

Circuit Description

a rate of 256 kHz. One channel is dedicated to the input signal. The other channel reads one of the Aux A/D inputs. The Aux inputs are multiplexed so that each input is read every four cycles. The two digital output streams are buffered by U406 and sent to the DSP board.

I/O INTERFACE

The Analog Input Board communicates with the CPU Board via its I/O Interface. U504 and U506 are simple latches which hold configuration data for the analog board. They are written via the isolated data bus from the DSP board. This data bus is active only when the Analog board is addressed. This prevents noise from the CPU and DSP boards from entering the Analog Board. Timing signals for the A/D Converter are buffered by U406.

POWER

Several voltages are generated on the Analog Input Board locally. $\pm 15V$ is generated for most of the analog IC's. A dedicated $\pm 15V$ supply is also generated for the front-end amplifier. $\pm 5.6V$ is generated for the digital circuitry as well as some of the drivers. The A/D Converter has its own $\pm 5V$ supply.