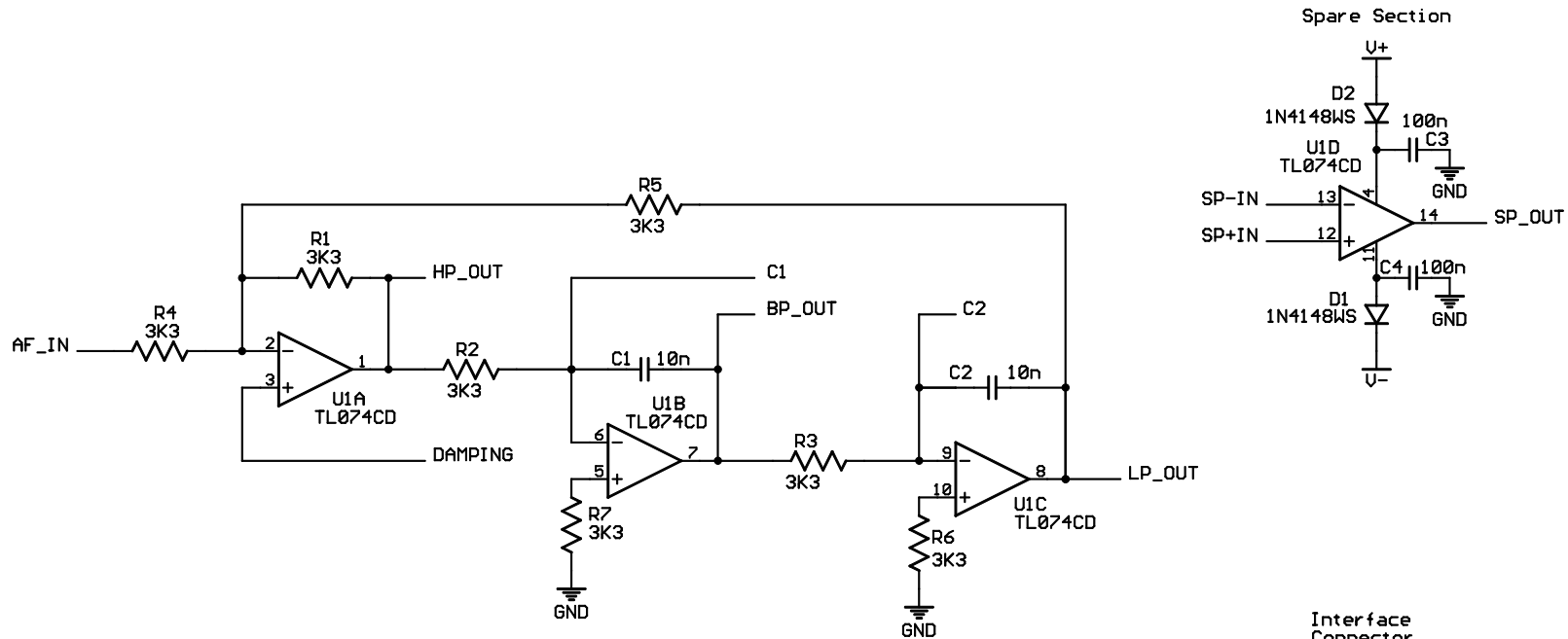


ENSC 320/380 State Variable Active Filter Lab Experiment

2004 January

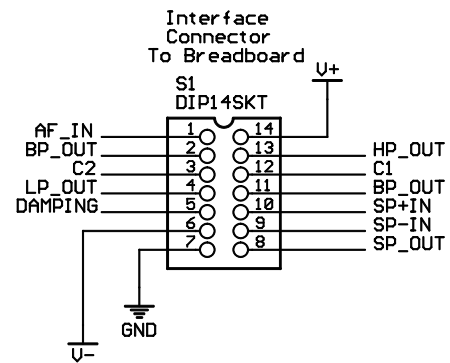
Fred Heep, Lab Technologist



Notes:

- 1) All resistors SMD0805 1% metal film.
- 2) All capacitors SMD0805 ceramic, 10% or better.
- 3) Alter frequency (add capacitors in parallel with C1 & C2)
- 4) Change passband by altering damping R's between
 - a) U1A+IN & Gnd (~3K3), b) U1A+IN & U1B-Out (~5K6)
- 5) $F_c = 1 / (2 * \pi * R1 * C1) = 1 / (2 * \pi * R2 * C2)$
- 6) $R3 = R4 = R5$
- 7) $R8 = [(3-d)/d] * R9$; d = damping ratio

For use with the RF spectrum analyzers, components supplied are 560pFx1, 4K7x1, 270Rx2



TITLE: State Variable Active Filter			
FOR: ENSC 320 - Lab Experiment	DATE/TIME: 10/01/2002 11:16:12	SHEET: 1/1	REV: 1B
FILE: Act_Filt-R1B	DOCUMENT: FLH 04-1001R1B - Designed by G.M. Austin		