

DESCRIPTION

This Integrated Circuit has a maximum sweep rate of 5 ns/div. "A" and "B" sweep input range is +2.0 volts to -2.4 volts with channel switching accomplished by pulling 2 mA out of the unused input(s). In X-Y operation (selected by pulling mode control to +5 volts), the "X" signal sees a 5 MHz preamplifier with gain of 10 and input range of approximately ± 200 mV. Output is a differential current from common base transistors with a sensitivity of 0.2 mA/div/side. Gain is adjusted and switched externally by selecting emitter resistors for the input differential pair.

The M138 has provisions for mag registration and horizontal position inputs. Bias current level is set with an external resistor. Nominal operation is ± 5.0 volt supplies with a power dissipation of 185 mW (215 mW in X-Y mode).

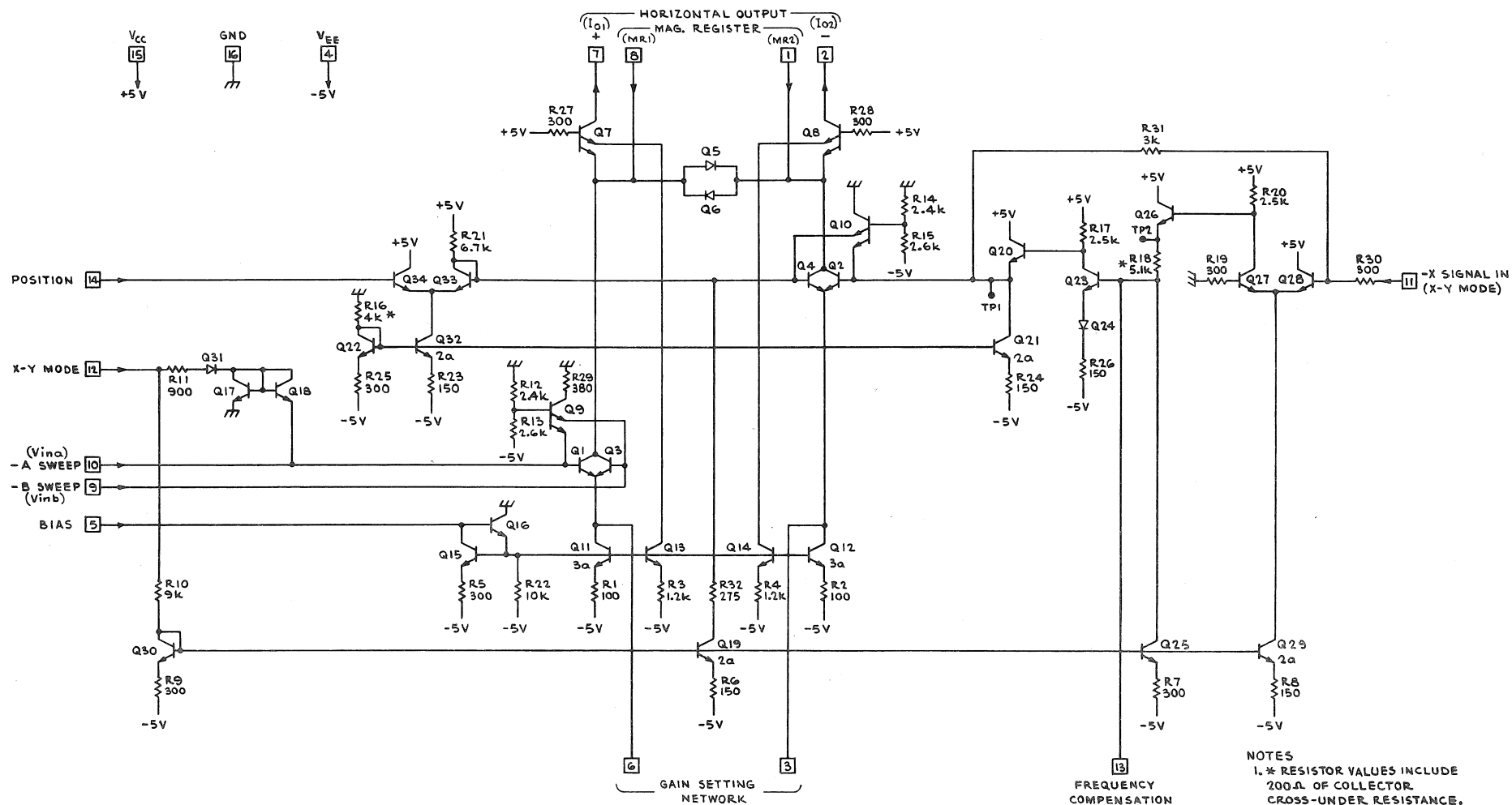
PROCESS 200 Ω /Sq

POWER SUPPLY. V_{CC} +5V, V_{EE} -5V

PACKAGE 16 Pin DIP

DESIGNER Bob Nordstrom

INSTRUMENT USAGE 455



ENGR	<i>R. N. Nelson</i>	9-19-74	PROCESS	200Ω/D
DWN BY	<i>R. H. Hinkle</i>	9-16-74	PACKAGE	16 PIN DIP
CHK BY	<i>Ja. M. Moody</i>	11-12-74	DIE SIZE	55 mil x 55 mil
TYPE	MONOLITHIC		HORIZONTAL PREAMPLIFIER	M158
INTEGRATED CIRCUIT ENG/MFG		PART NO. 155-0124-00		
TEKTRONIX, INC.				
BEAVERTON, OREGON, U.S.A.				