

Two-Modulus Prescaler

The MC12012 is a two-modulus prescaler which consists of three functional blocks: 1) a controllable divide by 5/divide by 6 prescaler; 2) a divide by 2 prescaler; and 3) a MECL to MTTL translator. When used with the MC12014 Counter Control Logic function and the MC4016 programmable counter, a divide by N programmable counter can be constructed for operation to 200 MHz. This arrangement is especially useful in frequency synthesizer applications.

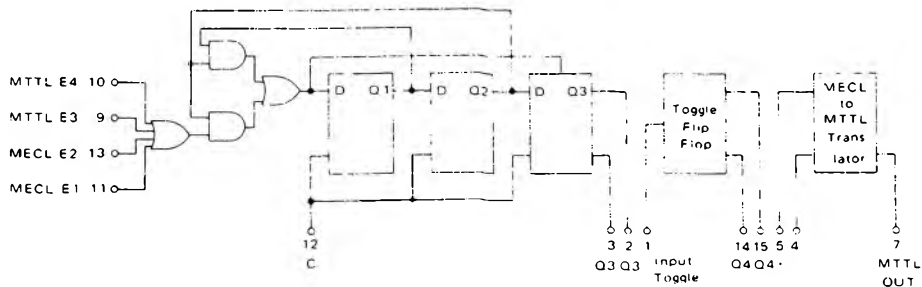
- $\div 2, \div 5/\div 6, \div 10/\div 11, \div 10/\div 12$
- MECL to MTTL Translator on Chip
- +5.0 or -5.2 V Operation*
- 200 MHz (typ) Toggle Frequency

*When using +5.0 V supply, apply +5.0 V to pin 16 (V_{CC}) and ground pin 8 (V_{EE}). When using -5.2 V supply, ground pin 16 (V_{CC}) and apply -5.2 V to pin 8 (V_{EE}).

**TOGGLE
FLIP-FLOP**

Q_n	Q_{n+1}
0	1
1	0

To obtain an MTTL output connect 5 and 4 to 2 and 3 or 14 and 15 respectively. The MECL outputs (2, 3, 14, 15) require terminating resistors. When used, the translator (4 and 5) will provide the proper termination for connection to the Toggle FF.



MC12012

PHASE-LOCKED LOOP