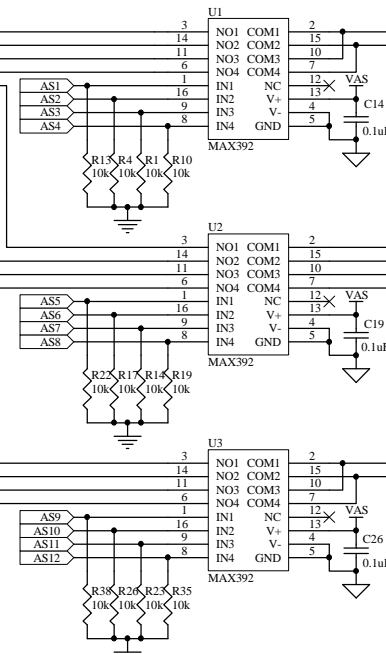
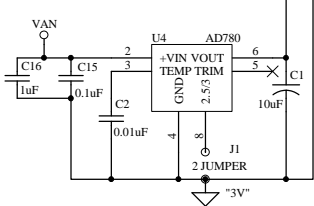
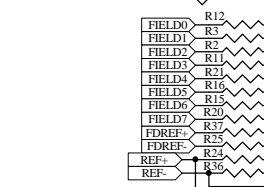
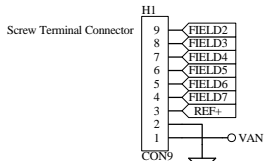
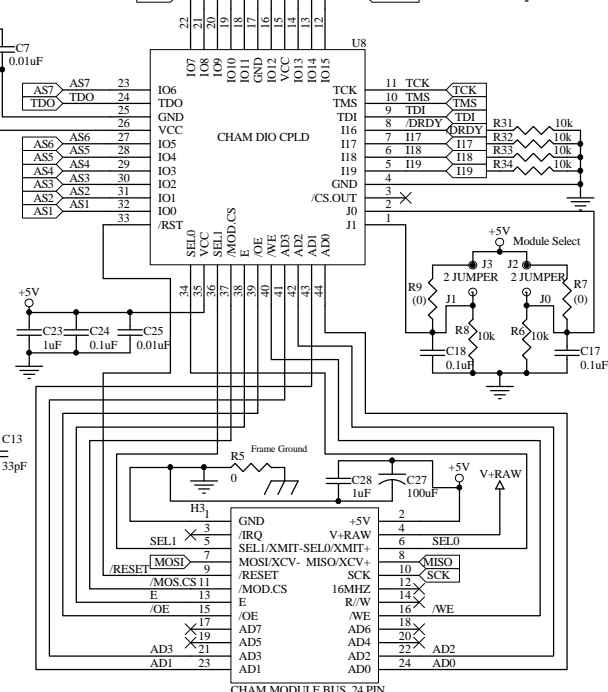
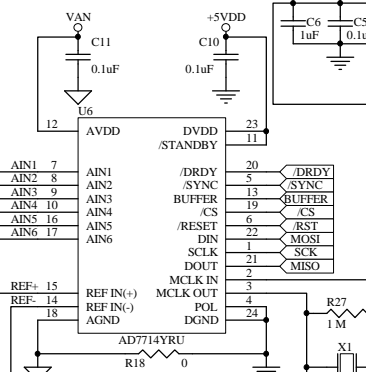
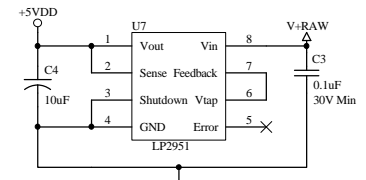
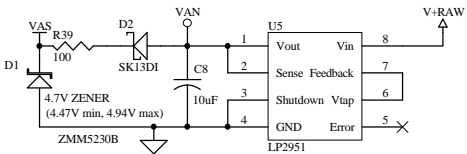


CHAM 24-AN CON, 24 PIN



- Input Characteristics**
- 1) Electrostatic discharge protected to > 2000V
  - 2) Voltage protected to +70V continuously, +/-220V peak (pulsed at 1ms, 10% duty cycle max)
  - 3) Protection resistors connected to NO1-4 of the MAX392 chip do not cause gain errors at the 20-bit level.
  - 4) In buffered mode, the protection resistor causes offset errors of  $\ln(A) \cdot 2.2k \approx 2.2uV$  on each input. These cancel for differential inputs.
  - 5) VAS stands for Supply Voltage for the Analog Switch.
  - 6) Digital and analog grounds are laid out in a star pattern.
  - 7) D2 protects AD7714 inputs in the event that high field voltages pull up the supply on the analog switches through substrate diodes.
  - 8) All power supply bypass caps are placed directly across the chips.
  - 9) Resistors with values in parentheses are not installed.

- Notes Continued:**
10. Errors and possible latch up of the AD7714 may occur if the analog / reference inputs rise above 4.8 volts.
  11. A ground loop will occur causing an offset error in A/D conversions if the AD7714 is used in single ended mode and the AGND & REF- are connected together externally & current is drawn from REF-.
  12. J2 & J3 select a 2-bit code that sets a unique address (0-3) on the module stack.
  13. J1 selects 3.0 volt reference instead of 2.5 volt reference.



<b>Title</b>		<b>24-bit A/D Module</b>	
<b>Project</b>		<b>Wildcards</b>	
<b>Size:</b>	<b>A</b>	<b>Designer</b>	<b>David Siu</b>
<b>File:</b> analog.sch		<b>Date:</b> 1-Mar-2004	<b>15:33:23</b>
<b>Sheet</b> 0 of 0		<b>Mosaic Industries</b>	