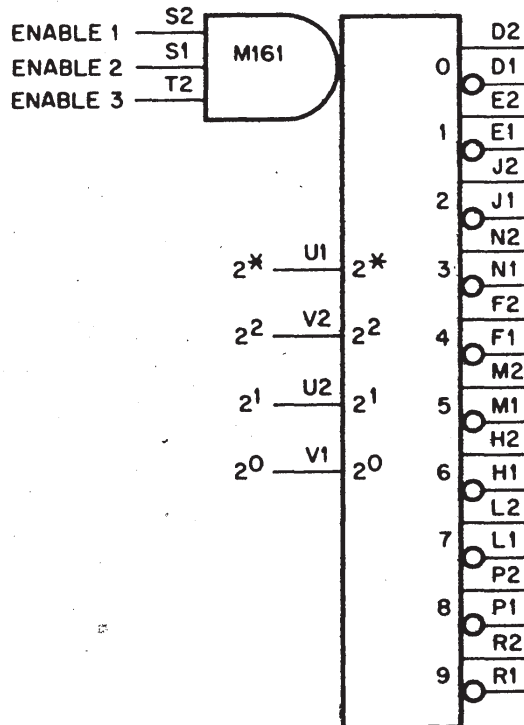


BINARY TO OCTAL/DECIMAL DECODER

TYPE M161

M
SERIES



M161 BINARY TO OCTAL/DECIMAL DECODER

The M161 is a functional decoding module which can be used as a binary-to-octal or binary-coded decimal (8421 or 2421 codes) to decimal decoder. In the binary-to-octal configuration, up to eight M161's can be linked together to provide decoding of up to six bits. Three ENABLE inputs are provided for selective enabling of modules in decoders of more than one digit. In the octal mode, the bit 2^* input is connected to ground, which automatically inhibits the 8 and 9 outputs. Connections for a 5-bit binary/octal decoder (4 modules) are shown below. The figure assumes that the inputs to the decoder are the outputs of flip-flops such as FF 2^0 (1), 1 output side; and FF 2^0 (0), 0 output side.

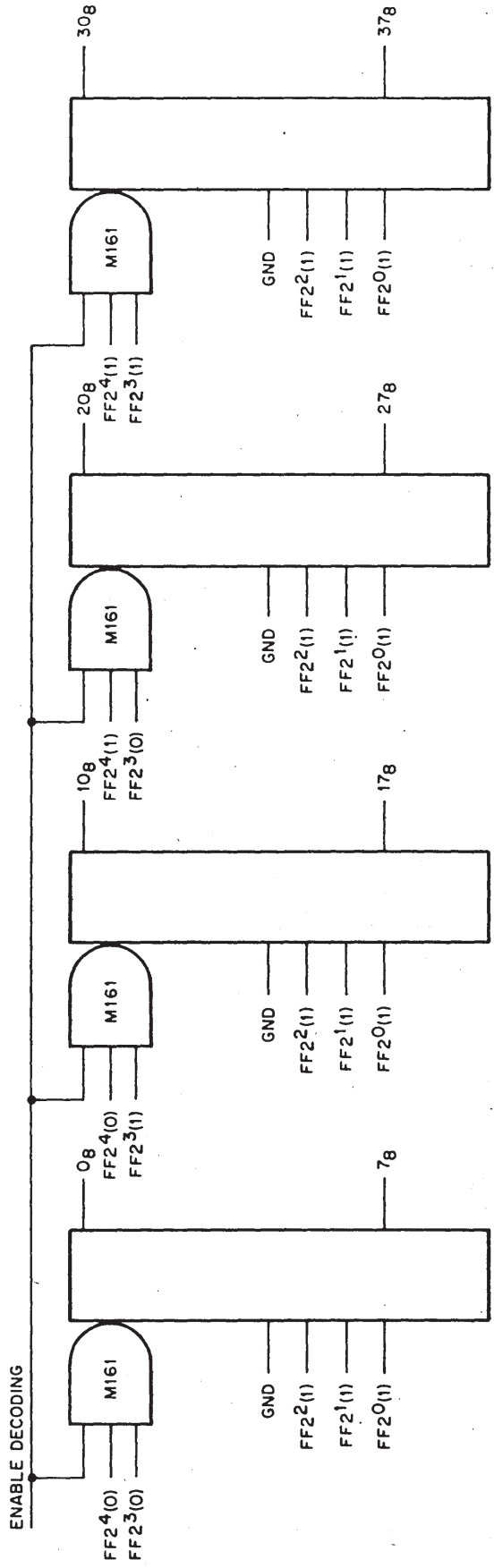
The 2^* input may be of decimal value 2, 4, 6, 8 as long as illegal combinations are inhibited before connections to the inputs, and the 4-2-1 part of the code is in binary.

The propagation delay through the decoder is typically 55 nsec in the binary-to-octal mode, and 75 nsec in the BCD-to-decimal mode. The maximum delay in the BCD-to-decimal mode is 120 nsec, frequency-limiting this module to 8MHz when used in this fashion. The enable inputs can be used to strobe output data providing inputs 2^0 — 2^* have settled at least 50 nsec prior to the input pulse.

Inputs: 2^0 through 2^* , 1 unit load each; ENABLE 1 through ENABLE 3, 2 unit loads each.

Outputs: Each positive output is capable of driving 10 unit loads, and each negative output, 9 unit loads.

Power: +5 volts, 80 ma (avg.)



5-BIT BINARY/OCTAL DECODER
 (OUTPUTS ARE REPRESENTED IN
 OCTAL 37₈ = 31₁₀)

5-BIT BINARY/OCTAL DECODER

M161 — \$60.00