

When a 3777 address has been written, the TCE flip-flop is reset to terminate the operation. An operating procedure for the timing track writer appears in Chapter 5.

3.6 SPECIAL CIRCUITS

The special-circuit modules used in the DF32 system have not been incorporated in the DEC Logic Handbook. Therefore, brief discussions of the pertinent special circuit modules are provided in the following paragraphs. The schematics for the special circuit modules are shown in Chapter 6 with the engineering drawings.

3.6.1 G083 Differential Preamplifier

The G083 contains two ac-coupled differential preamplifiers as shown in Figure 3-4. The G083 provides the gain (adjustable from 1 to 10) and common-mode noise rejection required to preamplify the signals generated by the disk read/write heads during the read-from-disk mode.

During the write cycle, a diode protection network prevents the amplifier from saturation. The amplifier has a bandwidth of 200 kHz to 1 MHz, with a maximum recovery time of 15 μ s.

The outputs of the dual preamplifiers are connected directly to the differential inputs of the W532 Difference Amplifiers. Since the W532 Mod B preamplifier has an operating frequency of 600 kHz, amplifiers W532 Mod A and B are not interchangeable. A bandpass-limiting capacitor of 180 pF (C2) is provided on the G083 Amplifier output when the DF32 contains a W532 Mod A Amplifier. This capacitor is removed when the DF32 contains the W532 Mod B Amplifier.

The power requirements for the G083 are shown below.

Pin	Normal Voltage	Marginal Check Limits		Current (mA)
		Min.	Max.	
A	+10	+6	+14	25
B	-15	-10	-20	30
V	+ 8.5	-6	-14	--

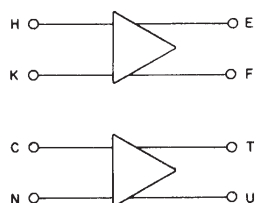


Figure 3-4 Block Diagram, G083 Differential Preamplifier Module