



- 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 $\ln A \times 2.2k \sim 2.3uV$ 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.

Title		24-bit A/D Module	
Project		Wildcards	
Size: A	Designer	David Siu	
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