

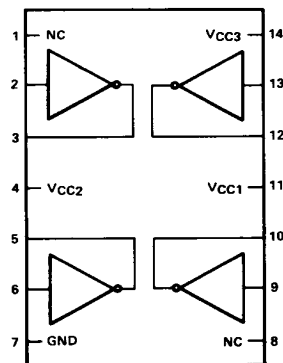
Features

- HIGH DRIVE CURRENT—150mA
- HIGH SPEED 50ns TYPICAL
- TTL COMPATIBLE INPUTS
- DIELECTRIC ISOLATION
- QUAD MONOLITHIC CONSTRUCTION
- POWER SUPPLY FLEXIBILITY
- LOW POWER:
STANDBY—30mW/CIRCUIT
ACTIVE—95mW/CIRCUIT

Description

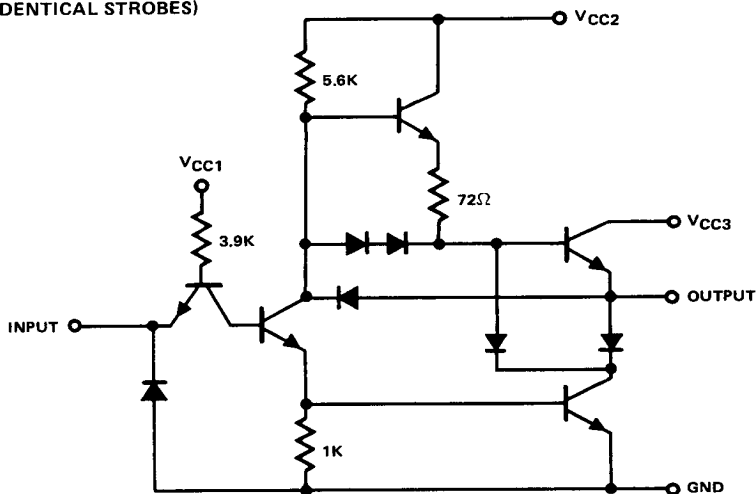
The HD-6600 Quad Power Strobe is constructed with Harris Dielectric Isolation Bipolar Monolithic Process. The design incorporates power supply flexibility with TTL compatible inputs and high current outputs. This circuit is intended for use in power switched PROM arrays.

Logic Diagram



Circuit Diagram

(ONE OF FOUR IDENTICAL STROBES)



Specifications HD-6600

ABSOLUTE MAXIMUM RATINGS

Power Supply Voltage	VCC1	+8 VDC
	VCC2	+18 VDC
	VCC3	+18 VDC
Input Voltage V_{IN}		-0.5 VDC to +5.5 VDC
Storage Temperature T_{STG}		-65°C to +150°C
Output Current I_L		-200mA
Power Dissipation at 25°C		1000mW
(Derate 9mW/°C Above 60°C)		

RECOMMENDED OPERATING CONDITIONS

Power Supplies:	VCC1	5 VDC $\pm$ 10%
	VCC2	12 VDC $\pm$ 15%
	VCC3	5 VDC $\pm$ 20%

ELECTRICAL CHARACTERISTICS

$T_A = -55^\circ\text{C}$ to $+125^\circ\text{C}$ HD1-6600-2
 $T_A = 0^\circ\text{C}$ to $+75^\circ\text{C}$ HD1-6600-5

$V_{CC2} = 12.0$ VDC
 $V_{CC3} = 5.0$ VDC

D.C.

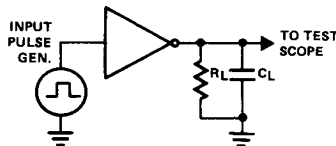
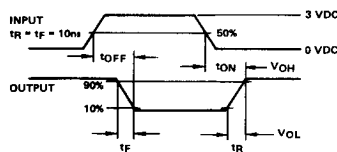
SYMBOL	PARAMETER	MIN.	TYP.	MAX.	UNITS	TEST CONDITIONS
I_{IR} I_{IF}	Input Current			60 -1.6	μA mA	$V_{IN} = 2.4$ VDC $V_{IN} = 0.4$ VDC $V_{CC1} = 5.5$ VDC
V_{IH} V_{IL}	Input Threshold Voltage (Note 1)	2.0		0.8	V	$V_{CC1} = 4.5$ VDC
V_{OH} V_{OL}	Output Voltage (Note 2)	4.75	4.85		V	$V_{CC1} = 5.0$ VDC $V_{IN} = 0.4$ VDC $I_L = -150\text{mA DC}$
I_{CC1} I_{CC2}	Supply Current (Note 3)		4	6.0	mA	$V_{CC1} = 5.5$ VDC $V_{IN} = 2.4$ VDC
I_{CC2}	Supply Current (Note 4)		8	15	mA	$V_{CC1} = 5.5$ VDC $V_{IN} = 0.4$ VDC $I_L = -150\text{mA DC}$
I_{CC2}	Supply Current (Note 4)		8	15	mA	$V_{CC1} = 5.5$ VDC $V_{IN} = 2.4$ VDC $I_L = 0$

A.C.

SYMBOL	PARAMETER	TYP.	MAX.	UNITS	CONDITIONS $T_A = 25^\circ\text{C}$
t_{ON} t_{OFF}	Turn On Delay Turn Off Delay	50	75	ns	$V_{CC1} = 5.0$ VDC $V_{CC2} = 12$ VDC $V_{CC3} = 5.0$ VDC
t_R t_F	Rise Time Fall Time	40	65	ns	$R_L = 33\Omega$ $C_L = 620$ pF

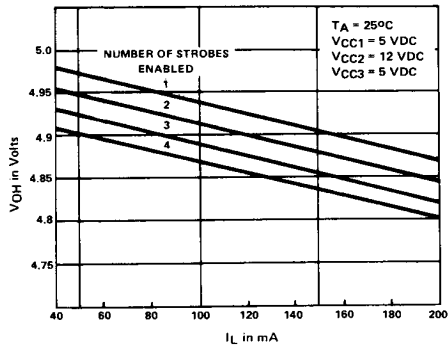
- NOTE (1) These are absolute voltages with respect to ground pin and include all overshoots due to system and/or tester noise. Do not attempt to test these values without suitable equipment.
(2) One strobe enabled.
(3) All strobes enabled.
(4) All strobes disabled.

Switching Time Definitions

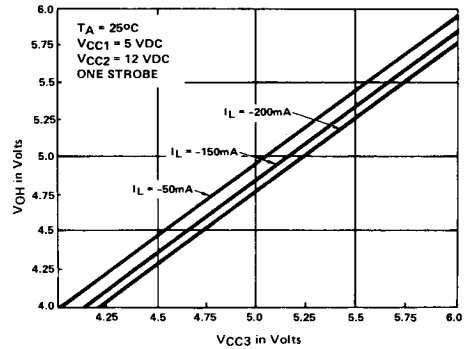


Typical Characteristics

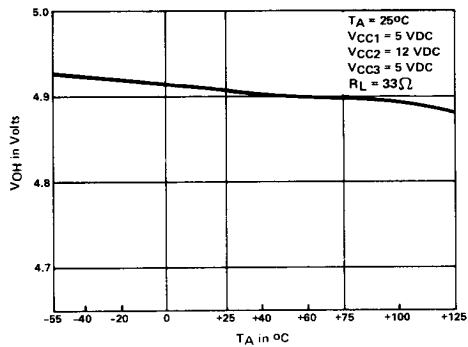
TYPICAL OUTPUT VOLTAGE vs.
LOAD CURRENT AND NUMBER OF STROBES ENABLED



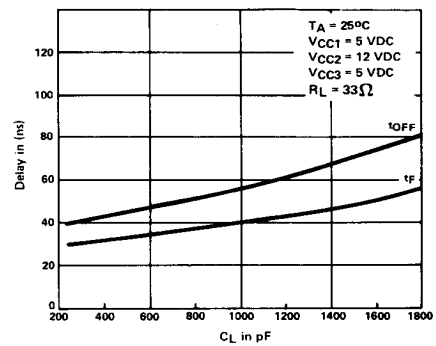
TYPICAL OUTPUT VOLTAGE vs.
 V_{CC3} SUPPLY VOLTAGE



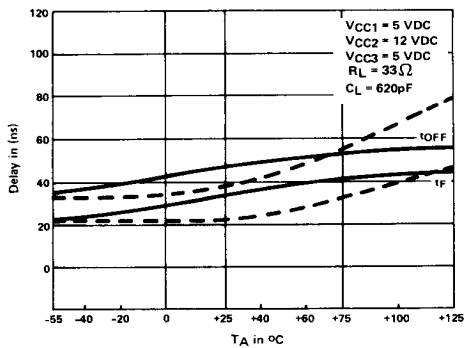
TYPICAL OUTPUT VOLTAGE vs.
AMBIENT TEMPERATURE



TYPICAL DELAY t_{OFF} AND t_F vs.
LOAD CAPACITANCE



TYPICAL DELAY vs.
AMBIENT TEMPERATURE



TYPICAL DELAY t_{ON} AND t_R vs.
LOAD CAPACITANCE

