

General Description

The TESTMUX standard cell is an analog multiplexer especially designed for in circuit or in system testing purposes of an integrated circuit. Through a digitally controlled one-out-of-N selector, one analog signal is directed to the TESTMUX output pin. This gives the chance to measure or analyze chip internal signals or to overwrite their current values. The output is pulled down, if no input signal is selected.

Ratings, Parameters and Conditions

Parameter / Condition	Symbol	Min	Typ.	Max	Unit	Comment
Electrical Parameters:						
Supply Voltage	V_{dd}	4.75	5	5.25	V	
Supply Current	I_{dd}		1		μA	no static current
Input Capacitance	C_{in}			100	fF	
On Resistance	R_{on}			500	Ohm	scaling is possible
Pull Down Resistance	R_{pd}	20			kOhm	
Number of Inputs	N_{in}	2		8		
Absolute Maximum Ratings:						
Operating Temperature	T_{range}	-20		80	$^{\circ}C$	
Supply Voltage	V_{dd}	-0.3		7	V	
Input Voltage	V_{in}	-0.3		$V_{dd}+0.7$		
Output Voltage	V_{out}	-0.3		$V_{dd}+0.7$		
Operating Conditions:						
Ambient Temperature	T_{amb}	-20	27	80	$^{\circ}C$	

IO-Description

Interface	I/O	Function	Comment
GND	Input	Supply	ground
VDDA	Input	Supply	supply voltage
IN0-IN7	InOut	analog	analog ports
T0-T7	Input	digital	control ports; max. one line active

Symbol / external schematic

