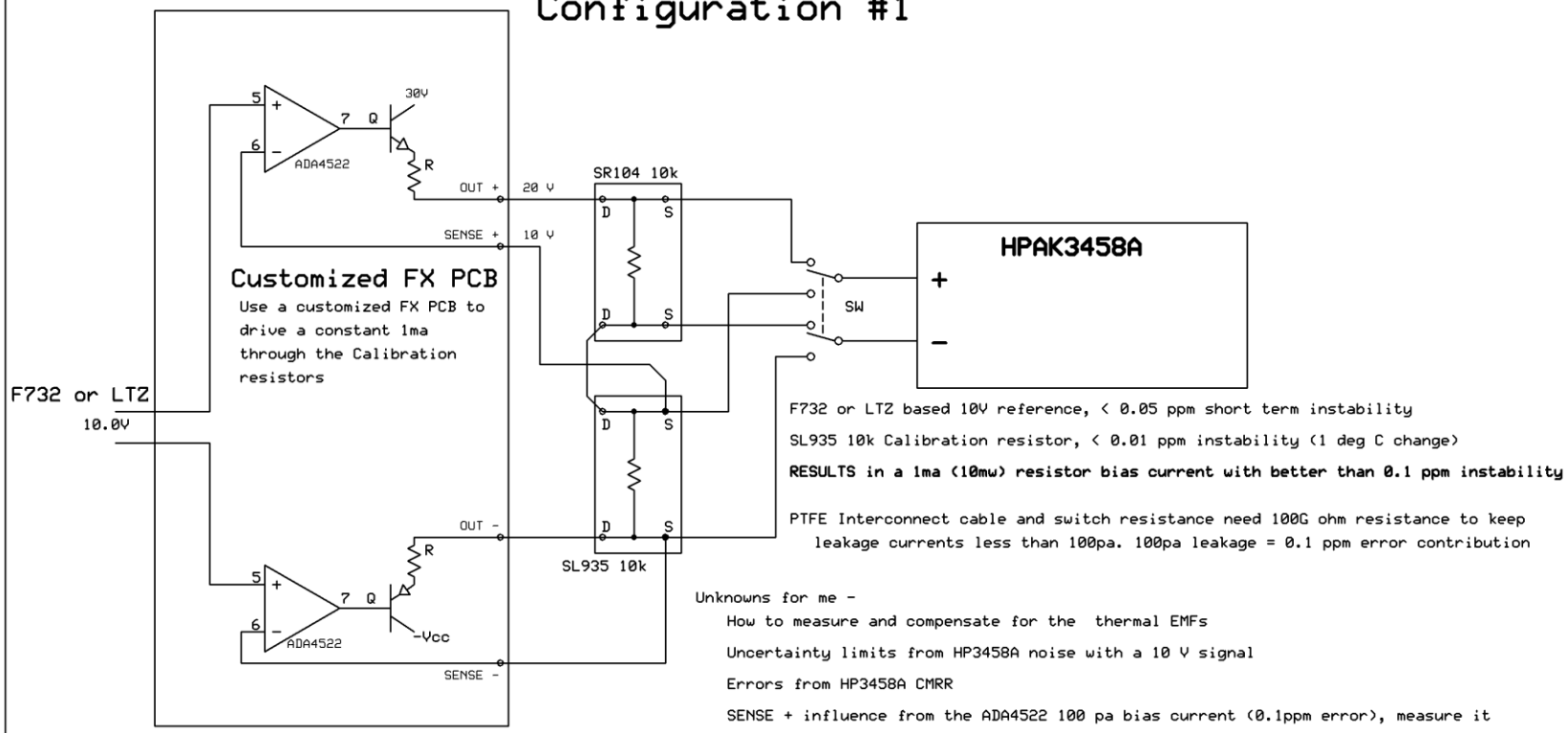
Configuration #1



F732 or LTZ based 10V reference, < 0.05 ppm short term instability

SL935 10k Calibration resistor, < 0.01 ppm instability (1 deg C change)

RESULTS in a 1ma (10mw) resistor bias current with better than 0.1 ppm instability

PTFE Interconnect cable and switch resistance need 100G ohm resistance to keep leakage currents less than 100pa. 100pa leakage = 0.1 ppm error contribution

Unknowns for me -

- How to measure and compensate for the thermal EMFs
- Uncertainty limits from HP3458A noise with a 10 V signal
- Errors from HP3458A CMRR
- SENSE + influence from the ADA4522 100 pa bias current (0.1ppm error), measure it

Company Name		
Schematic Name		
Designer's name	Rev 1.0 4/6/2018	Page # or name