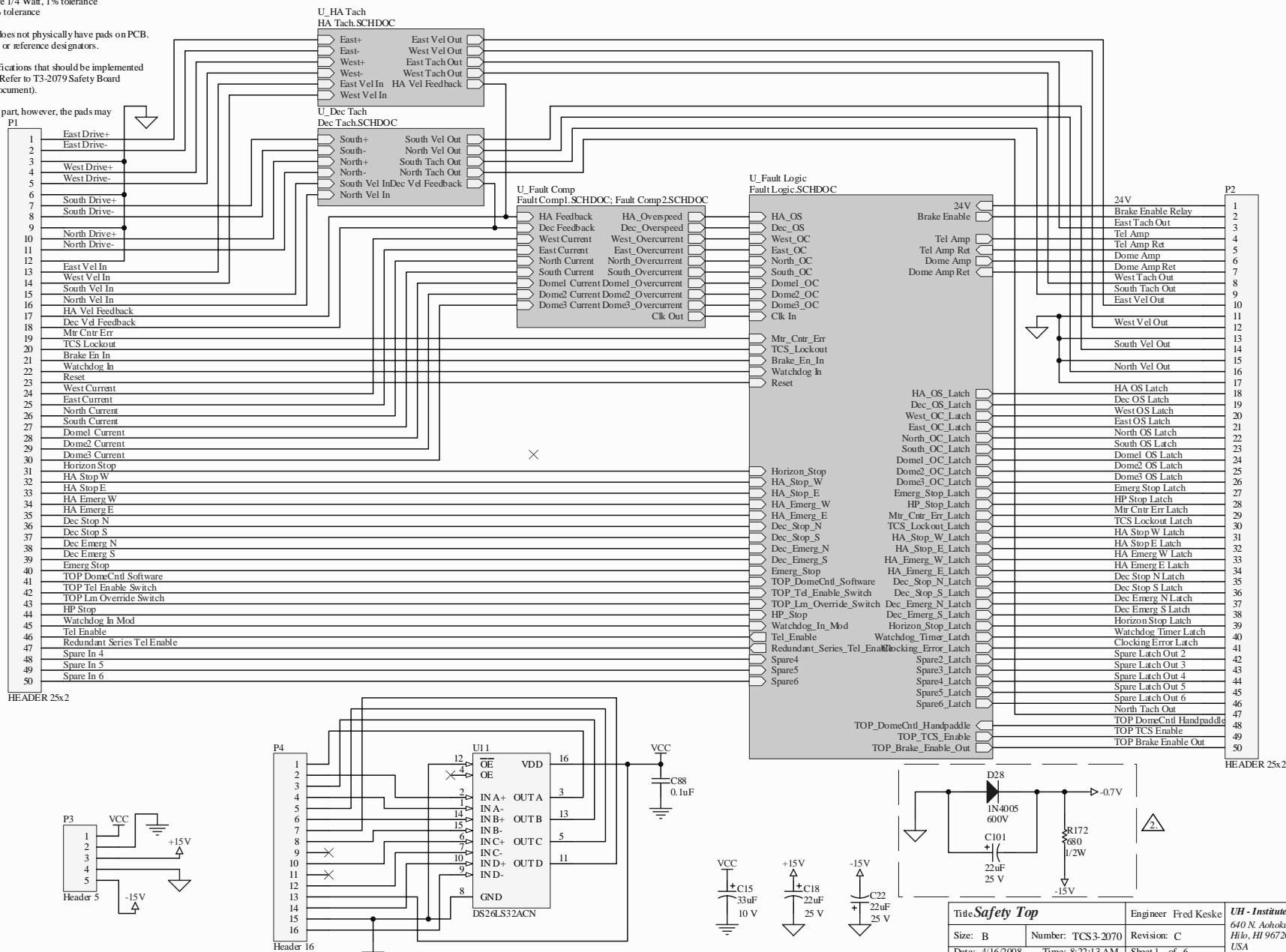



NOTES:

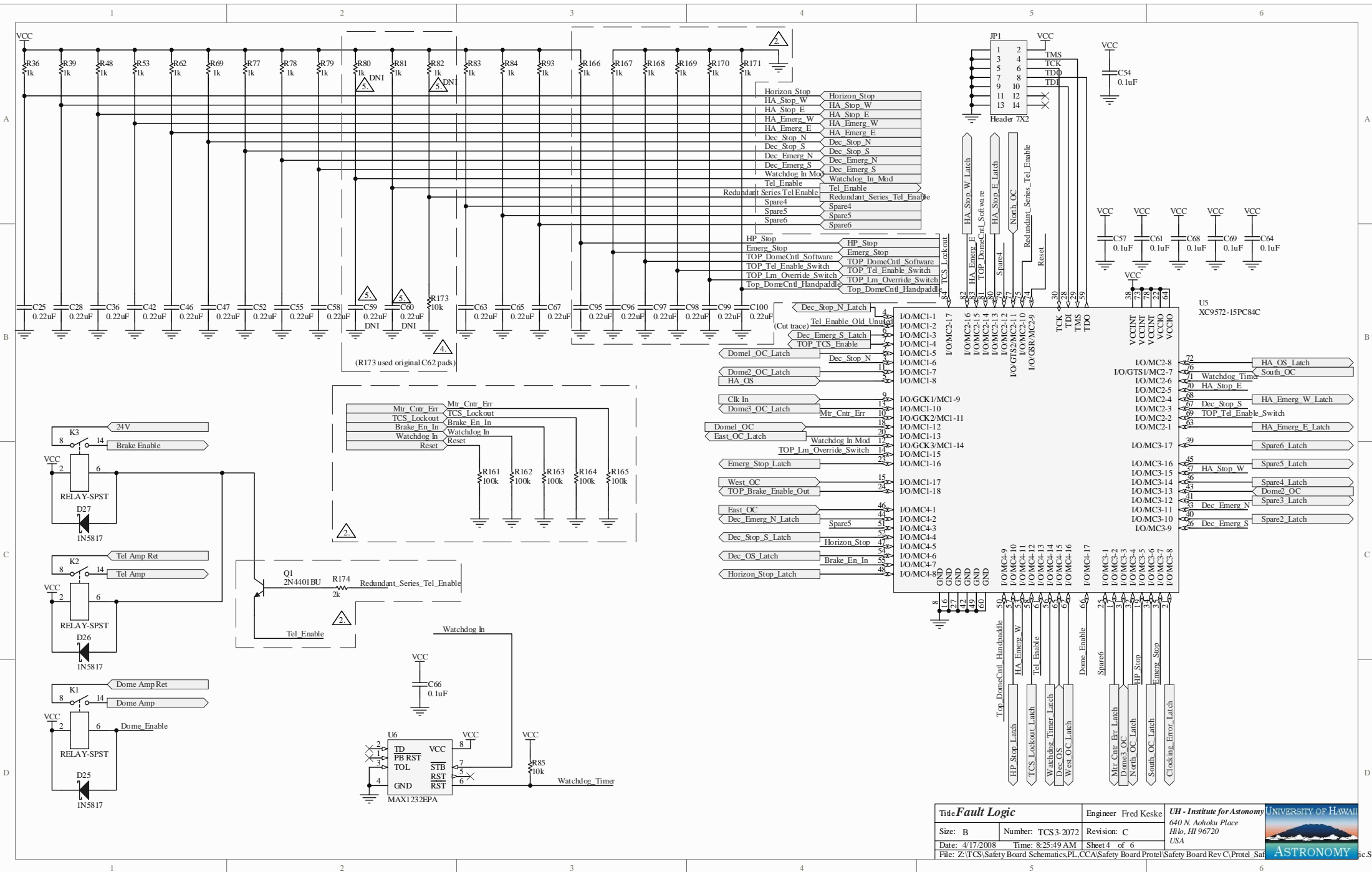
- Unless otherwise stated:
Resistors have units of ohms, are 1/4 Watt, 1% tolerance
Capacitors are 50V, 5 % or 10% tolerance
- Green wire modification. Part does not physically have pads on PCB.
Artwork does not contain traces or reference designators.
- There are multiple design modifications that should be implemented if a new layout is ever created. Refer to T3-2079 Safety Board HDD (Hardware Description Document).
- Modification. Pads on PCB part, however, the pads may may have been for a different component /designator.
- Do not install (DNI).

REV	DESCRIPTION	DATE	BY
- to B	Released board for manufacturing.	2006	F. KESKE
C	Modified board for use in TCS3.	4-02-08	EAW



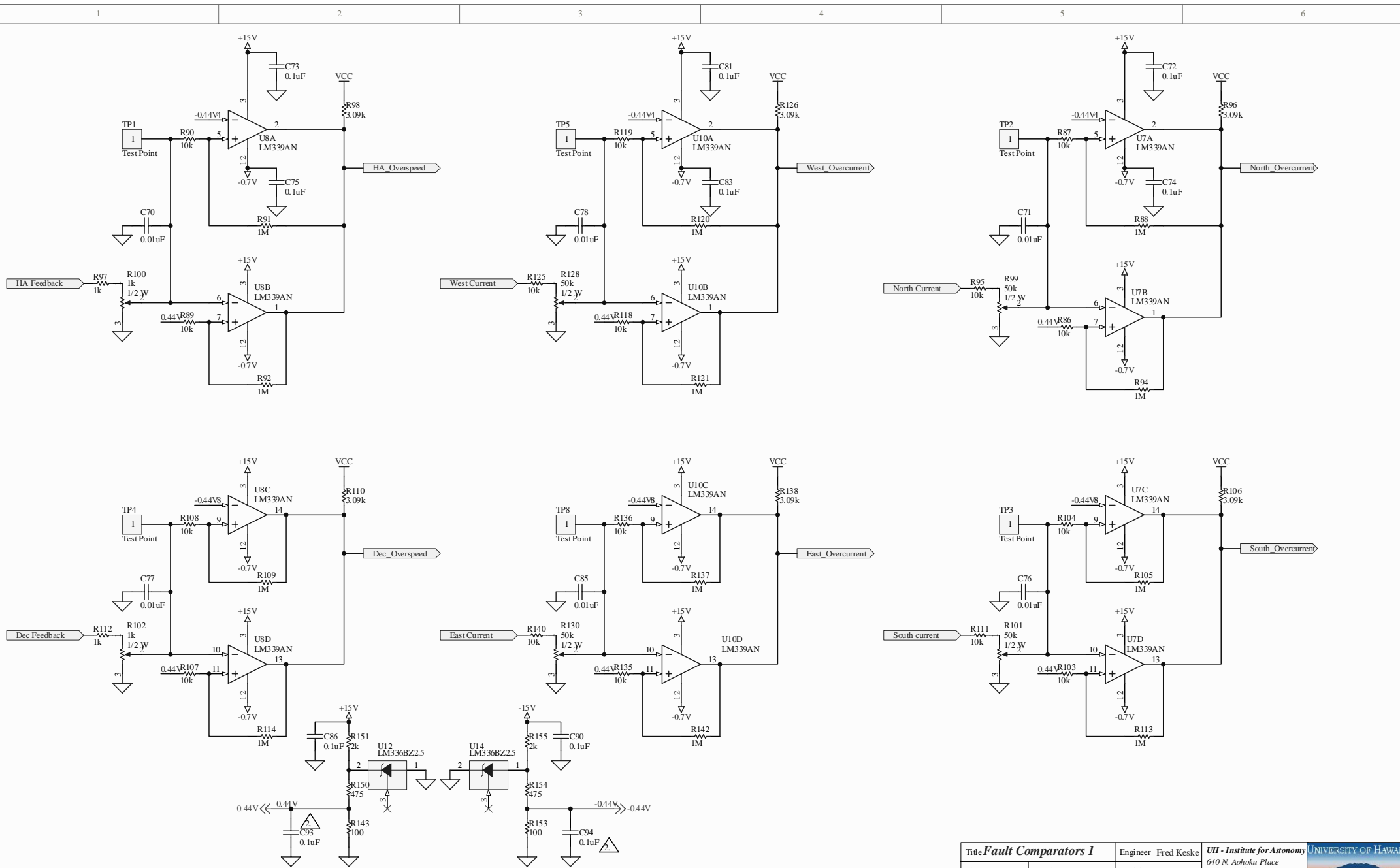
P1-45,46,47 should not be connected to anything externally. These pins connect to traces that were used for modifications on the Safety Board.

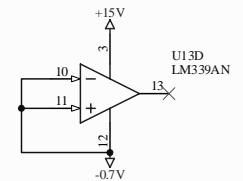
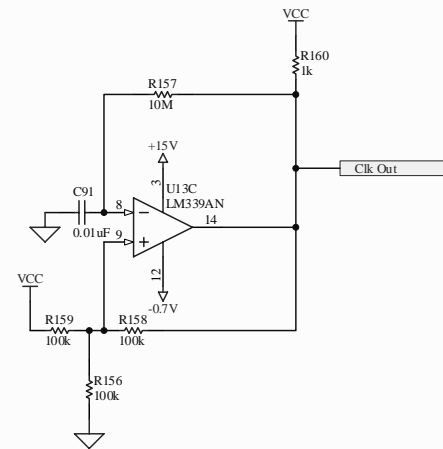
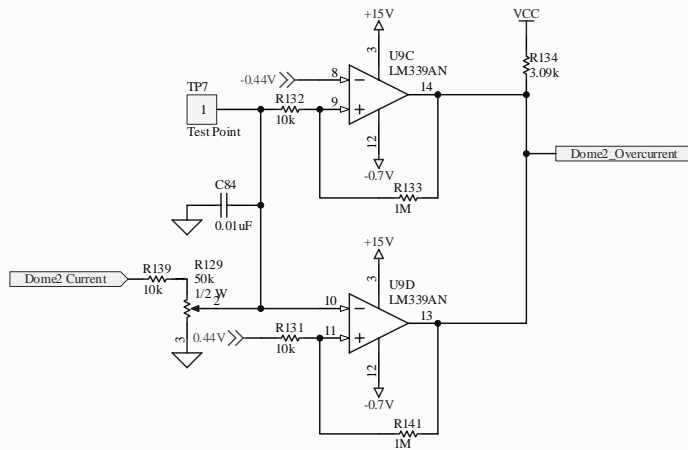
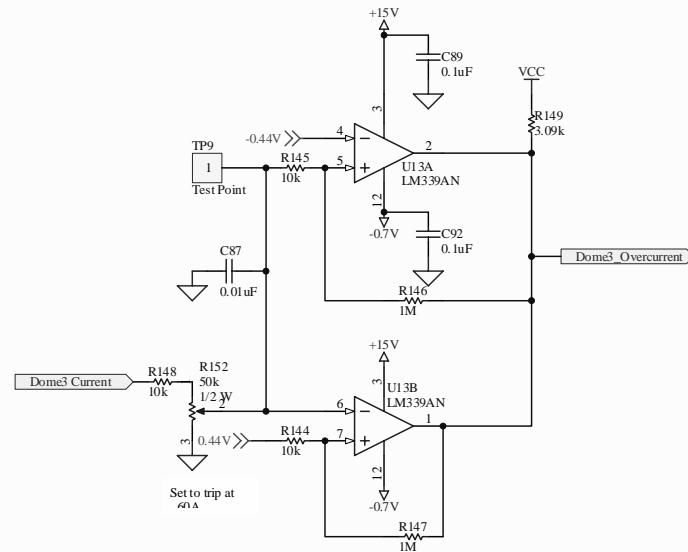
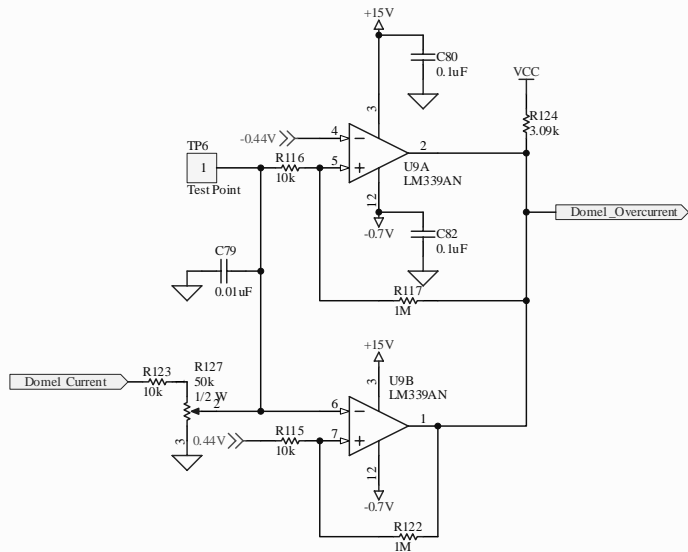
Title Safety Top		Engineer Fred Keske	UH - Institute for Astronomy
Size: B	Number: TCS3-2070	Revision: C	640 N. Aohoku Place Hilo, HI 96720 USA
Date: 4/16/2008	Time: 8:22:13 AM	Sheet 1 of 6	
File: Z:\TCS\Safety Board Schematics\PL_CCA\Safety Board Rev C\Protel_SchDoc			

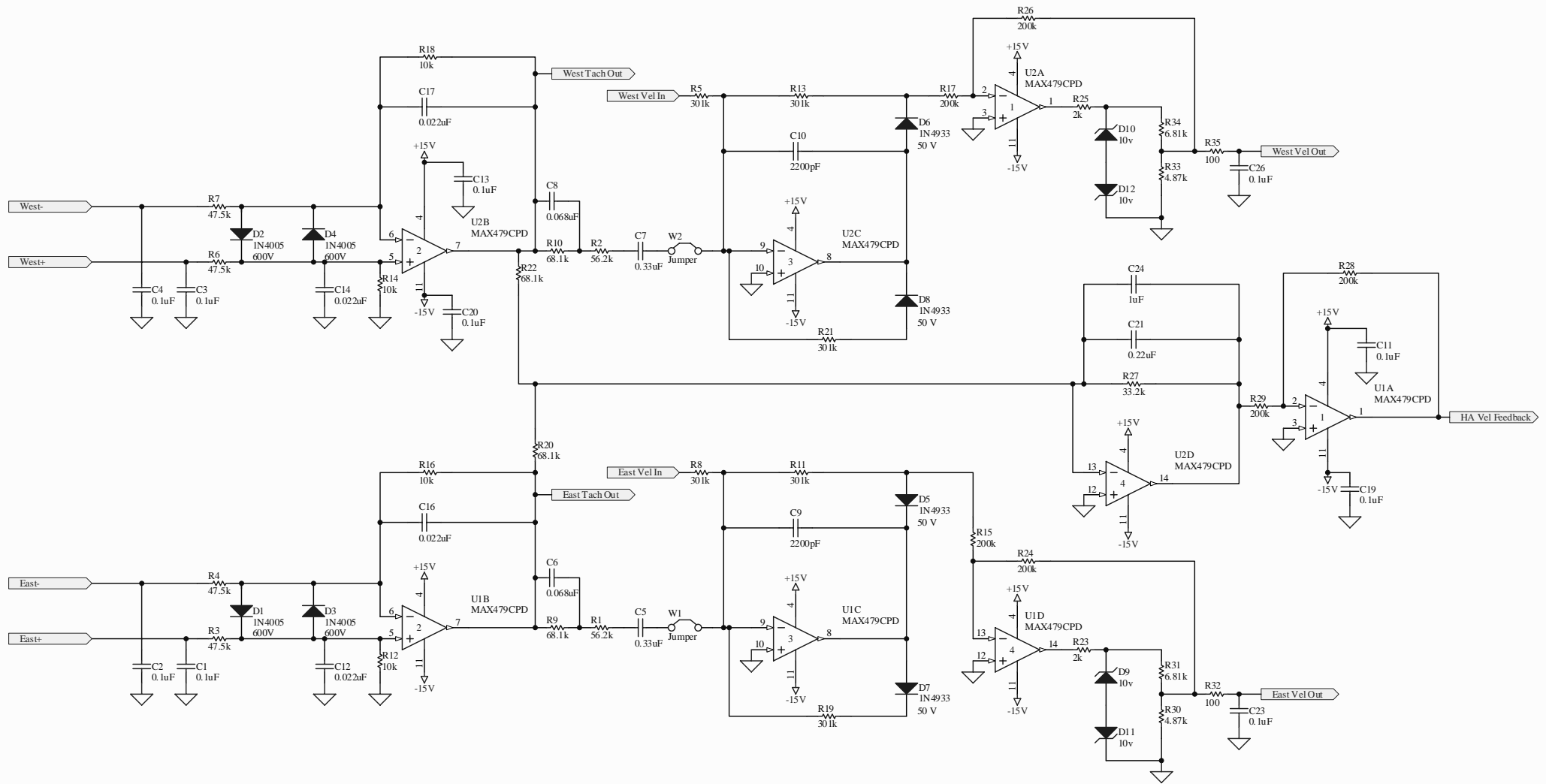



Title <i>Fault Logic</i>		Engineer Fred Keske	UH - Institute for Astronomy 640 N. Aohoku Place Hilo, HI 96720 USA
Size: B	Number: TCS3-2072	Revision: C	
Date: 4/17/2008	Time: 8:25:49 AM	Sheet 4 of 6	
File: Z:\TCS\Safety Board Schematics\PL_CCA\Safety Board Protel\Safety Board Rev C\Protel_Sch			

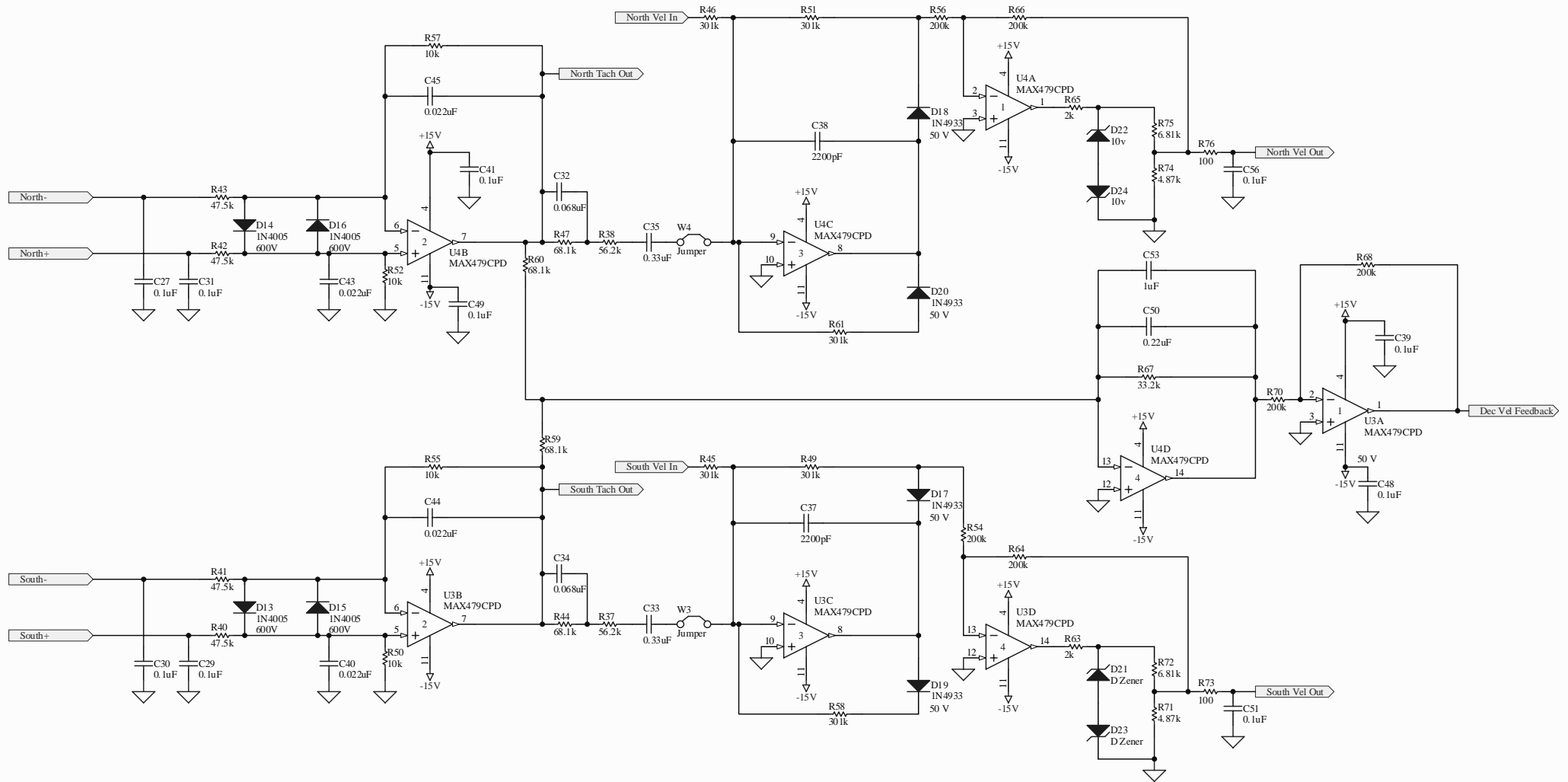









Title HA Tach		Engineer Fred Keske	UH - Institute for Astronomy 640 N. Aohoku Place Hilo, HI 96720 USA	
Size: B	Number: TCS3-2075	Revision: C		
Date: 4/8/2008	Time: 8:26:18 AM	Sheet 5 of 6		
File: Z:\TCS\Safety Board Schematics\PL_CCA\Safety Board Rev C\Protel_SchDoc				



Title <i>Dec Tach</i>		Engineer Fred Keske	UH - Institute for Astronomy
Size: B	Number: TCS3-2076	Revision: C	640 N. Aohoku Place Hilo, HI 96720 USA
Date: 4/8/2008	Time: 8:26:33 AM	Sheet 6 of 6	
File: Z:\TCS\Safety Board Schematics\PL_CCA\Safety Board Rev C\Protel_Saf			