Signetics

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Status	Product Specification
FAST Products	

FAST 74F779 Counter

8-Bit Bidirectional Binary Counter (3-state)

TYPE	TYPICAL f_{MAX}	TYPICAL SUPPLY CURRENT (TOTAL)
74F779	145MHz	90mA

FEATURES

- **Multiplexed 3-state I/O ports for bus oriented applications**
- **Built-in look-ahead carry capability**
- **Center power pins to reduce effects of package inductance**
- **Count frequency 145MHz typical**
- **Supply current 90mA typical**
- **See 'F269 for 24 pin separate I/O port version**
- **See 'F579 for 20 pin version**
- **See 'F1779 for extended function version of the 'F799**

ORDERING INFORMATION

PACKAGES	COMMERCIAL RANGE V_{CC} = 5V±10%; T_A = 0°C to +70°C
16-Pin Plastic DIP	N74F779N
16-Pin Plastic SOL	N74F779D

INPUT AND OUTPUT LOADING AND FAN-OUT TABLE

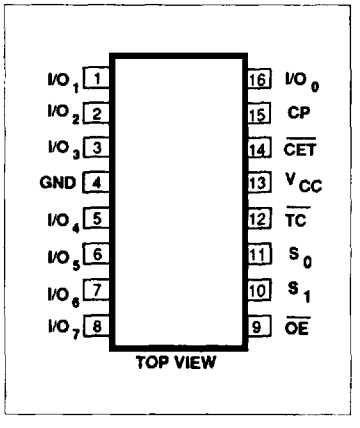
PINS	DESCRIPTION	74F(U.L.) HIGH/LOW	LOAD VALUE HIGH/LOW
I/O_n	Data inputs	3.5/1.0	70µA/0.6mA
	Data outputs	150/40	3.0mA/24mA
S_0, S_1	Select inputs	1.0/1.0	20µA/0.6mA
$\overline{OE}$	Output enable input (active Low)	1.0/1.0	20µA/0.6mA
$\overline{CET}$	Count Enable Trickle input (active Low)	1.0/1.0	20µA/0.6mA
CP	Clock input (active rising edge)	1.0/1.0	20µA/0.6mA
$\overline{TC}$	Terminal count output (active Low)	50/33	1.0mA/20mA

NOTE:
One (1.0) FAST Unit Load is defined as: 20µA in the High state and 0.6mA in the Low state.

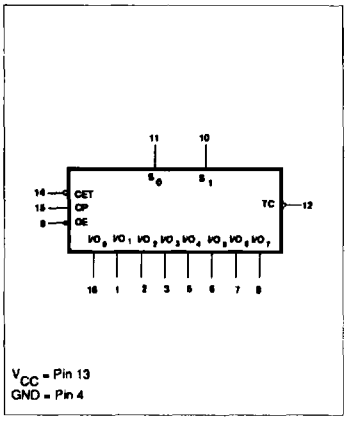
DESCRIPTION

The 74F779 is fully synchronous 8-stage Up/Down Counter with multiplexed 3-state I/O ports for bus-oriented applications. All control functions (hold, count up, count down, synchronous load) are controlled by two mode pins (S_0,S_1). The device also features carry look-ahead for easy cascading. All state changes are initiated by the rising edge of the clock. When $\overline{CET}$ is High the data outputs are held in their current state and $\overline{TC}$ is held High. The $\overline{TC}$ output is not recommended for use as a clock or asynchronous reset due to the possibility of decoding spikes.

PIN CONFIGURATION



LOGIC SYMBOL



LOGIC SYMBOL(IEEE/IEC)