# 74LVC1G80

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

Rev. 15 — 29 March 2022

Product data sheet

### 1. General description

The 74LVC1G80 is a single positive-edge triggered D-type flip-flop. Data at the D-input that meets the set-up and hold time requirements on the LOW-to-HIGH clock transition will be stored in the flip-flop and its complement will appear at the  $\overline{\mathbb{Q}}$  output. Inputs can be driven from either 3.3 V or 5 V devices. This feature allows the use of these devices as translators in mixed 3.3 V and 5 V environments.

Schmitt-trigger action at all inputs makes the circuit tolerant of slower input rise and fall times.

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

#### 2. Features and benefits

- Wide supply voltage range from 1.65 V to 5.5 V
- Overvoltage tolerant inputs to 5.5 V
- · High noise immunity
- ±24 mA output drive (V<sub>CC</sub> = 3.0 V)
- · CMOS low power dissipation
- · Direct interface with TTL levels
- I<sub>OFF</sub> circuitry provides partial Power-down mode operation
- · Latch-up performance exceeds 250 mA
- Complies with JEDEC standard:
  - JESD8-7 (1.65 V to 1.95 V)
  - JESD8-5 (2.3 V to 2.7 V)
  - JESD8C (2.7 V to 3.6 V)
  - JESD36 (4.5 V to 5.5 V)
- ESD protection:
  - HBM JESD22-A114F exceeds 2000 V
  - MM JESD22-A115-A exceeds 200 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	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 × 1.45 × 0.5 mm	SOT886				
74LVC1G80GN	-40 °C to +125 °C	XSON6	extremely thin small outline package; no leads; 6 terminals; body 0.9 × 1.0 × 0.35 mm	SOT1115				
74LVC1G80GS	-40 °C to +125 °C	XSON6	extremely thin small outline package; no leads; 6 terminals; body 1.0 × 1.0 × 0.35 mm	SOT1202				
74LVC1G80GX	-40 °C to +125 °C	X2SON5	plastic thermal enhanced extremely thin small outline package; no leads; 5 terminals; body 0.8 × 0.8 × 0.32 mm	SOT1226-3				

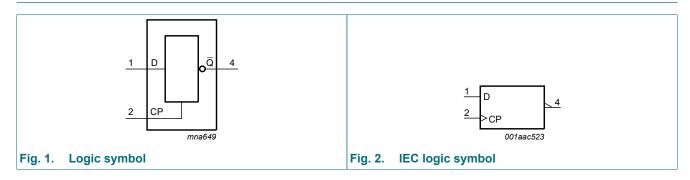
## 4. Marking

Table 2. Marking codes

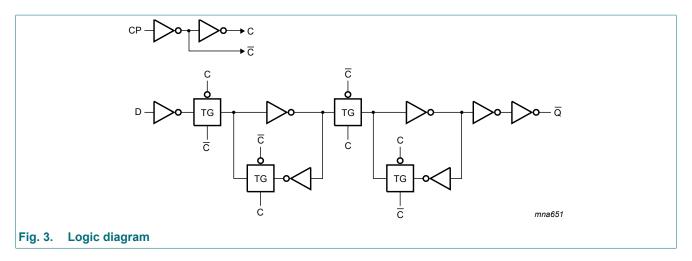
Table 2. Marking codes			
Marking[1]			
VT			
V80			
VT			

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

## 5. Functional diagram

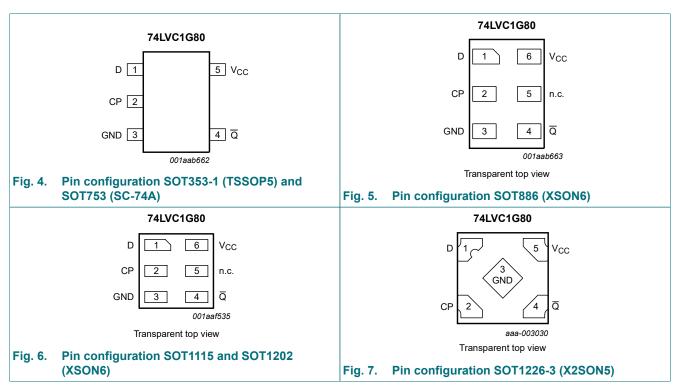


### Single D-type flip-flop; positive-edge trigger



## 6. Pinning information

### 6.1. Pinning



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

### 6.2. Pin description

Table 3. Pin description

Symbol	Pin	Pin		
	TSSOP5, SC-74A, 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 <sub>CC</sub>	5	6	supply voltage	

## 7. Functional description

#### **Table 4. Function table**

 $H = HIGH \ voltage \ level; \ L = LOW \ voltage \ level; \ \uparrow = LOW-to-HIGH \ CP \ transition; \ X = don't \ care;$ 

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

Input		Output
СР	D	Q
<b>↑</b>	L	Н
<b>↑</b>	Н	L
L	X	q

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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 <sub>CC</sub>	supply voltage			-0.5	+6.5	V
I <sub>IK</sub>	input clamping current	V <sub>I</sub> < 0 V		-50	-	mA
VI	input voltage		[1]	-0.5	+6.5	V
I <sub>OK</sub>	output clamping current	V <sub>O</sub> > V <sub>CC</sub> or V <sub>O</sub> < 0 V		-	±50	mA
Vo	output voltage	Active mode	[1]	-0.5	V <sub>CC</sub> + 0.5	V
		Power-down mode; V <sub>CC</sub> = 0 V	[1]	-0.5	+6.5	V
Io	output current	V <sub>O</sub> = 0 V to V <sub>CC</sub>		-	±50	mA
I <sub>CC</sub>	supply current			-	100	mA
I <sub>GND</sub>	ground current			-100	-	mA
P <sub>tot</sub>	total power dissipation	T <sub>amb</sub> = -40 °C to +125 °C	[2]	-	250	mW
T <sub>stg</sub>	storage temperature			-65	+150	°C

<sup>[1]</sup> The input and output voltage ratings may be exceeded if the input and output current ratings are observed.

For SOT753 (SC-74A) package: Ptot derates linearly with 3.8 mW/K above 85 °C.

For SOT886 (XSON6) package:  $P_{tot}$  derates linearly with 3.3 mW/K above 74 °C.

For SOT1115 (XSON6) package:  $P_{tot}$  derates linearly with 3.2 mW/K above 71 °C.

For SOT1202 (XSON6) package:  $P_{tot}$  derates linearly with 3.3 mW/K above 74 °C.

For SOT1226-3 (X2SON5) package: Ptot derates linearly with 3.0 mW/K above 67 °C.

## 9. Recommended operating conditions

Table 6. Recommended operating conditions

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

<sup>[2]</sup> For SOT353-1 (TSSOP5) package: Ptot derates linearly with 3.3 mW/K above 74 °C.

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## 10. Static characteristics

#### **Table 7. Static characteristics**

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

Symbol	Parameter	Conditions	Min	Typ[1]	Max	Unit
T <sub>amb</sub> = -	40 °C to +85 °C	·				
V <sub>IH</sub>	HIGH-level input voltage	V <sub>CC</sub> = 1.65 V to 1.95 V	0.65 × V <sub>CC</sub>	-	-	V
		V <sub>CC</sub> = 2.3 V to 2.7 V	1.7	-	-	V
		V <sub>CC</sub> = 2.7 V to 3.6 V	2.0	-	-	V
		V <sub>CC</sub> = 4.5 V to 5.5 V	0.7 × V <sub>CC</sub>	-	-	V
V <sub>IL</sub>	LOW-level input voltage	V <sub>CC</sub> = 1.65 V to 1.95 V	-	-	0.35 × V <sub>CC</sub>	V
		V <sub>CC</sub> = 2.3 V to 2.7 V	-	-	0.7	V
		V <sub>CC</sub> = 2.7 V to 3.6 V	-	-	0.8	V
		V <sub>CC</sub> = 4.5 V to 5.5 V	-	-	0.3 × V <sub>CC</sub>	V
V <sub>OH</sub>	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 <sub>CC</sub> - 0.1	-	-	V
		I <sub>O</sub> = -4 mA; V <sub>CC</sub> = 1.65 V	1.2	-	-	V
		I <sub>O</sub> = -8 mA; V <sub>CC</sub> = 2.3 V	1.9	-	-	V
		I <sub>O</sub> = -12 mA; V <sub>CC</sub> = 2.7 V	2.2	-	-	V
		I <sub>O</sub> = -24 mA; V <sub>CC</sub> = 3.0 V	2.3	-	-	V
		I <sub>O</sub> = -32 mA; V <sub>CC</sub> = 4.5 V	3.8	-	-	V
V <sub>OL</sub>	LOW-level output voltage	$V_I = V_{IH}$ or $V_{IL}$				
		I <sub>O</sub> = 100 μA; V <sub>CC</sub> = 1.65 V to 5.5 V	-	-	0.1	V
		I <sub>O</sub> = 4 mA; V <sub>CC</sub> = 1.65 V	-	-	0.45	V
		I <sub>O</sub> = 8 mA; V <sub>CC</sub> = 2.3 V	-	-	0.3	V
		I <sub>O</sub> = 12 mA; V <sub>CC</sub> = 2.7 V	-	-	0.4	V
		I <sub>O</sub> = 24 mA; V <sub>CC</sub> = 3.0 V	-	-	0.55	V
		I <sub>O</sub> = 32 mA; V <sub>CC</sub> = 4.5 V	-	-	0.55	V
l <sub>l</sub>	input leakage current	$V_I$ = 5.5 V or GND; $V_{CC}$ = 0 V to 5.5 V	-	±0.1	±1	μΑ
I <sub>OFF</sub>	power-off leakage current	$V_{CC} = 0 \text{ V}; V_{I} \text{ or } V_{O} = 5.5 \text{ V}$	-	±0.1	±2	μA
I <sub>CC</sub>	supply current	$V_I = 5.5 \text{ V or GND};$ - 0.1 $V_{CC} = 1.65 \text{ V to } 5.5 \text{ V}; I_O = 0 \text{ A}$		4	μΑ	
Δl <sub>CC</sub>	additional supply current	per pin; V <sub>CC</sub> = 2.3 V to 5.5 V; V <sub>I</sub> = V <sub>CC</sub> - 0.6 V; I <sub>O</sub> = 0 A	-	5	500	μΑ
Cı	input capacitance	$V_{CC}$ = 3.3 V; $V_I$ = GND to $V_{CC}$	-	5	-	pF

Symbol	Parameter	Conditions	Min	Typ[1]	Max	Unit
T <sub>amb</sub> = -	40 °C to +125 °C					
$V_{IH}$	HIGH-level input voltage	V <sub>CC</sub> = 1.65 V to 1.95 V	0.65 × V <sub>CC</sub>	-	-	V
		V <sub>CC</sub> = 2.3 V to 2.7 V	1.7	-	-	V
		V <sub>CC</sub> = 2.7 V to 3.6 V	2.0	-	-	V
		V <sub>CC</sub> = 4.5 V to 5.5 V	0.7 × V <sub>CC</sub>	-	-	V
V <sub>IL</sub>	LOW-level input voltage	V <sub>CC</sub> = 1.65 V to 1.95 V	-	-	0.35 × V <sub>CC</sub>	V
		V <sub>CC</sub> = 2.3 V to 2.7 V	-	-	0.7	V
		V <sub>CC</sub> = 2.7 V to 3.6 V	-	-	0.8	V
		V <sub>CC</sub> = 4.5 V to 5.5 V	-	-	0.3 × V <sub>CC</sub>	V
V <sub>OH</sub>	HIGH-level output voltage	V <sub>I</sub> = V <sub>IH</sub> or V <sub>IL</sub>				
		$I_{O}$ = -100 $\mu$ A; $V_{CC}$ = 1.65 $V$ to 5.5 $V$	V <sub>CC</sub> - 0.1	-	-	V
		I <sub>O</sub> = -4 mA; V <sub>CC</sub> = 1.65 V	0.95	-	-	V
		I <sub>O</sub> = -8 mA; V <sub>CC</sub> = 2.3 V	1.7	-	-	V
		$I_{O}$ = -12 mA; $V_{CC}$ = 2.7 V	1.9	-	-	V
		$I_{O}$ = -24 mA; $V_{CC}$ = 3.0 V	2.0	-	-	V
		$I_{O}$ = -32 mA; $V_{CC}$ = 4.5 V	3.4	-	-	V
V <sub>OL</sub>	LOW-level output voltage	V <sub>I</sub> = V <sub>IH</sub> or V <sub>IL</sub>				
		I <sub>O</sub> = 100 μA; V <sub>CC</sub> = 1.65 V to 5.5 V	-	-	0.1	V
		I <sub>O</sub> = 4 mA; V <sub>CC</sub> = 1.65 V	-	-	0.70	V
		I <sub>O</sub> = 8 mA; V <sub>CC</sub> = 2.3 V	-	-	0.45	V
		I <sub>O</sub> = 12 mA; V <sub>CC</sub> = 2.7 V	-	-	0.60	V
		I <sub>O</sub> = 24 mA; V <sub>CC</sub> = 3.0 V	-	-	0.80	V
		I <sub>O</sub> = 32 mA; V <sub>CC</sub> = 4.5 V	-	-	0.80	V
I <sub>I</sub>	input leakage current	$V_{I} = 5.5 \text{ V or GND}; V_{CC} = 0 \text{ V to } 5.5 \text{ V}$	-	-	±1	μΑ
I <sub>OFF</sub>	power-off leakage current	$V_{CC} = 0 \text{ V; } V_{I} \text{ or } V_{O} = 5.5 \text{ V}$		-	±2	μΑ
I <sub>CC</sub>	supply current	V <sub>I</sub> = 5.5 V or GND; V <sub>CC</sub> = 1.65 V to 5.5 V; I <sub>O</sub> = 0 A	4		4	μΑ
ΔI <sub>CC</sub>	additional supply current	per pin; V <sub>CC</sub> = 2.3 V to 5.5 V; V <sub>I</sub> = V <sub>CC</sub> - 0.6 V; I <sub>O</sub> = 0 A	-	-	500	μA

<sup>[1]</sup> All typical values are measured at  $V_{CC}$  = 3.3 V and  $T_{amb}$  = 25 °C.

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## 11. Dynamic characteristics

**Table 8. Dynamic characteristics** 

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

Symbol	Parameter	Conditions	-40	°C to +85	°C	-40 °C to +125 °C		Unit
			Min	Typ[1]	Max	Min	Max	1
t <sub>pd</sub>	propagation	CP to $\overline{Q}$ ; see Fig. 8 [2]						
	delay	V <sub>CC</sub> = 1.65 V to 1.95 V	1.0	3.4	9.9	1.0	13.0	ns
		V <sub>CC</sub> = 2.3 V to 2.7 V	0.5	2.3	7.0	0.5	9.0	ns
		V <sub>CC</sub> = 2.7 V	0.5	2.5	6.0	0.5	8.0	ns
		V <sub>CC</sub> = 3.0 V to 3.6 V	0.9	2.4	5.0	0.9	6.5	ns
		V <sub>CC</sub> = 4.5 V to 5.5 V	0.5	1.8	4.5	0.5	6.0	ns
t <sub>su</sub>	set-up time	HIGH or LOW; D to CP; see Fig. 9 [3]						
		V <sub>CC</sub> = 1.65 V to 1.95 V	2.3	0.8	-	2.3	-	ns
		V <sub>CC</sub> = 2.3 V to 2.7 V	1.5	0.6	-	1.5	-	ns
		V <sub>CC</sub> = 2.7 V	1.5	0.5	-	1.5	-	ns
		V <sub>CC</sub> = 3.0 V to 3.6 V	1.3	0.4	-	1.3	-	ns
		V <sub>CC</sub> = 4.5 V to 5.5 V	1.1	0.5	-	1.1	-	ns
t <sub>h</sub>	hold time	D to CP; see Fig. 9						
		V <sub>CC</sub> = 1.65 V to 1.95 V	0	-0.6	-	0	-	ns
		V <sub>CC</sub> = 2.3 V to 2.7 V	0	-0.4	-	0	-	ns
		V <sub>CC</sub> = 2.7 V	+0.5	-0.2	-	0.5	-	ns
		V <sub>CC</sub> = 3.0 V to 3.6 V	0.9	0.2	-	0.9	-	ns
		V <sub>CC</sub> = 4.5 V to 5.5 V	+0.5	-0.1	-	0.5	-	ns
t <sub>W</sub>	pulse width	CP HIGH or LOW; see Fig. 9						
		V <sub>CC</sub> = 1.65 V to 1.95 V	3.0	1.1	-	3.0	-	ns
		V <sub>CC</sub> = 2.3 V to 2.7 V	2.5	0.7	-	2.5	-	ns
		V <sub>CC</sub> = 2.7 V	2.5	0.6	-	2.5	-	ns
		V <sub>CC</sub> = 3.0 V to 3.6 V	2.5	0.6	-	2.5	-	ns
		V <sub>CC</sub> = 4.5 V to 5.5 V	2.0	0.5	-	2.0	-	ns
f <sub>max</sub>	maximum	CP; see Fig. 9						
	frequency	V <sub>CC</sub> = 1.65 V to 1.95 V	160	300	-	160	-	MHz
		V <sub>CC</sub> = 2.3 V to 2.7 V	160	350	-	160	-	MHz
		V <sub>CC</sub> = 2.7 V	160	350	-	160	-	MHz
		V <sub>CC</sub> = 3.0 V to 3.6 V	160	350	-	160	-	MHz
		V <sub>CC</sub> = 4.5 V to 5.5 V	200	400	-	200	-	MHz
C <sub>PD</sub>	power dissipation capacitance	$V_1 = GND \text{ to } V_{CC}; V_{CC} = 3.3 \text{ V}$ [4]	-	17	-	-	-	pF

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.

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t<sub>pd</sub> is the same as t<sub>PLH</sub> and t<sub>PHL</sub>.

<sup>[3]</sup> 

 $t_{su}$  is the same as  $t_{su(H)}$  and  $t_{su(L)}$ .  $C_{PD}$  is used to determine the dynamic power dissipation ( $P_D$  in  $\mu W$ ).

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

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#### 11.1. Waveforms and test circuit

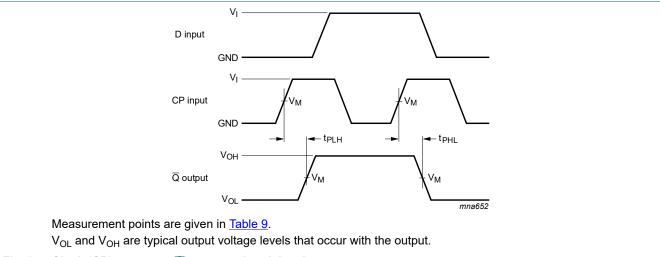
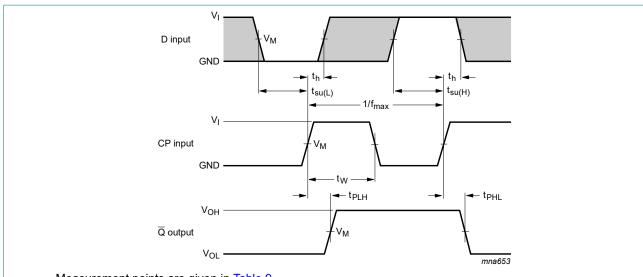


Fig. 8. Clock (CP) to output  $(\overline{\mathbb{Q}})$  propagation delay times



Measurement points are given in <u>Table 9</u>.

V<sub>OL</sub> and V<sub>OH</sub> are typical output voltage levels that occur with the output.

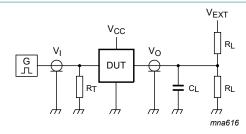
The shaded areas indicate when the input is permitted to change for predictable output performance.

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

Table 9. Measurement points

Supply voltage	Input	Output
V <sub>CC</sub>	V <sub>M</sub>	V <sub>M</sub>
1.65 V to 1.95 V	0.5 × V <sub>CC</sub>	0.5 × V <sub>CC</sub>
2.3 V to 2.7 V	0.5 × V <sub>CC</sub>	0.5 × V <sub>CC</sub>
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 <sub>CC</sub>	0.5 × V <sub>CC</sub>

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



Test data is given in Table 10.

Definitions for test circuit:

R<sub>L</sub> = Load resistance;

 $C_L$  = Load capacitance including jig and probe capacitance;

R<sub>T</sub> = Termination resistance should be equal to the output impedance Z<sub>o</sub> of the pulse generator;

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

### Fig. 10. Test circuit for measuring switching times

#### Table 10. Test data

Supply voltage	Input		Load		V <sub>EXT</sub>
V <sub>CC</sub>	V <sub>I</sub>	$t_r = t_f$	CL	R <sub>L</sub>	t <sub>PLH</sub> , t <sub>PHL</sub>
1.65 V to 1.95 V	V <sub>CC</sub>	≤ 2.0 ns	30 pF	1 kΩ	open
2.3 V to 2.7 V	V <sub>CC</sub>	≤ 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 <sub>CC</sub>	≤ 2.5 ns	50 pF	500 Ω	open

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

## 12. Package outline

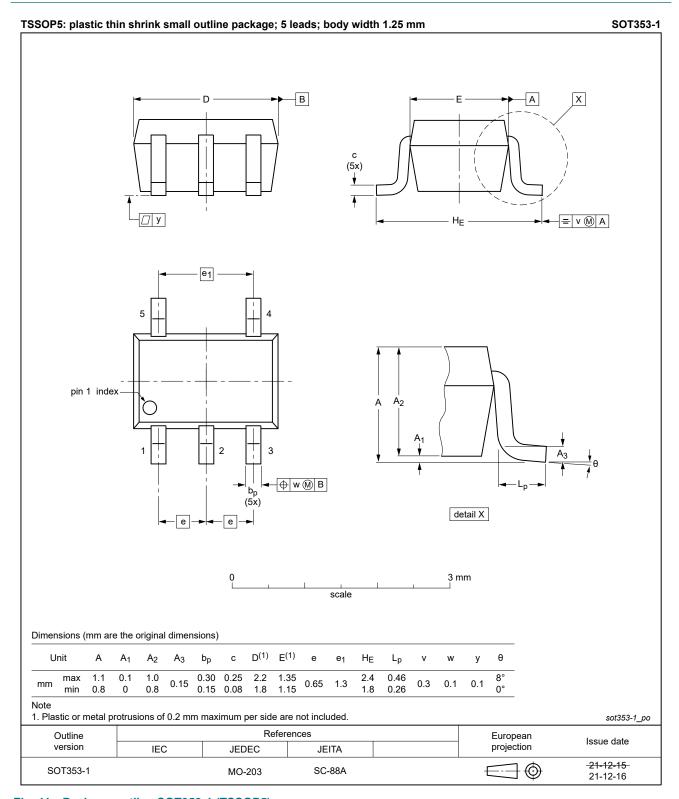


Fig. 11. Package outline SOT353-1 (TSSOP5)

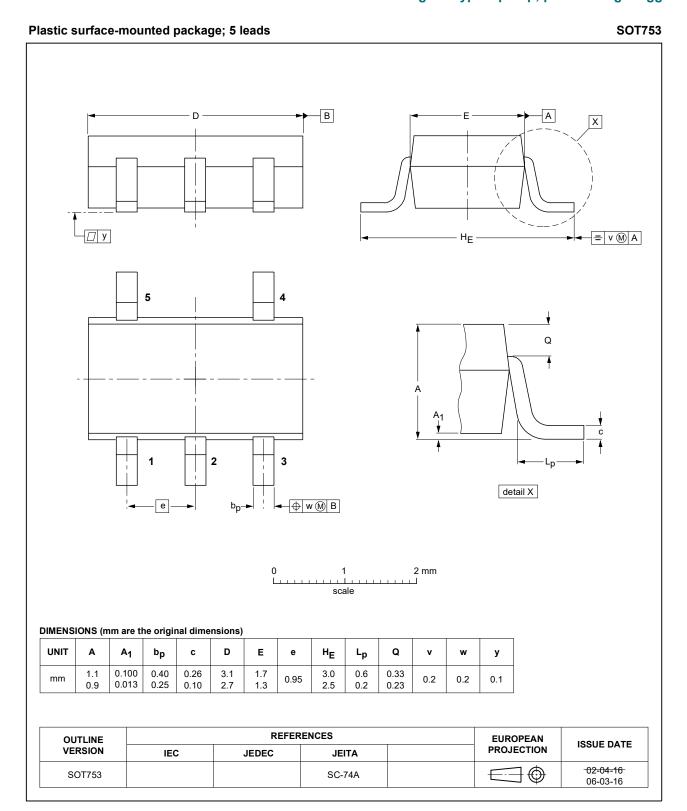


Fig. 12. Package outline SOT753 (SC-74A)

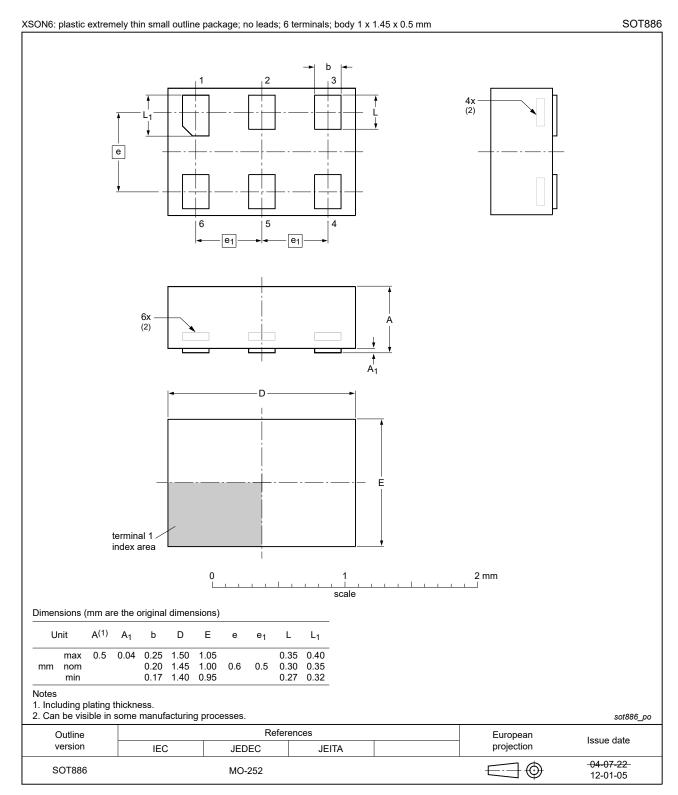


Fig. 13. Package outline SOT886 (XSON6)

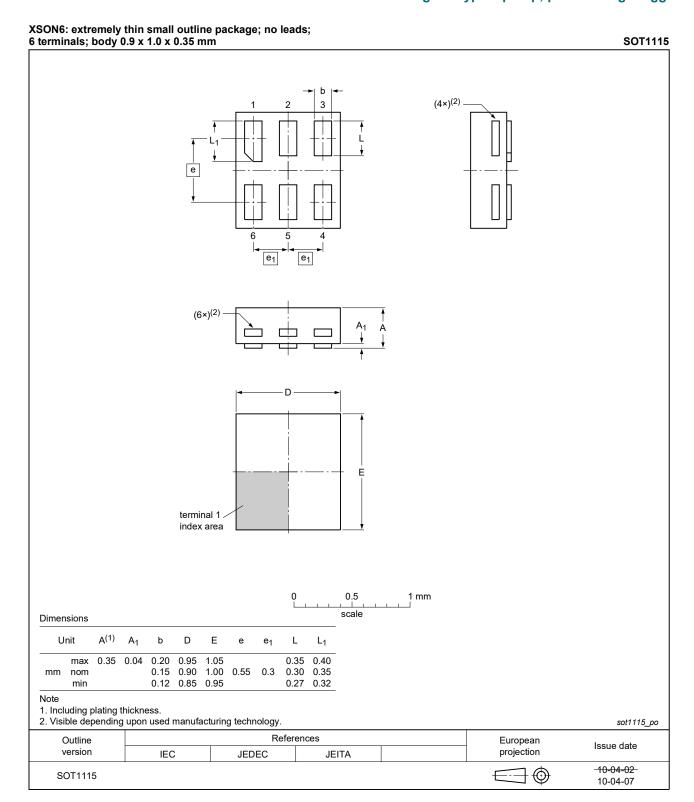


Fig. 14. Package outline SOT1115 (XSON6)

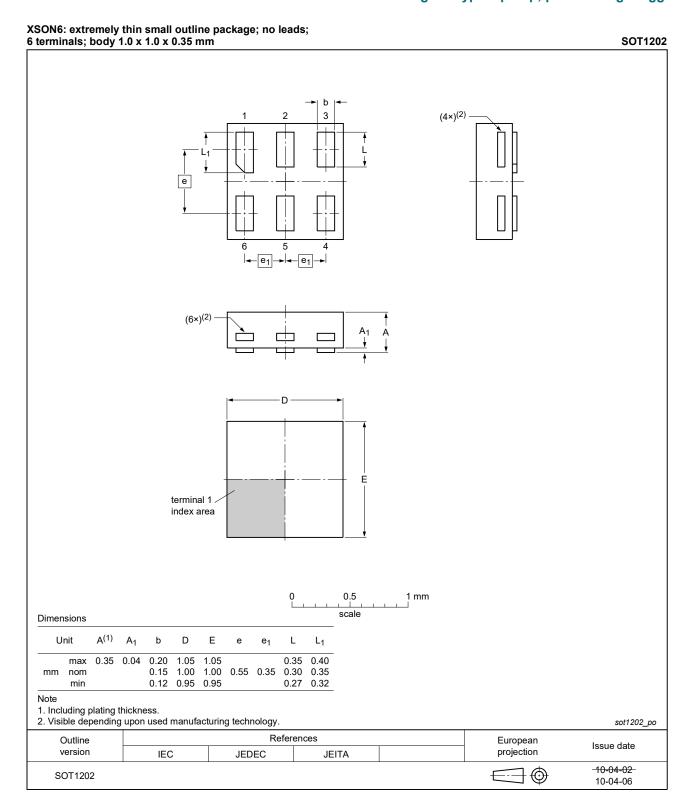


Fig. 15. Package outline SOT1202 (XSON6)

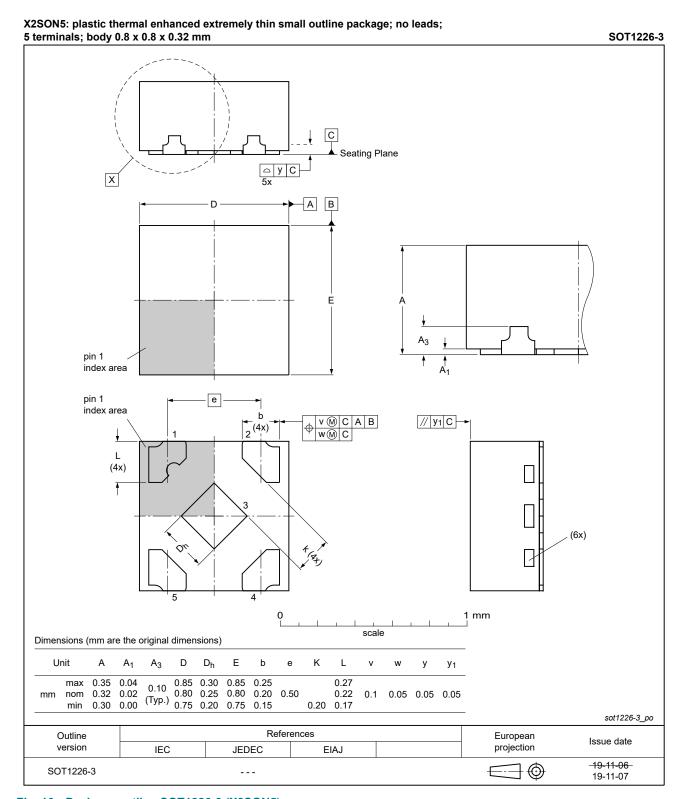


Fig. 16. Package outline SOT1226-3 (X2SON5)

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### 13. Abbreviations

#### **Table 11. Abbreviations**

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

# 14. Revision history

### Table 12. Revision history

Document ID	Release date	Data sheet status	Change notice	Supersedes		
74LVC1G80 v.15	20220329	Product data sheet	-	74LVC1G80 v.14		
Modifications:	Package S0	Package SOT1226 (X2SON5) changed to SOT1226-3 (X2SON5).				
74LVC1G80 v.14	20220131	Product data sheet	-	74LVC1G80 v.13		
Modifications:	guidelines of Legal texts Type number Section 1 are Table 5: Der	<ul> <li>The format of this data sheet has been redesigned to comply with the identity guidelines of Nexperia.</li> <li>Legal texts have been adapted to the new company name where appropriate.</li> <li>Type number 74LVC1G80GF (SOT891/XSON6) removed.</li> <li>Section 1 and Section 2 updated.</li> <li>Table 5: Derating values for P<sub>tot</sub> total power dissipation updated.</li> <li>Fig. 11: Package outline drawing SOT353-1 (TSSOP5) has changed.</li> </ul>				
74LVC1G80 v.13	20161205	Product data sheet	-	74LVC1G80 v.12		
Modifications:	• <u>Table 7</u> : The	<u>Table 7</u> : The maximum limits for leakage current and supply current have changed.				
74LVC1G80 v.12	20120702	Product data sheet	-	74LVC1G80 v.11		
Modifications:	Added type	Added type number 74LVC1G80GX (SOT1226)				
74LVC1G80 v.11	20120402	Product data sheet	-	74LVC1G80 v.10		
Modifications:	Errata in <u>Ta</u>	Errata in <u>Table 3</u> corrected (description CP input).				
74LVC1G80 v.10	20111202	Product data sheet	-	74LVC1G80 v.9		
Modifications:	<ul> <li>Legal pages</li> </ul>	Legal pages updated.				
74LVC1G80 v.9	20100928	Product data sheet	-	74LVC1G80 v.8		
Modifications:		Adda type hamber 7 12 of cooch (con 1116/Aconto package).				
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	-	-		

### 15. Legal information

#### **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.

- Please consult the most recently issued document before initiating or completing a design.
- [2] The term 'short data sheet' is explained in section "Definitions".
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74LVC1G80

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