

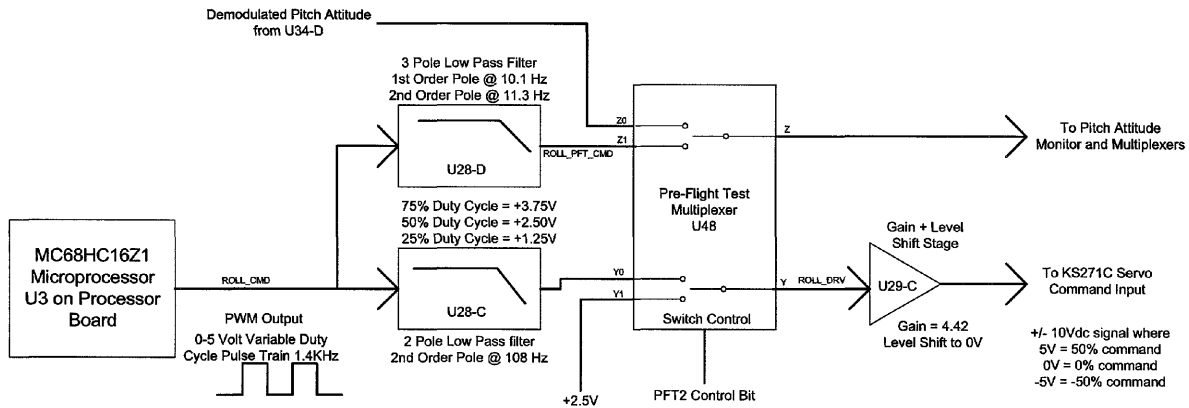
PFT CONTROL CIRCUITS

The following circuits are used during preflight testing to check for proper operation of the hardware monitors.

Roll PFT Command Output

Refer to Fig 4-13.

The roll PFT command circuit allows the processor to generate DC command voltages during pre-flight testing in order to test the thresholds of the various monitor circuits. The roll PFT command output circuitry is composed of U28-D. Operational amplifier U28-D is configured as a 3-pole active filter. This filter has a first-order pole with a cutoff frequency of 10.07 Hz and a second-order pole with a cutoff frequency of 11.27 Hz. The pulse-width modulated ROLL_CMD output signal from the processor is routed to this circuit, which filters this PWM signal and produces an output voltage proportional to the amplitude and duty cycle of the PWM input signal. The processor uses this DC voltage to test the monitor thresholds during pre-flight testing.



KC 225 Roll Command Output

All component reference designator refer to the I/O Board unless stated otherwise.

FIGURE 4-13 ROLL COMMAND OUTPUT