

电波钟驱动 IC

产 品 说 明 书

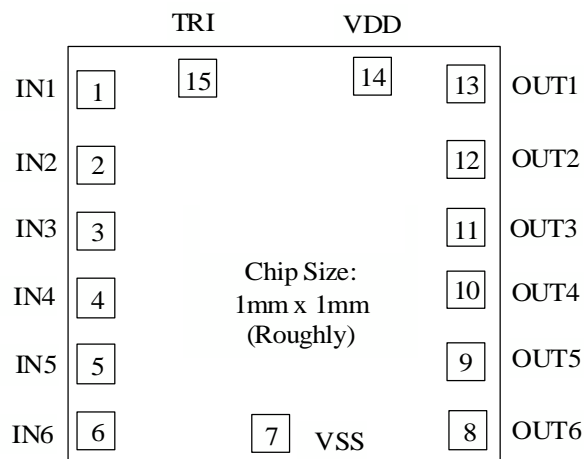
Low voltage CMOS Driver

General Description

is a low voltage CMOS driver. It contains six independent tri-state output drivers. To obtain a fast transition of the outputs, even for slow rise/fall time input signals, all digital inputs (IN1-IN6) have Schmitt-trigger characteristic.

Features

- Wide range of supply voltage (1.1V~3.6V)
- 6 non-inverting tri-state output drivers
- Schmitt-trigger characteristic for IN1-IN6
- On-chip CMOS construction
- Low power consumption
- High load current at low supply voltage



Note: The substrate should be connected to VDD in PCB layout artwork.

Pad description:

Pad Number	Pad Name	Description	X (μm)	Y (μm)
1	IN1	Input 1		
2	IN2	Input 2		
3	IN3	Input 3		
4	IN4	Input 4		
5	IN5	Input 5		
6	IN6	Input 6		
7	VSS	Power supply (-)		
8	OUT6	Output 6		
9	OUT5	Output 5		
10	OUT4	Output 4		
11	OUT3	Output 3		
12	OUT2	Output 2		
13	OUT1	Output 1		
14	VDD	Power supply (+)		
15	TRI	Tri-state enable		

Absolute Maximum Rating:

Parameters	Symbol	Limit	Unit
Supply Voltage	V_{DD}	-0.2~+4.0	V
Input Voltage	V_{IN}	$V_{SS}-0.2 \sim V_{DD}+0.2$	V
Operating Temp.	T_{OPR}	0.0~+70.0	$^{\circ}\text{C}$
Storage Temp.	T_{STG}	-25.0~+125.0	$^{\circ}\text{C}$

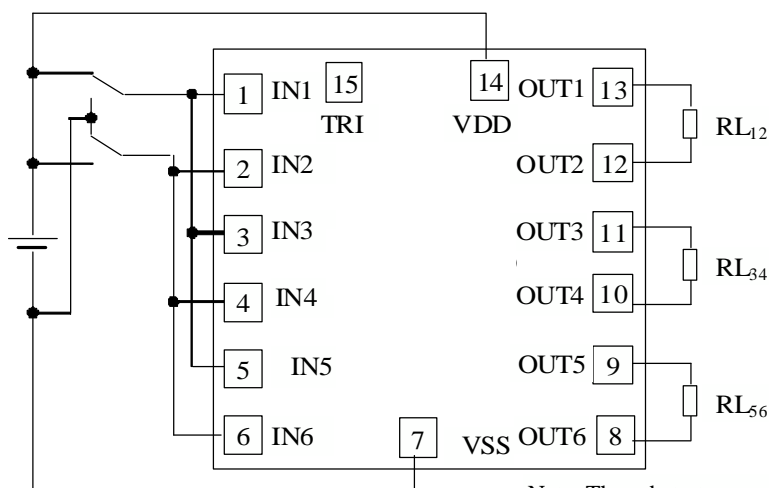
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DC Characteristics: ($V_{DD}=1.5V$, $V_{SS}=0V$, Temp= $25^{\circ}C$, Unless otherwise specified)

Parameters	Symbol	Min	Typ	Max	Unit	Test Condition
Operating Voltage	V_{DD}	1.1	-	3.6	V	
Standby Current	SI_{DD}	-	-	1.5	μA	$V_{DD}=3.6V$, TRI at V_{SS} ; IN1-IN6 at V_{SS}
Driver Output OUT1-OUT6						
Output Current	I_{OUT}	± 4.3	-	-	mA	$V_{DD}=1.2V$ $RL_{12}=RL_{34}=RL_{56}=200\Omega$
		± 5.7	-	-	mA	$V_{DD}=1.5V$ $RL_{12}=RL_{34}=RL_{56}=200\Omega$
		± 12	-	-	mA	$V_{DD}=3.0V$ $RL_{12}=RL_{34}=RL_{56}=200\Omega$
Digital Input IN1-IN6						
Input Current	I_{IL}	-	-	-100	nA	$V_{IL}=0.0V$
	I_{IH}	-	-	100	nA	$V_{IH}=V_{DD}$
Threshold	V_{TH}	-	$V_{DD}/2$	-	V	-
Hysteresis	V_{HYST}	-	50	-	mV	-
Input Current TRI	I_{TRI}	0.15	-	1.2	μA	$V_{TR}=V_{DD}$

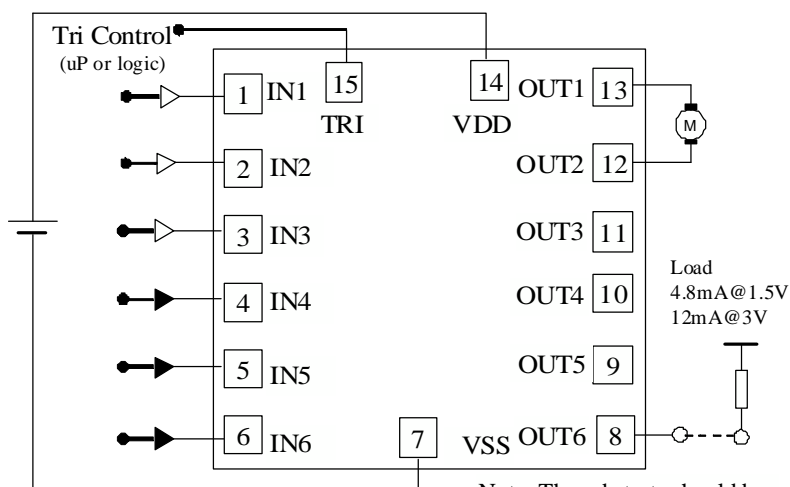
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Testing Diagram



Note: The substrate should be connected to

Application Diagram



Note: The substrate should be connected to VDD in PCB