74LVC1G80

Single D-type flip-flop; positive-edge trigger Rev. 12 — 2 July 2012

Product data sheet

1. **General description**

The 74LVC1G80 provides a single positive-edge triggered D-type flip-flop.

Information on the data input is transferred to the \overline{Q} output on the LOW-to-HIGH transition of the clock pulse. The input pin D must be stable one set-up time prior to the LOW-to-HIGH clock transition for predictable operation.

Inputs can be driven from either 3.3 V or 5 V devices. This feature allows the use of this device in a mixed 3.3 V and 5 V environment.

This device is fully specified for partial power-down applications using I_{OFF}. The I_{OFF} circuitry disables the output, preventing the damaging backflow current through the device when it is powered down.

Features and benefits 2.

- Wide supply voltage range from 1.65 V to 5.5 V
- High noise immunity
- Complies with JEDEC standard:
 - ◆ JESD8-7 (1.65 V to 1.95 V)
 - ◆ JESD8-5 (2.3 V to 2.7 V)
 - ◆ JESD8B/JESD36 (2.7 V to 3.6 V)
- ESD protection:
 - HBM JESD22-A114F exceeds 2000 V
 - MM JESD22-A115-A exceeds 200 V
- \pm 24 mA output drive (V_{CC} = 3.0 V)
- CMOS low power consumption
- Latch-up performance exceeds 250 mA
- Direct interface with TTL levels
- Inputs accept voltages up to 5 V
- Multiple package options
- Specified from -40 °C to +85 °C and -40 °C to +125 °C.



Single D-type flip-flop; positive-edge trigger

3. Ordering information

Table 1. Ordering information

Type number	Package							
	Temperature range	Name	Description	Version				
74LVC1G80GW	–40 °C to +125 °C	TSSOP5	plastic thin shrink small outline package; 5 leads; body width 1.25 mm	SOT353-1				
74LVC1G80GV	–40 °C to +125 °C	SC-74A	plastic surface-mounted package; 5 leads	SOT753				
74LVC1G80GM	–40 °C to +125 °C	XSON6	plastic extremely thin small outline package; no leads; 6 terminals; body $1 \times 1.45 \times 0.5$ mm	SOT886				
74LVC1G80GF	–40 °C to +125 °C	XSON6	plastic extremely thin small outline package; no leads; 6 terminals; body $1 \times 1 \times 0.5$ mm	SOT891				
74LVC1G80GN	−40 °C to +125 °C	XSON6	extremely thin small outline package; no leads; 6 terminals; body $0.9 \times 1.0 \times 0.35$ mm	SOT1115				
74LVC1G80GS	−40 °C to +125 °C	XSON6	extremely thin small outline package; no leads; 6 terminals; body $1.0 \times 1.0 \times 0.35$ mm	SOT1202				
74LVC1G80GX	–40 °C to +125 °C	X2SON5	X2SON5: plastic thermal enhanced extremely thin small outline package; no leads; 5 terminals; body $0.8 \times 0.8 \times 0.35$ mm	SOT1226				

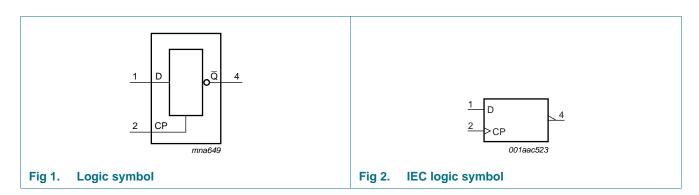
4. Marking

Table 2. Marking codes

Type number	Marking ^[1]
74LVC1G80GW	VT
74LVC1G80GV	V80
74LVC1G80GM	VT
74LVC1G80GF	VT
74LVC1G80GN	VT
74LVC1G80GS	VT
74LVC1G80GX	VT

^[1] The pin 1 indicator is located on the lower left corner of the device, below the marking code.

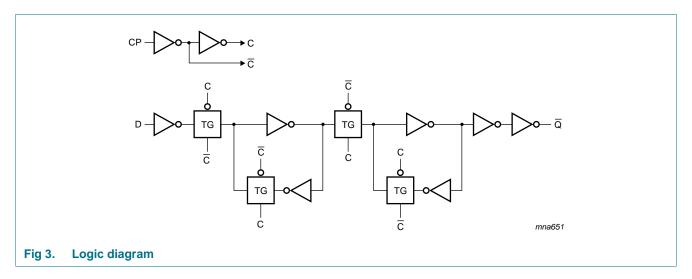
5. Functional diagram



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6. Pinning information

6.1 Pinning





Single D-type flip-flop; positive-edge trigger

6.2 Pin description

Table 3. Pin description

Symbol	Pin		Description	
	TSSOP5 and X2SON5	XSON6		
D	1	1	data input	
CP	2	2	clock pulse input	
GND	3	3	ground (0 V)	
Q	4	4	data output	
n.c.	-	5	not connected	
V_{CC}	5	6	supply voltage	

7. Functional description

Table 4. Function table[1]

•		Output
СР	D	Q
\uparrow	L	Н
\uparrow	Н	L
L	X	q

^[1] H = HIGH voltage level;

L = LOW voltage level.

 $[\]uparrow$ = LOW-to-HIGH CP transition;

X = don't care;

 $[\]overline{q}$ = lower case letter indicates the state of referenced input, one set-up time prior to the LOW-to-HIGH CP transition.

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8. Limiting values

Table 5. Limiting values

In accordance with the Absolute Maximum Rating System (IEC 60134). Voltages are referenced to GND (ground = 0 V).

Symbol	Parameter	Conditions	Min	Max	Unit
V_{CC}	supply voltage		-0.5	+6.5	V
I _{IK}	input clamping current	V _I < 0 V	-50	-	mA
V_{I}	input voltage		<u>[1]</u> –0.5	+6.5	V
I _{OK}	output clamping current	$V_O > V_{CC}$ or $V_O < 0 V$	-	±50	mA
Vo	output voltage	Active mode	[<u>1][2]</u> –0.5	$V_{CC} + 0.5$	V
		Power-down mode	[<u>1][2]</u> –0.5	+6.5	V
Io	output current	$V_O = 0 V \text{ to } V_{CC}$	-	±50	mA
I _{CC}	supply current		-	100	mA
I_{GND}	ground current		-100	-	mA
P _{tot}	total power dissipation	$T_{amb} = -40 ^{\circ}\text{C} \text{ to } +125 ^{\circ}\text{C}$	<u>[3]</u> _	250	mW
T _{stg}	storage temperature		-65	+150	°C

^[1] The input and output voltage ratings may be exceeded if the input and output current ratings are observed.

9. Recommended operating conditions

Table 6. Recommended operating conditions

Symbol	Parameter	Conditions	Min	Тур	Max	Unit
V_{CC}	supply voltage		1.65	-	5.5	V
VI	input voltage		0	-	5.5	V
Vo	output voltage	Active mode	0	-	V_{CC}	V
		V _{CC} = 0 V; Power-down mode	0	-	5.5	V
T _{amb}	ambient temperature		-40	-	+125	°C
Δt/ΔV	input transition rise and fall rate	$V_{CC} = 1.65 \text{ V to } 2.7 \text{ V}$	-	-	20	ns/V
		V _{CC} = 2.7 V to 5.5 V	-	-	10	ns/V

^[2] When $V_{CC} = 0 \text{ V}$ (Power-down mode), the output voltage can be 5.5 V in normal operation.

^[3] For TSSOP5 and SC-74A packages: above 87.5 °C the value of P_{tot} derates linearly with 4.0 mW/K. For XSON6 and X2SON5 packages: above 118 °C the value of P_{tot} derates linearly with 7.8 mW/K.

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10. Static characteristics

Table 7. Static characteristics

At recommended operating conditions. Voltages are referenced to GND (ground = 0 V).

Symbo	l Parameter	Conditions	Min	Typ[1]	Max	Unit
T _{amb} =	-40 °C to +85 °C					
V _{IH}	HIGH-level input voltage	V _{CC} = 1.65 V to 1.95 V	$0.65 \times V_{CC}$	-	-	V
		$V_{CC} = 2.3 \text{ V to } 2.7 \text{ V}$	1.7	-	-	V
		$V_{CC} = 2.7 \text{ V to } 3.6 \text{ V}$	2.0	-	-	V
		V _{CC} = 4.5 V to 5.5 V	$0.7 \times V_{CC}$	-	-	V
V_{IL}	LOW-level input voltage	V _{CC} = 1.65 V to 1.95 V	-	-	$0.35 \times V_{CC}$	V
		V _{CC} = 2.3 V to 2.7 V	-	-	0.7	V
		V _{CC} = 2.7 V to 3.6 V	-	-	0.8	V
		V _{CC} = 4.5 V to 5.5 V	-	-	$0.3 \times V_{CC}$	V
V _{OH}	HIGH-level output voltage	$V_I = V_{IH}$ or V_{IL}				
		$I_{O} = -100 \ \mu A; \ V_{CC} = 1.65 \ V \ to \ 5.5 \ V$	$V_{CC}-0.1$	-	-	V
		$I_{O} = -4 \text{ mA}; V_{CC} = 1.65 \text{ V}$	1.2	-	-	V
		$I_{O} = -8 \text{ mA}; V_{CC} = 2.3 \text{ V}$	1.9	-	-	V
		$I_{O} = -12 \text{ mA}; V_{CC} = 2.7 \text{ V}$	2.2	-	-	V
		$I_{O} = -24 \text{ mA}; V_{CC} = 3.0 \text{ V}$	2.3	-	-	V
		$I_{O} = -32 \text{ mA}; V_{CC} = 4.5 \text{ V}$	3.8	-	-	V
V _{OL}	LOW-level output voltage	$V_I = V_{IH}$ or V_{IL}				
		$I_O = 100 \mu A$; $V_{CC} = 1.65 \text{ V to } 5.5 \text{ V}$	-	-	0.1	V
		$I_{O} = 4 \text{ mA}; V_{CC} = 1.65 \text{ V}$	-	-	0.45	V
		$I_{O} = 8 \text{ mA}; V_{CC} = 2.3 \text{ V}$	-	-	0.3	V
		$I_O = 12 \text{ mA}; V_{CC} = 2.7 \text{ V}$	-	-	0.4	V
		$I_O = 24 \text{ mA}; V_{CC} = 3.0 \text{ V}$	-	-	0.55	V
		$I_O = 32 \text{ mA}; V_{CC} = 4.5 \text{ V}$	-	-	0.55	V
l _l	input leakage current	$V_I = 5.5 \text{ V or GND}$; $V_{CC} = 0 \text{ V to } 5.5 \text{ V}$	-	±0.1	±5	μΑ
I _{OFF}	power-off leakage current	$V_{CC} = 0 \text{ V}$; $V_{I} \text{ or } V_{O} = 5.5 \text{ V}$	-	±0.1	±10	μΑ
I _{CC}	supply current	$V_I = 5.5 \text{ V or GND};$ $V_{CC} = 1.65 \text{ V to } 5.5 \text{ V}; I_O = 0 \text{ A}$	-	0.1	10	μА
Δl _{CC}	additional supply current	per pin; $V_{CC} = 2.3 \text{ V to } 5.5 \text{ V};$ $V_{I} = V_{CC} - 0.6 \text{ V}; I_{O} = 0 \text{ A}$	-	5	500	μΑ
Cı	input capacitance	$V_{CC} = 3.3 \text{ V}; V_I = \text{GND to } V_{CC}$	-	5	-	pF
T _{amb} =	–40 °C to +125 °C					
V_{IH}	HIGH-level input voltage	V _{CC} = 1.65 V to 1.95 V	$0.65 \times V_{CC}$	-	-	V
		V _{CC} = 2.3 V to 2.7 V	1.7	-	-	V
		V _{CC} = 2.7 V to 3.6 V	2.0	-	-	V
		V _{CC} = 4.5 V to 5.5 V	$0.7 \times V_{CC}$	-	-	V
V _{IL}	LOW-level input voltage	V _{CC} = 1.65 V to 1.95 V	-	-	$0.35 \times V_{CC}$	V
		V _{CC} = 2.3 V to 2.7 V	-	-	0.7	V
		V _{CC} = 2.7 V to 3.6 V	-	-	0.8	V
		V _{CC} = 4.5 V to 5.5 V	-	-	$0.3 \times V_{CC}$	V
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Table 7. Static characteristics ...continued

At recommended operating conditions. Voltages are referenced to GND (ground = 0 V).

Symbol	Parameter	Conditions	Min	Typ[1]	Max	Unit
V_{OH}	HIGH-level output voltage	$V_I = V_{IH}$ or V_{IL}				
		$I_O = -100~\mu\text{A};~V_{CC} = 1.65~V$ to $5.5~V$	$V_{CC}-0.1$	-	-	V
		$I_O = -4 \text{ mA}; V_{CC} = 1.65 \text{ V}$	0.95	-	-	V
		$I_O = -8 \text{ mA}; V_{CC} = 2.3 \text{ V}$	1.7	-	-	V
		$I_{O} = -12 \text{ mA}; V_{CC} = 2.7 \text{ V}$	1.9	-	-	V
		$I_{O} = -24 \text{ mA}; V_{CC} = 3.0 \text{ V}$	2.0	-	-	V
		$I_{O} = -32 \text{ mA}; V_{CC} = 4.5 \text{ V}$	3.4	-	-	V
V _{OL}	LOW-level output voltage	$V_I = V_{IH}$ or V_{IL}				
		I_{O} = 100 μ A; V_{CC} = 1.65 V to 5.5 V	-	-	0.1	V
		$I_O = 4 \text{ mA}; V_{CC} = 1.65 \text{ V}$	-	-	0.70	V
		$I_{O} = 8 \text{ mA}; V_{CC} = 2.3 \text{ V}$	-	-	0.45	V
		$I_O = 12 \text{ mA}; V_{CC} = 2.7 \text{ V}$	-	-	0.60	V
		$I_O = 24 \text{ mA}; V_{CC} = 3.0 \text{ V}$	-	-	0.80	V
		$I_O = 32 \text{ mA}; V_{CC} = 4.5 \text{ V}$	-	-	0.80	V
I _I	input leakage current	$V_I = 5.5 \text{ V or GND}$; $V_{CC} = 0 \text{ V to } 5.5 \text{ V}$	-	-	±100	μΑ
I _{OFF}	power-off leakage current	$V_{CC} = 0 \text{ V}; V_{I} \text{ or } V_{O} = 5.5 \text{ V}$	-	-	±200	μΑ
I _{CC}	supply current	$V_I = 5.5 \text{ V or GND};$ $V_{CC} = 1.65 \text{ V to 5.5 V}; I_O = 0 \text{ A}$	-	-	200	μА
ΔI_{CC}	additional supply current	per pin; $V_{CC} = 2.3 \text{ V to } 5.5 \text{ V};$ $V_{I} = V_{CC} - 0.6 \text{ V};$ $I_{O} = 0 \text{ A}$	-	-	5000	μА

^[1] All typical values are measured at V_{CC} = 3.3 V and T_{amb} = 25 °C.

11. Dynamic characteristics

Table 8. Dynamic characteristics

Voltages are referenced to GND (ground = 0 V). For test circuit see Figure 10.

Symbol	Symbol Parameter Conditions		-4	-40 °C to +85 °C		-40 °C to +125 °C		Unit
			Min	Typ[1]	Max	Min	Max	
t_{pd}	propagation delay	CP to \overline{Q} ; see Figure 8	Ĺ					
		V_{CC} = 1.65 V to 1.95 V	1.0	3.4	9.9	1.0	13.0	ns
		V_{CC} = 2.3 V to 2.7 V	0.5	2.3	7.0	0.5	9.0	ns
		$V_{CC} = 2.7 \text{ V}$	0.5	2.5	6.0	0.5	8.0	ns
		$V_{CC} = 3.0 \text{ V to } 3.6 \text{ V}$	0.9	2.4	5.0	0.9	6.5	ns
		$V_{CC} = 4.5 \text{ V to } 5.5 \text{ V}$	0.5	1.8	4.5	0.5	6.0	ns
t _{su}	set-up time	HIGH or LOW; D to CP; see Figure 9						
		$V_{CC} = 1.65 \text{ V to } 1.95 \text{ V}$	2.3	0.8	-	2.3	-	ns
		$V_{CC} = 2.3 \text{ V to } 2.7 \text{ V}$	1.5	0.6	-	1.5	-	ns
		$V_{CC} = 2.7 \text{ V}$	1.5	0.5	-	1.5	-	ns
		$V_{CC} = 3.0 \text{ V to } 3.6 \text{ V}$	1.3	0.4	-	1.3	-	ns
		$V_{CC} = 4.5 \text{ V to } 5.5 \text{ V}$	1.1	0.5	-	1.1	-	ns

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Single D-type flip-flop; positive-edge trigger

 Table 8.
 Dynamic characteristics ...continued

Voltages are referenced to GND (ground = 0 V). For test circuit see Figure 10.

Symbol Parameter		Conditions		-40 °C to +8	5 °C	-40 °C to	o +125 °C	Unit
			Min	Typ[1]	Max	Min	Max	
t _h	hold time	D to CP; see Figure 9	'	'	'		'	'
		$V_{CC} = 1.65 \text{ V to } 1.95 \text{ V}$	0	-0.6	-	0	-	ns
		$V_{CC} = 2.3 \text{ V to } 2.7 \text{ V}$	0	-0.4	-	0	-	ns
		$V_{CC} = 2.7 \text{ V}$	+0.5	-0.2	-	0.5	-	ns
		$V_{CC} = 3.0 \text{ V to } 3.6 \text{ V}$	0.9	0.2	-	0.9	-	ns
		$V_{CC} = 4.5 \text{ V to } 5.5 \text{ V}$	+0.5	-0.1	-	0.5	-	ns
t _W	pulse width	CP HIGH or LOW; see Figure 9						
		$V_{CC} = 1.65 \text{ V to } 1.95 \text{ V}$	3.0	1.1	-	3.0	-	ns
		$V_{CC} = 2.3 \text{ V to } 2.7 \text{ V}$	2.5	0.7	-	2.5	-	ns
		$V_{CC} = 2.7 \text{ V}$	2.5	0.6	-	2.5	-	ns
		$V_{CC} = 3.0 \text{ V to } 3.6 \text{ V}$	2.5	0.6	-	2.5	-	ns
		$V_{CC} = 4.5 \text{ V to } 5.5 \text{ V}$	2.0	0.5	-	2.0	-	ns
max	maximum	CP; see Figure 9						
	frequency	$V_{CC} = 1.65 \text{ V to } 1.95 \text{ V}$	160	300	-	160	-	MHz
		$V_{CC} = 2.3 \text{ V to } 2.7 \text{ V}$	160	350	-	160	-	MHz
		$V_{CC} = 2.7 \text{ V}$	160	350	-	160	-	MHz
		$V_{CC} = 3.0 \text{ V to } 3.6 \text{ V}$	160	350	-	160	-	MHz
		$V_{CC} = 4.5 \text{ V to } 5.5 \text{ V}$	200	400	-	200	-	MHz
C_{PD}	power dissipation capacitance	$V_I = GND \text{ to } V_{CC};$ $V_{CC} = 3.3 \text{ V}$	[4] _	17	-	-	-	pF

^[1] Typical values are measured at $T_{amb} = 25$ °C and $V_{CC} = 1.8$ V, 2.5 V, 2.7 V, 3.3 V and 5.0 V respectively.

$$P_D = C_{PD} \times V_{CC}^2 \times f_i \times N + \sum (C_L \times V_{CC}^2 \times f_o) \text{ where:}$$

 f_i = input frequency in MHz;

f_o = output frequency in MHz;

C_L = output load capacitance in pF;

 V_{CC} = supply voltage in V;

N = number of inputs switching;

 $\sum (C_L \times V_{CC}{}^2 \times f_o)$ = sum of outputs.

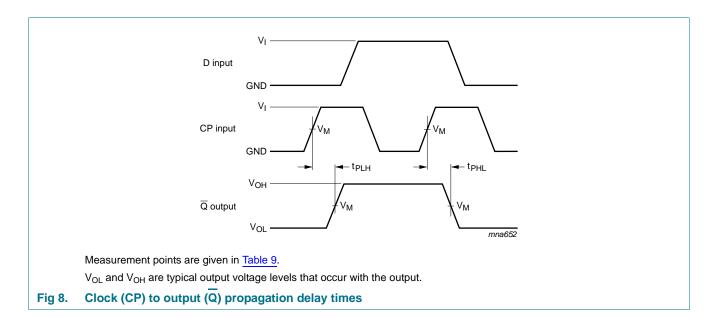
^[2] t_{pd} is the same as t_{PLH} and t_{PHL} .

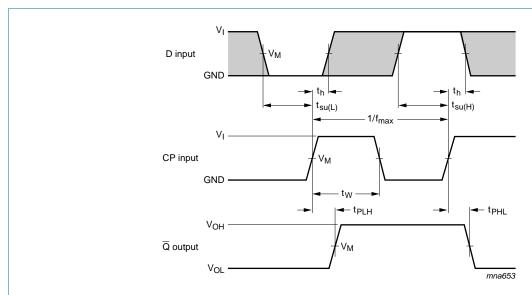
^[3] t_{su} is the same as $t_{su(H)}$ and $t_{su(L)}$.

^[4] C_{PD} is used to determine the dynamic power dissipation (P_D in μW).

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12. Waveforms





Measurement points are given in Table 9.

 $\ensuremath{V_{OL}}$ and $\ensuremath{V_{OH}}$ are typical output voltage levels that occur with the output.

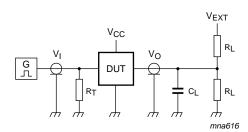
The shaded areas indicate when the input is permitted to change for predictable output performance.

Fig 9. Clock (CP) to output (Q) propagation delay times, clock pulse width, D to set-up times, the CP to D hold times and maximum clock pulse frequency

Single D-type flip-flop; positive-edge trigger

Table 9. Measurement points

Supply voltage	Input	Output
V _{CC}	V _M	V _M
1.65 V to 1.95 V	$0.5 \times V_{CC}$	0.5 × V _{CC}
2.3 V to 2.7 V	$0.5 \times V_{CC}$	0.5 × V _{CC}
2.7 V	1.5 V	1.5 V
3.0 V to 3.6 V	1.5 V	1.5 V
4.5 V to 5.5 V	0.5 × V _{CC}	0.5 × V _{CC}



Test data is given in Table 10.

Definitions for test circuit:

 R_L = Load resistance.

 C_L = Load capacitance including jig and probe capacitance.

 R_T = Termination resistance should be equal to the output impedance Z_0 of the pulse generator.

 V_{EXT} = External voltage for measuring switching times.

Fig 10. Test circuit for measuring switching times

Table 10. Test data

Supply voltage	Input		Load		V _{EXT}
V _{CC}	Vı	$t_r = t_f$	CL	R _L	t _{PLH} , t _{PHL}
1.65 V to 1.95 V	V _{CC}	\leq 2.0 ns	30 pF	1 kΩ	open
2.3 V to 2.7 V	V _{CC}	≤ 2.0 ns	30 pF	500 Ω	open
2.7 V	2.7 V	≤ 2.5 ns	50 pF	500 Ω	open
3.0 V to 3.6 V	2.7 V	≤ 2.5 ns	50 pF	500 Ω	open
4.5 V to 5.5 V	V _{CC}	≤ 2.5 ns	50 pF	500 Ω	open

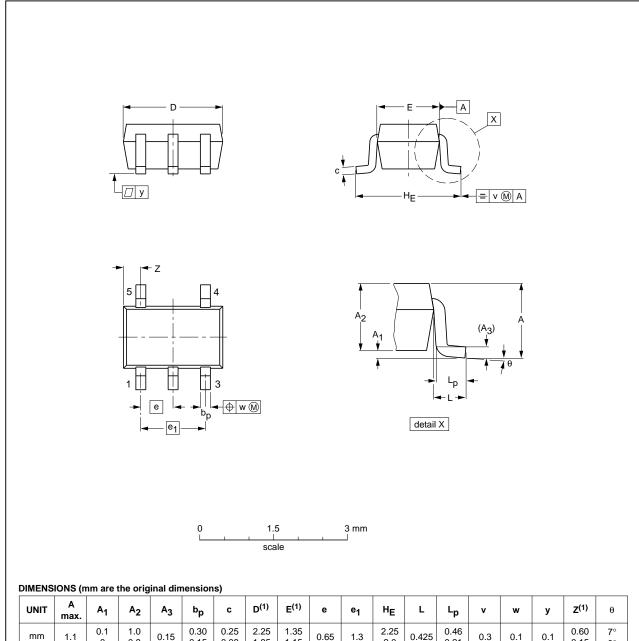
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Single D-type flip-flop; positive-edge trigger

13. Package outline

TSSOP5: plastic thin shrink small outline package; 5 leads; body width 1.25 mm

SOT353-1



UNIT	A max.	A ₁	A ₂	A ₃	bp	С	D ⁽¹⁾	E ⁽¹⁾	е	e ₁	HE	L	Lp	v	w	у	Z ⁽¹⁾	θ
mm	1.1	0.1 0	1.0 0.8	0.15	0.30 0.15	0.25 0.08	2.25 1.85	1.35 1.15	0.65	1.3	2.25 2.0	0.425	0.46 0.21	0.3	0.1	0.1	0.60 0.15	7° 0°

1. Plastic or metal protrusions of 0.15 mm maximum per side are not included.

OUTLINE		REFER	EUROPEAN	ISSUE DATE			
VERSION	IEC	JEDEC	JEITA		PROJECTION	ISSUE DATE	
SOT353-1		MO-203	SC-88A			-00-09-01 03-02-19	

Fig 11. Package outline SOT353-1 (TSSOP5)

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Plastic surface-mounted package; 5 leads

SOT753

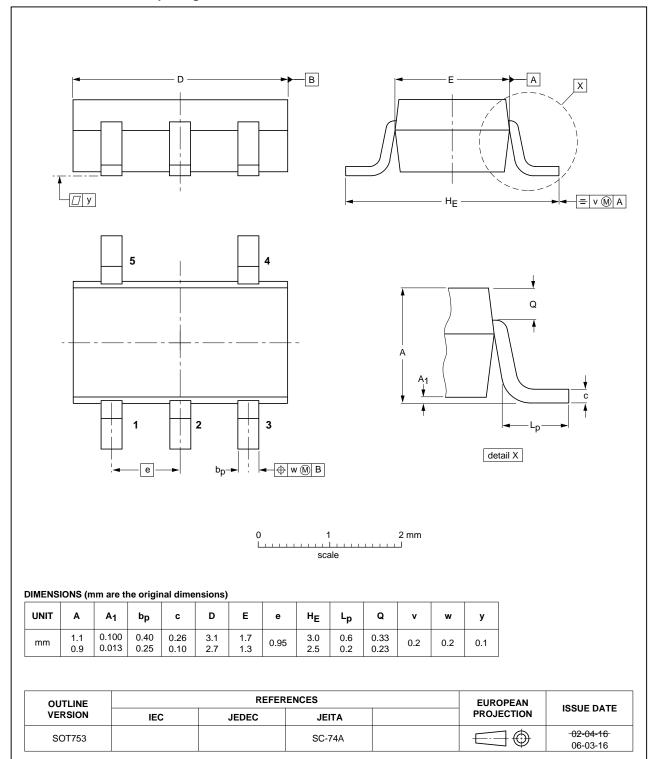


Fig 12. Package outline SOT753 (SC-74A)

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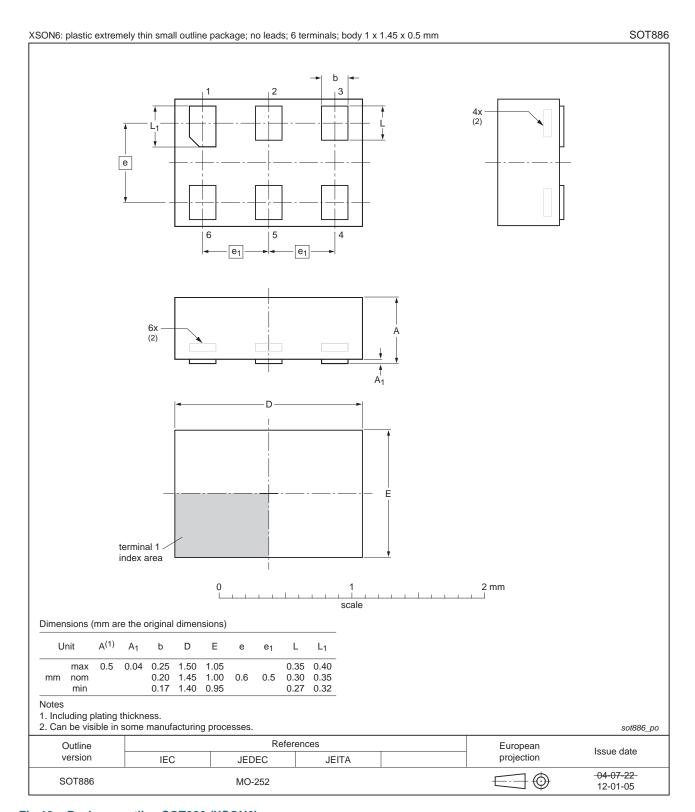


Fig 13. Package outline SOT886 (XSON6)

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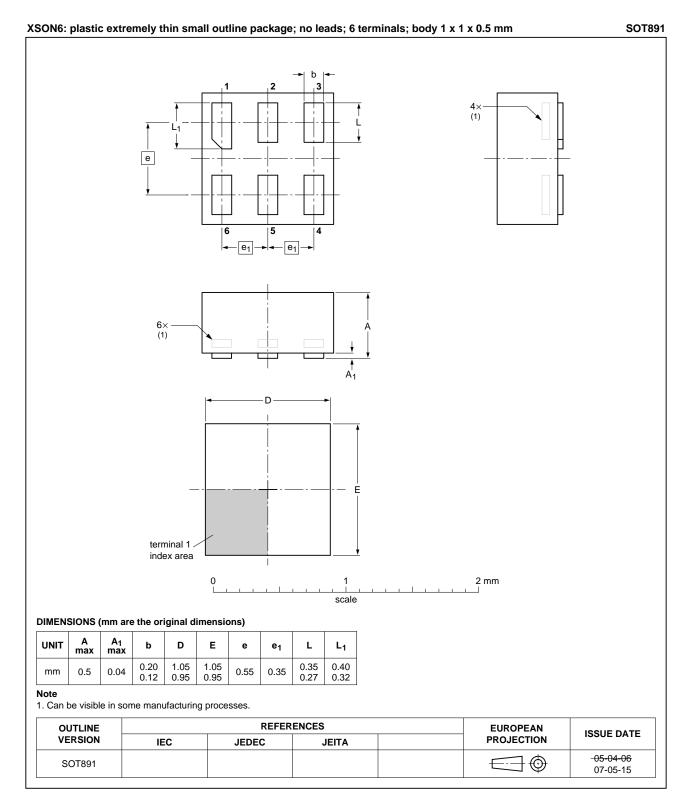


Fig 14. Package outline SOT891 (XSON6)

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Single D-type flip-flop; positive-edge trigger

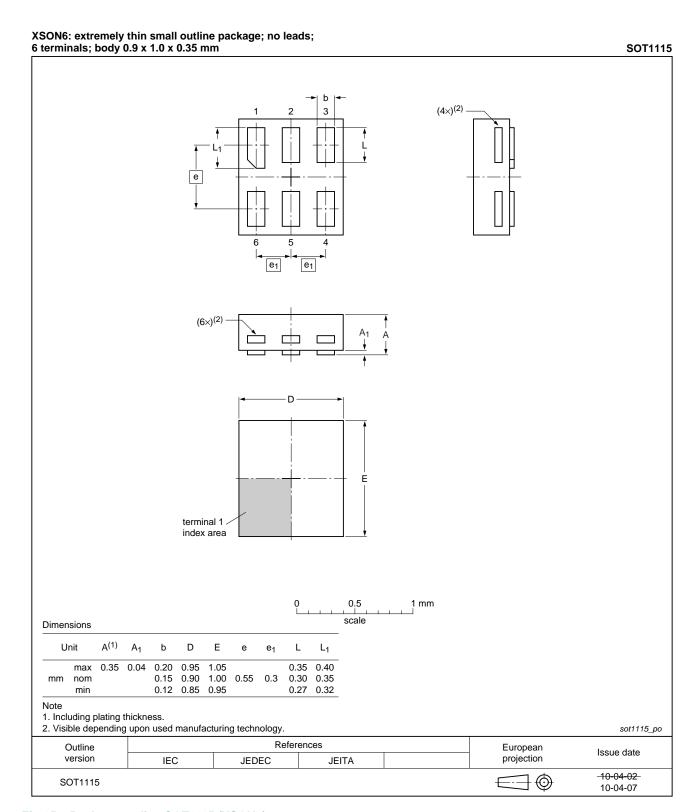


Fig 15. Package outline SOT1115 (XSON6)

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Single D-type flip-flop; positive-edge trigger

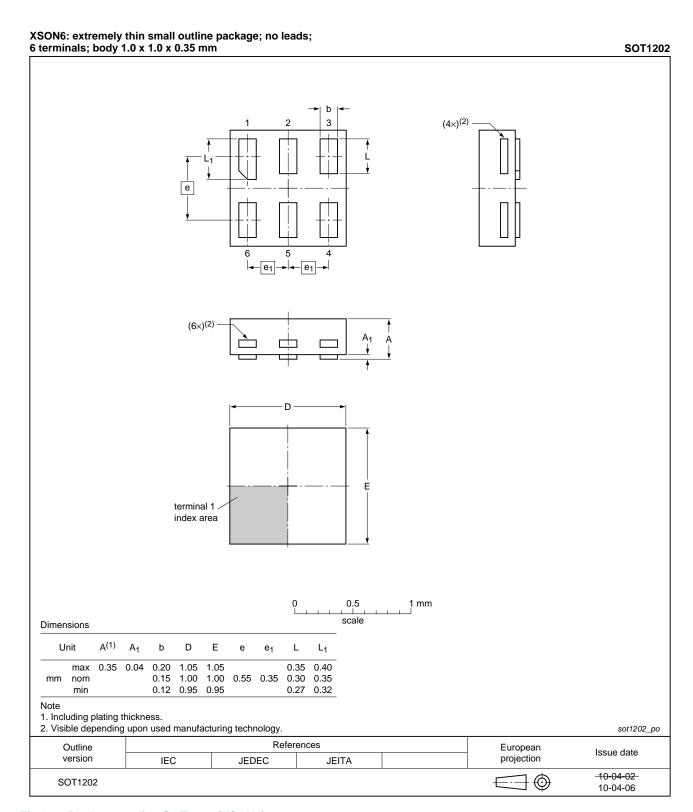


Fig 16. Package outline SOT1202 (XSON6)

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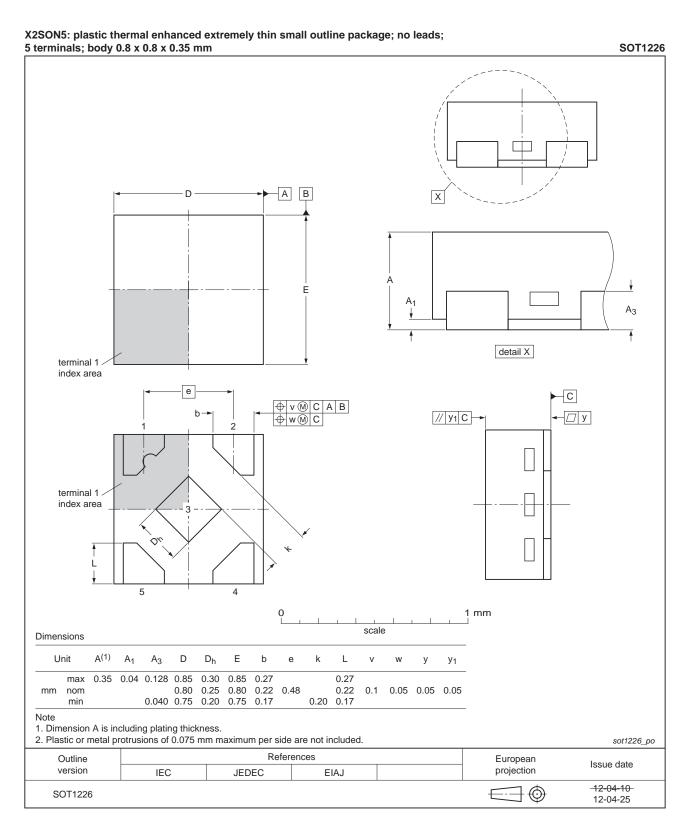


Fig 17. Package outline SOT1226 (X2SON5)

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Single D-type flip-flop; positive-edge trigger

14. Abbreviations

Table 11. Abbreviations

Acronym	Description
CMOS	Complementary Metal Oxide Semiconductor
DUT	Device Under Test
ESD	ElectroStatic Discharge
НВМ	Human Body Model
MM	Machine Model
TTL	Transistor-Transistor Logic

15. Revision history

Table 12. Revision history

	•			
Document ID	Release date	Data sheet status	Change notice	Supersedes
74LVC1G80 v.12	20120702	Product data sheet	-	74LVC1G80 v.11
Modifications:	 Added type 	number 74LVC1G80GX (S	OT1226)	
74LVC1G80 v.11	20120402	Product data sheet	-	74LVC1G80 v.10
Modifications:	 Errata in tal 	ole 3 corrected (description	CP input).	
74LVC1G80 v.10	20111202	Product data sheet	-	74LVC1G80 v.9
Modifications:	 Legal pages 	s updated.		
74LVC1G80 v.9	20100928	Product data sheet	-	74LVC1G80 v.8
Modifications:	 Added type 	number 74LVC1G80GN (S	OT1115/XSON6 package	e).
	 Added type 	number 74LVC1G80GS (S	OT1202/XSON6 package	e).
74LVC1G80 v.8	20070829	Product data sheet	-	74LVC1G80 v.7
74LVC1G80 v.7	20061012	Product data sheet	-	74LVC1G80 v.6
74LVC1G80 v.6	20040910	Product specification		74LVC1G80 v.5
74LVC1G80 v.5	20040629	Product specification	-	74LVC1G80 v.4
74LVC1G80 v.4	20040429	Product specification	-	74LVC1G80 v.3
74LVC1G80 v.3	20030526	Product specification	-	74LVC1G80 v.2
74LVC1G80 v.2	20030130	Product specification	-	74LVC1G80 v.1
74LVC1G80 v.1	20010404	Product specification	-	-

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16. Legal information

16.1 Data sheet status

Document status[1][2]	Product status[3]	Definition
Objective [short] data sheet	Development	This document contains data from the objective specification for product development.
Preliminary [short] data sheet	Qualification	This document contains data from the preliminary specification.
Product [short] data sheet	Production	This document contains the product specification.

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Single D-type flip-flop; positive-edge trigger

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