

TSC361

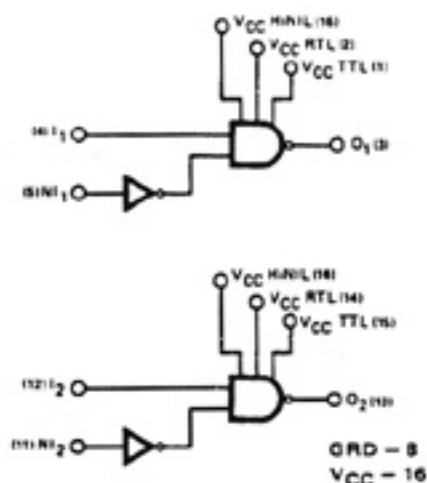
Dual 11-16V to 5 Volt Interface

• Voltage Translator

Features

- DROPS HINIL LOGIC LEVELS TO LOWER LOGIC LEVELS
- INVERTING AND NONINVERTING INPUTS AVAILABLE
- SPECIFIED TO RTL AND TTL CHARACTERISTICS
- IDEAL COMPANION TO 362 OUTPUT INTERFACE

Logic Diagrams



Specifications

SPECIFICATION AS RTL INTERFACE:
VCC (RTL) = 3.0 VOLTS

PARAMETER	TEMPERATURE (°C)		
	-30	+25	+70/+85
I _A , min. available output current at V _{OUT} *	-2.3 mA	-2.2 mA	-2.0 mA
V _{OL} , max. output low voltage	350 mV	300 mV	330 mV

SPECIFICATION AS TTL INTERFACE:
VCC (TTL) = 4.5V

PARAMETER	TEMPERATURE (°C)		
	-30	+25	+70/+85
V _{OL} , max. output low voltage I _{OL} = 6.4 mA	0.4V	0.4V	0.4V
V _{OH} , min. output high voltage I _{OH} = -160 μA	2.4V	2.4V	2.4V

I _{CC} (WORST-CASE)	8 mA @ 13V, 11 mA @ 16V			
t _{PD}	230 ns	325 ns	260 ns	240 ns
I/O FUNCTION FOR t _{PD}	A-O+	A+O+	A-O-	A+O-

Note: I_{CC} is tested at V_{CC} + 1 Volt (+13V for C type and +16V for A type) and is guaranteed across the applicable temp range. t_{PD} is guaranteed at V_{CC} ± 1V and across the applicable temp range.

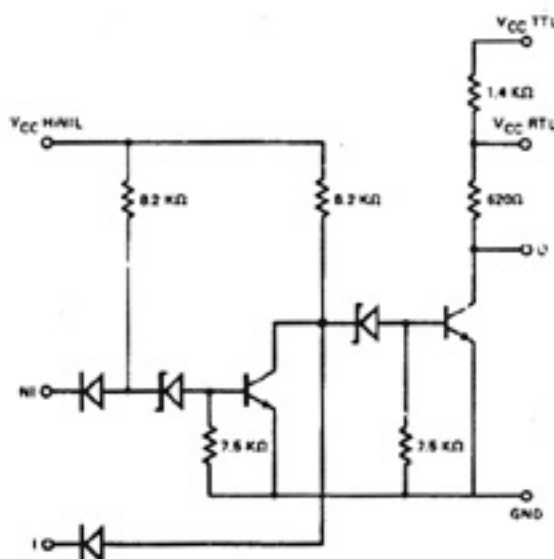
See page 12 for electrical summary data.

General Description

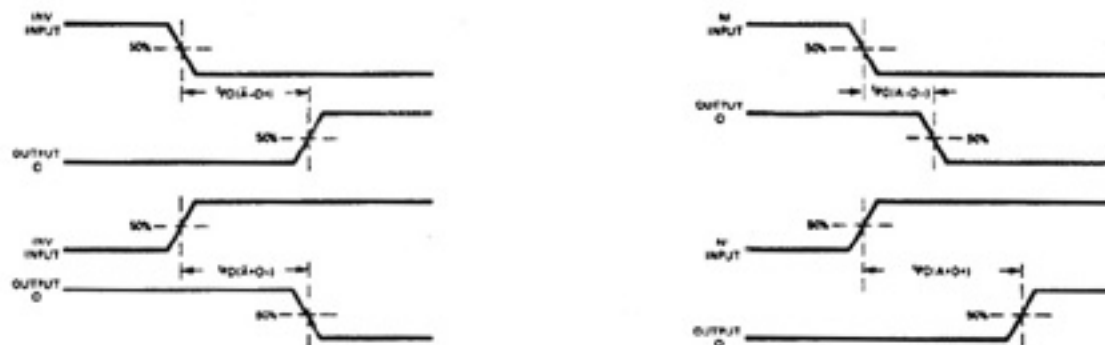
The 361 is used to convert HINIL logic levels to DTL, TTL and RTL logic levels. It is very simple to use, merely requiring connection to the V_{CC} output level desired for adjustment of the output to the lower logic level.

See 362, 363 for applications information.

Equivalent Circuit



Switching Time Waveforms



Loading Table

361

PINS	FUNCTION	LOADING
I	Inverting input	1 UL
NI	Noninverting input	1 UL
O	Output	See specifications

Typical Performance Characteristics

