$$T(\text{deg C}) = 773 - 0.2841 \times \text{ADU}.$$

address $2000, and are allocated $300 words per program. They are read into the internal DSP memory spaces P:APL_ADR to $1FF, X:COM_TBL to COM_TBL+15, and Y:0000 to Y:$00FF. The EEPROM memory map is shown in Fig. 4-4, and the source code files "utilboot.asm" and "utilappl.asm" can be referred to for further

pattern approximates a pyramid.

(9) Test A/D inputs: Connect an adjustable power supply to several AIN pins in turn and examine U8 pin 20 (the A/D) with a scope. As the power supply is adjusted one of the positions in the ramp will change too. Vary AIN5 = C32 over the range of -1.5 to +1.5 volts, while the MUX should vary over -3 to +3 volts. Do this for AIN6,7 as well if desired, after rejumpering the inputs. Inputs AIN8-15 should be connected to a variable voltage source as the A/D input is examined for unity gain.

(10) Board temperature: Cool the temperature sensor U5 a little with a localizeable coolant, and watch the first ramp position change a little.

are properly loaded with legal values.

(5) The utility board instructs the power control board to turn on the low voltage power lines (nominally +/- 15V) by toggling the LVEN line 128 times. These will be ramped up over a 20 millisecond time period.

(6) The utility board samples the low voltage power lines, making sure they are within tolerance. If not, an ’ERR’ message is sent to the host computer. If yes, processing continues.

(7) The utility board turns

not depending on the setting of a control bit. Resetting the DSP will cause the current exposure to be lost, and corrective action must be taken by the host computer.

(11) **Board Reset:** A reset circuit on the board is implemented with the PAL (programmable array logic) chip U31 to reset the DSP and generate interrupts to it from a ait

AEX - "Abort exposure". Immediately stop exposing altogether by cl2 0 Td 3_ shutter, putd 3_ CCD in idle mode, and putd 3_ VME interface board in command interpret0 Tdmode.

OSH - "Open shutter". Open 3_ shutter.

X:0	STATUS	Board status word
Bit 0	ADC	