8-bit shift register with output register Rev. 3 — 25 June 2020

1. General description

The 74AHC594; 74AHCT594 is a high-speed Si-gate CMOS device and is pin compatible with Low-Power Schottky TTL (LSTTL). It is specified in compliance with JEDEC standard No. 7-A.

The 74AHC594; 74AHCT594 is an 8-bit, non-inverting, serial-in, parallel-out shift register that feeds an 8-bit D-type storage register. Separate clocks (SHCP and STCP) and direct overriding clears (SHR and STR) are provided on both the shift and storage registers. A serial output (Q7S) is provided for cascading purposes.

Both the shift and storage register clocks are positive-edge triggered. If the user wishes to connect both clocks together, the shift register will always be one count pulse ahead of the storage register.

2. Features and benefits

- Wide supply voltage range from 2.0 V to 5.5 V
- Balanced propagation delays
- All inputs have Schmitt-trigger action
- Overvoltage tolerant inputs to 5.5 V
- High noise immunity
- CMOS low power dissipation
- 8-bit serial-in, parallel-out shift register with storage
- · Independent direct overriding clears on shift and storage registers
- Independent clocks for shift and storage registers
- Latch-up performance exceeds 100 mA per JESD 78 Class II Level A
- Input levels:
 - For 74AHC594: CMOS level
 - For 74AHCT594: TTL level
- ESD protection:
 - HBM JESD22-A114F exceeds 2000 V
 - MM JESD22-A115-A exceeds 200 V
 - CDM JESD22-C101E exceeds 1000 V
- Multiple package options
- Specified from -40 °C to +85 °C and from -40 °C to +125 °C

3. Applications

- Serial-to parallel data conversion
- Remote control holding register

nexperia

4. Ordering information

Type number	Package						
	Temperature range	Name	Description	Version			
74AHC594D	-40 °C to +125 °C	SO16	plastic small outline package; 16 leads;	SOT109-1			
74AHCT594D			body width 3.9 mm				
74AHC594DB	-40 °C to +125 °C	SSOP16	plastic shrink small outline package; 16 leads;	SOT338-1			
74AHCT594DB			body width 5.3 mm				
74AHC594PW	-40 °C to +125 °C	TSSOP16	plastic thin shrink small outline package; 16 leads;	SOT403-1			
74AHCT594PW			body width 4.4 mm				
74AHC594BQ	-40 °C to +125 °C	DHVQFN16	plastic dual in-line compatible thermal enhanced	SOT763-1			
74AHCT594BQ			very thin quad flat package; no leads; 16 terminals body 2.5 × 3.5 × 0.85 mm				

5. Functional diagram

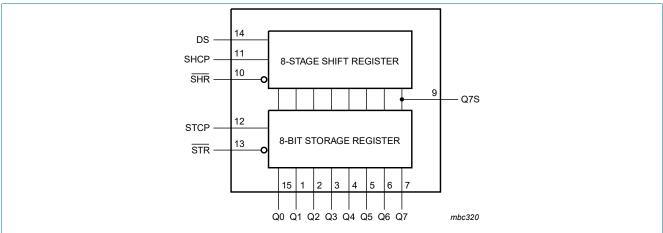
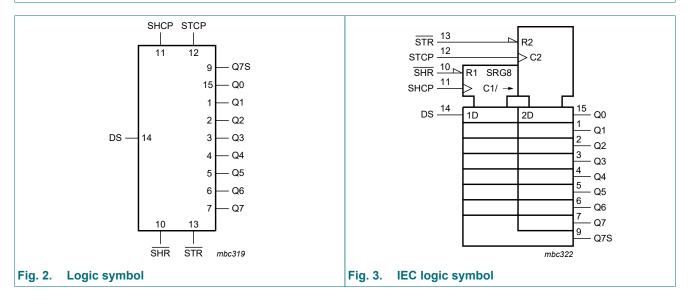
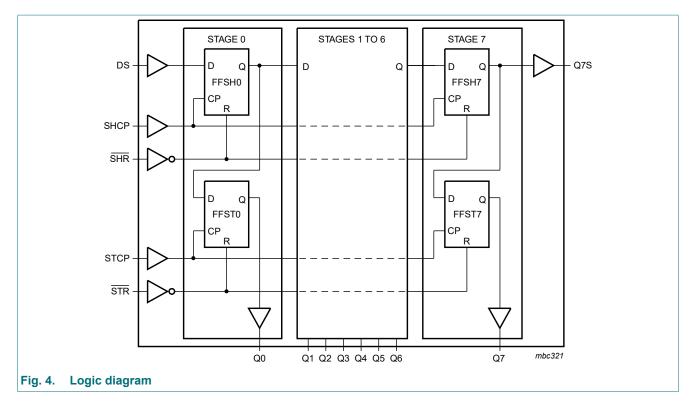


Fig. 1. Functional diagram

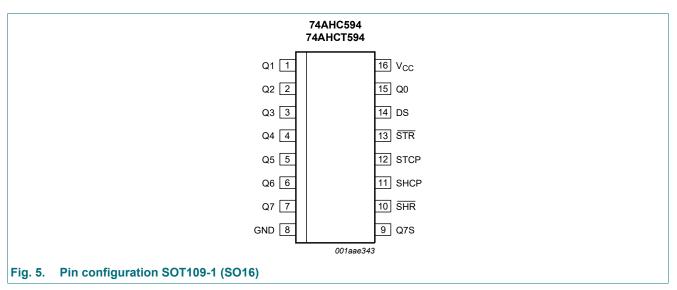


8-bit shift register with output register

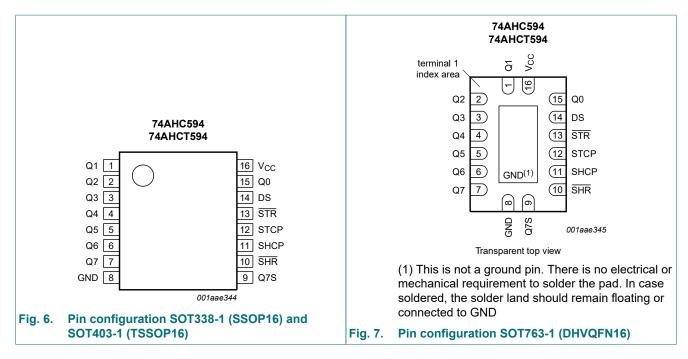


6. Pinning information

6.1. Pinning



8-bit shift register with output register



6.2. Pin description

Table 2. Pin description

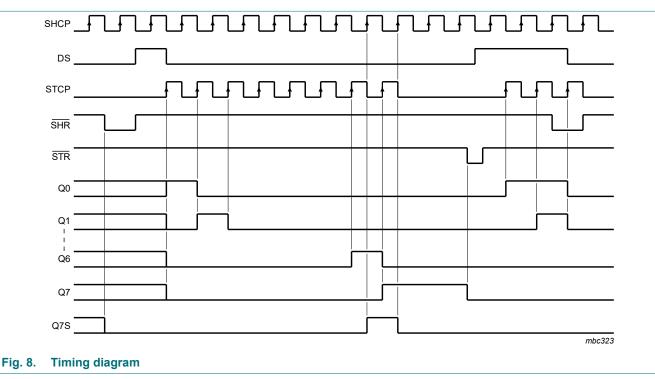
Symbol	Pin	Description
Q0, Q1, Q2, Q3, Q4, Q5, Q6, Q7	15, 1, 2, 3, 4, 5, 6, 7	parallel data output
GND	8	ground (0 V)
Q7S	9	serial data output
SHR	10	shift register reset input (active LOW)
SHCP	11	shift register clock input
STCP	12	storage register clock input
STR	13	storage register reset input (active LOW)
DS	14	serial data input
V _{CC}	16	supply voltage

7. Functional description

Table 3. Function table

H = HIGH voltage state; L = LOW voltage state; $\uparrow = LOW$ to HIGH transition; X = don't care; NC = no change.

Input					Outpu	t	Function
SHCP	STCP	SHR	STR	DS	Q7S	Qn	
Х	Х	L	Х	Х	L	NC	a LOW-state on SHR only affects the shift register
Х	Х	Х	L	Х	NC	L	a LOW-state on STR only affects the storage register
Х	1	L	Н	Х	L	L	empty shift register loaded into storage register
1	x	Н	X	Н	Q6S	NC	logic HIGH level shifted into shift register stage 0. Contents of all shift register stages shifted through, e.g. previous state of stage 6 (internal Q6S) appears on the serial output (Q7S).
Х	↑	Н	Н	Х	NC	QnS	contents of shift register stages (internal QnS) are transferred to the storage register and parallel output stages
1	↑	Η	Η	X	Q6S	QnS	contents of shift register shifted through; previous contents of the shift register is transferred to the storage register and the parallel output stages



8. Limiting values

Table 4. 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	+7.0	V
VI	input voltage			-0.5	+7.0	V
I _{IK}	input clamping current	V ₁ < -0.5 V	[1]	-20	-	mA
I _{OK}	output clamping current	$V_{\rm O}$ < -0.5 V or $V_{\rm O}$ > $V_{\rm CC}$ + 0.5 V	[1]	-20	+20	mA
lo	output current	$V_{\rm O}$ = -0.5 V to (V _{CC} + 0.5 V)		-25	+25	mA
I _{CC}	supply current			-	+75	mA
I _{GND}	ground current			-75	-	mA
T _{stg}	storage temperature			-65	+150	°C
P _{tot}	total power dissipation	T _{amb} = -40 °C to +125 °C	[2]	-	500	mW

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

[2] For SOT109-1 (SO16) package: P_{tot} derates linearly with 12.4 mW/K above 110 °C.

For SOT338-1 (SSOP16) package: Ptot derates linearly with 8.5 mW/K above 91 °C.

For SOT403-1 (TSSOP16) package: P_{tot} derates linearly with 8.5 mW/K above 91 °C.

For SOT763-1 (DHVQFN16) package: P_{tot} derates linearly with 11.2 mW/K above 106 $^\circ\text{C}.$

9. Recommended operating conditions

Table 5. Operating conditions

Symbol	Parameter	Conditions	7	4AHC59	4	74	Unit		
			Min	Тур	Мах	Min	Тур	Max	
V _{CC}	supply voltage		2.0	5.0	5.5	4.5	5.0	5.5	V
VI	input voltage		0	-	5.5	0	-	5.5	V
Vo	output voltage		0	-	V _{CC}	0	-	V _{CC}	V
T _{amb}	ambient temperature		-40	+25	+125	-40	+25	+125	°C
Δt/ΔV	input transition rise and fall rate	V_{CC} = 3.0 V to 3.6 V	-	-	100	-	-	-	ns/V
		V_{CC} = 4.5 V to 5.5 V	-	-	20	-	-	20	ns/V

10. Static characteristics

Table 6. Static characteristics

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

Symbol	Parameter	Conditions		25 °C			°C to 5 °C		°C to 5 °C	Unit
			Min	Тур	Max	Min	Max	Min	Max	
74AHC5	94									
VIH	HIGH-level	V _{CC} = 2.0 V	1.5	-	-	1.5	-	1.5	-	V
	input voltage	V _{CC} = 3.0 V	2.1	-	-	2.1	-	2.1	-	V
		V _{CC} = 5.5 V	3.85	-	-	3.85	-	3.85	-	V
VIL	LOW-level	V _{CC} = 2.0 V	-	-	0.5	-	0.5	-	0.5	V
	input voltage	V _{CC} = 3.0 V	-	-	0.9	-	0.9	-	0.9	V
		V _{CC} = 5.5 V	-	-	1.65	-	1.65	-	1.65	V
V _{OH}	HIGH-level	V _I = V _{IH} or V _{IL}								
	output voltage	I _O = -50 μA; V _{CC} = 2.0 V	1.9	2.0	-	1.9	-	1.9	-	V
		I _O = -50 μA; V _{CC} = 3.0 V	2.9	3.0	-	2.9	-	2.9	-	V
		I _O = -50 μA; V _{CC} = 4.5 V	4.4	4.5	-	4.4	-	4.4	-	V
		I _O = -4.0 mA; V _{CC} = 3.0 V	2.58	-	-	2.48	-	2.40	-	V
		I _O = -8.0 mA; V _{CC} = 4.5 V	3.94	-	-	3.80	-	3.70	-	V
V _{OL}	LOW-level	V _I = V _{IH} or V _{IL}								
	output voltage	I _O = 50 μA; V _{CC} = 2.0 V	-	0	0.1	-	0.1	-	0.1	V
		I _O = 50 μA; V _{CC} = 3.0 V	-	0	0.1	-	0.1	-	0.1	V
		I _O = 50 μA; V _{CC} = 4.5 V	-	0	0.1	-	0.1	-	0.1	V
		I _O = 4 mA; V _{CC} = 3.0 V	-	-	0.36	-	0.44	-	0.55	V
		I _O = 8 mA; V _{CC} = 4.5 V	-	-	0.36	-	0.44	-	0.55	V
lı	input leakage current	V _I = 5.5 V or GND; V _{CC} = 0 V to 5.5 V	-	-	0.1	-	1.0	-	2.0	μA
I _{CC}	supply current	$V_I = V_{CC}$ or GND; $I_O = 0$ A; $V_{CC} = 5.5$ V	-	-	4.0	-	40	-	80	μA
CI	input capacitance	V _I = V _{CC} or GND	-	3	10	-	10	-	10	pF

8-bit shift register with output register

Symbol	Parameter	Conditions		25 °C			°C to 5 °C		°C to 5 °C	Unit
			Min	Тур	Max	Min	Max	Min	Max	
74AHCT	594	1								
V _{IH}	HIGH-level input voltage	V _{CC} = 4.5 V to 5.5 V	2.0	-	-	2.0	-	2.0	-	V
V _{IL}	LOW-level input voltage	V _{CC} = 4.5 V to 5.5 V	-	-	0.8	-	0.8	-	0.8	V
V _{OH}	HIGH-level	$V_{I} = V_{IH} \text{ or } V_{IL}$								
	output voltage	I _O = -50 μA; V _{CC} = 4.5 V	4.4	4.5	-	4.4	-	4.4	-	V
		I _O = -8.0 mA; V _{CC} = 4.5 V	3.94	-	-	3.80	-	3.70	-	V
V _{OL}	LOW-level	V _I = V _{IH} or V _{IL}								
	output voltage	I _O = 50 μA; V _{CC} = 4.5 V	-	0	0.1	-	0.1	-	0.1	V
		I _O = 8 mA; V _{CC} = 4.5 V	-	-	0.36	-	0.44	-	0.55	V
I _I	input leakage current	V _I = 5.5 V or GND; V _{CC} = 0 V to 5.5 V	-	-	0.1	-	1.0	-	2.0	μA
I _{CC}	supply current	$V_I = V_{CC}$ or GND; $I_O = 0$ A; $V_{CC} = 5.5$ V	-	-	4.0	-	40	-	80	μA
ΔI _{CC}	additional supply current	per input pin; V _I = V _{CC} - 2.1 V; other pins at V _{CC} or GND; $I_O = 0 A$; V _{CC} = 4.5 V to 5.5 V	-	-	1.35	-	1.5	-	1.5	mA
CI	input capacitance	V _I = V _{CC} or GND	-	3	10	-	10	-	10	pF

11. Dynamic characteristics

Table 7. Dynamic characteristics

Voltages are referenced to GND (ground = 0 V); for test circuit see Fig. 15.

Symbol	Parameter	Conditions		25 °C			°C to 5 °C		°C to 5 °C	Unit
			Min	Typ[1]	Мах	Min	Max	Min	Мах	
74AHC5	94	-	I							
t _{PLH}	LOW to HIGH	SHCP to Q7S; see Fig. 9								
	propagation delay	V _{CC} = 3.0 V to 3.6 V								
	delay	C _L = 15 pF	-	5.2	8.5	2.2	9.7	2.2	10.6	ns
		C _L = 50 pF	-	7.4	11.5	3.0	13.2	3.0	14.3	ns
		V _{CC} = 4.5 V to 5.5 V								
		C _L = 15 pF	-	3.8	6.3	1.7	7.2	1.7	7.8	ns
		C _L = 50 pF	-	4.8	8.0	2.4	9.1	2.4	10.0	ns
		STCP to Qn; see Fig. 10								
		V _{CC} = 3.0 V to 3.6 V								
		C _L = 15 pF	-	5.1	8.3	2.3	9.5	2.3	10.6	ns
		C _L = 50 pF	-	7.3	11.9	3.3	13.6	3.3	14.7	ns
		V _{CC} = 4.5 V to 5.5 V								
		C _L = 15 pF	-	3.5	5.7	1.8	6.5	1.8	7.1	ns
		C _L = 50 pF	-	4.8	7.8	2.6	9.0	2.6	9.8	ns

8-bit shift register with output register

Symbol	Parameter	Conditions		25 °C			°C to 5 °C	-	°C to 5 °C	Unit
			Min	Typ[1]	Max	Min	Max	Min	Max	
t _{PHL}	HIGH to LOW	SHCP to Q7S; see Fig. 9								
	propagation delay	V _{CC} = 3.0 V to 3.6 V								
	uelay	C _L = 15 pF	-	5.5	8.9	2.3	10.2	2.3	11.0	ns
		C _L = 50 pF	-	7.4	12.1	3.0	13.9	3.0	15.1	ns
		V _{CC} = 4.5 V to 5.5 V								
		C _L = 15 pF	-	4.1	6.7	1.9	7.6	1.9	8.2	ns
		C _L = 50 pF	-	5.4	8.8	2.5	10.1	2.5	11.0	ns
		STCP to Qn; see Fig. 10								
		V _{CC} = 3.0 V to 3.6 V								
		C _L = 15 pF	-	5.5	9.1	2.4	10.4	2.4	11.3	ns
		C _L = 50 pF	-	7.3	12.0	3.2	13.8	3.2	15.0	ns
		V _{CC} = 4.5 V to 5.5 V								
		C _L = 15 pF	-	3.7	6.0	1.9	6.9	1.9	7.5	ns
		C _L = 50 pF	-	5.2	8.5	2.6	9.7	2.6	10.5	ns
		SHR to Q7S; see Fig. 13								
		V _{CC} = 3.0 V to 3.6 V								
		C _L = 15 pF	-	5.7	9.5	2.3	10.8	2.3	11.7	ns
		C _L = 50 pF	-	7.5	12.2	3.6	14.0	3.6	15.2	ns
		V _{CC} = 4.5 V to 5.5 V								
		C _L = 15 pF	-	4.1	6.7	2.0	7.6	2.0	8.2	ns
		C _L = 50 pF	-	5.4	8.8	2.8	10.1	2.8	11.0	ns
		STR to Qn; see Fig. 12								
		V _{CC} = 3.0 V to 3.6 V								
		C _L = 15 pF	-	5.8	9.6	2.8	11.0	2.8	12.0	ns
		C _L = 50 pF	-	7.7	12.5	3.8	14.4	3.8	15.6	ns
		V _{CC} = 4.5 V to 5.5 V								
		C _L = 15 pF	-	4.1	7.2	2.2	8.2	2.2	8.9	ns
		C _L = 50 pF	-	5.4	9.4	3.0	10.7	3.0	11.6	ns
f _{max}	maximum frequency	SHCP or STCP; see <u>Fig. 9</u> and <u>Fig. 10</u>								
		V _{CC} = 3.0 V to 3.6 V	80	125	-	70	-	65	-	MHz
		V _{CC} = 4.5 V to 5.5 V	90	170	-	80	-	70	-	MHz
t _W	pulse width	SHCP and STCP HIGH or LOW; see <u>Fig. 9</u> and <u>Fig. 10</u>								
		V _{CC} = 3.0 V to 3.6 V	6.0	-	-	6.5	-	7.0	-	ns
		V _{CC} = 4.5 V to 5.5 V	5.5	-	-	6.0	-	6.5	-	ns
		SHR and STR HIGH or LOW; see Fig. 13 and Fig. 12								<u> </u>
		V _{CC} = 3.0 V to 3.6 V	5.0	-	-	5.0	-	5.5	-	ns
		V _{CC} = 4.5 V to 5.5 V	5.0	-	-	5.2	-	5.7	-	ns

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8-bit shift register with output register

Symbol	Parameter	Conditions		25 °C			°C to 5 °C	-40 °C to +125 °C		Unit
			Min	Typ[1]	Max	Min	Max	Min	Max	
t _{su}	set-up time	DS to SHCP; see Fig. 11								
		V _{CC} = 3.0 V to 3.6 V	3.5	-	-	3.5	-	4.0	-	ns
		V _{CC} = 4.5 V to 5.5 V	3.0	-	-	3.0	-	3.5	-	ns
		SHR to STCP; see Fig. 14								
		V _{CC} = 3.0 V to 3.6 V	8.0	-	-	9.0	-	9.5	-	ns
		V _{CC} = 4.5 V to 5.5 V	5.0	-	-	5.0	-	5.5	-	ns
		SHCP to STCP; see Fig. 10								
		V _{CC} = 3.0 V to 3.6 V	8.0	-	-	8.5	-	9.0	-	ns
		V _{CC} = 4.5 V to 5.5 V	5.0	-	-	5.0	-	5.5	-	ns
t _h	hold time	DS to SHCP; see Fig. 11								
		V _{CC} = 3.0 V to 3.6 V	1.5	-	-	1.5	-	2.0	-	ns
		V _{CC} = 4.5 V to 5.5 V	2.0	-	-	2.0	-	2.5	-	ns
t _{rec}	recovery time	SHR to SHCP; see Fig. 13								
		V _{CC} = 3.0 V to 3.6 V	4.2	-	-	4.8	-	5.3	-	ns
		V _{CC} = 4.5 V to 5.5 V	2.9	_	-	3.3	-	3.8	-	ns
		STR to STCP; see Fig. 12								
		V _{CC} = 3.0 V to 3.6 V	4.6	-	-	5.3	_	5.8	_	ns
		V _{CC} = 4.5 V to 5.5 V	3.2	-	-	3.7	-	4.3	-	ns
C _{PD}	power dissipation capacitance	$f_i = 1 \text{ MHz}; V_i = \text{GND to } V_{\text{CC}}$ [2]	-	55	-	-	-	-	-	pF
74AHCT	594; V _{CC} = 4.5	V to 5.5 V								
t _{PLH}		SHCP to Q7S; see Fig. 9								
1 211	propagation	C _L = 15 pF	_	3.8	6.3	1.7	7.2	1.7	7.8	ns
	delay	$C_{l} = 50 \text{ pF}$	-	4.8	8.0	2.2	9.1	2.2	9.9	ns
		STCP to Qn; see Fig. 10								
		$C_{I} = 15 \text{ pF}$	_	3.5	5.7	1.8	6.5	1.8	7.1	ns
		$C_L = 50 \text{ pF}$	-	4.6	7.7	2.6	8.8	2.6	9.6	ns
t _{PHL}	HIGH to LOW	SHCP to Q7S; see Fig. 9					0.0		0.0	
TIL	propagation	$C_{L} = 15 \text{pF}$	_	4.1	6.7	1.8	7.6	1.8	8.3	ns
	delay	$C_{l} = 50 \text{ pF}$	_	5.4	8.8	2.4	10.1	2.4	11.0	ns
		STCP to Qn; see Fig. 10		0.1	0.0		10.1			
		$C_L = 15 \text{pF}$	-	3.7	6.1	1.9	6.9	1.9	7.2	ns
		$C_{l} = 50 \text{ pF}$	_	5.2	8.5	2.6	9.7	2.6	10.5	ns
		SHR to Q7S; see Fig. 13			2.0					
		$C_{\rm L} = 15 \rm pF$	_	4.3	7.0	2.4	8.0	2.4	8.7	ns
		$C_{I} = 50 \text{ pF}$	-	5.4	8.8	2.7	10.1	2.7	11.0	ns
		STR to Qn; see Fig. 12		U. T	0.0			<u> </u>	1.0	
		$C_{L} = 15 \text{ pF}$	_	4.5	7.4	2.3	8.4	2.3	9.2	ns
		$C_{L} = 50 \text{ pF}$	_	5.7	9.4	3.1	10.7	3.1	11.7	ns
f _{max}	maximum frequency	SHCP or STCP; see Fig. 9 and Fig. 10	90	160	-	80	-	70	-	MHz

8-bit shift register with output register

Symbol	Parameter	Conditions	25 °C		-40 °C to +85 °C		-40 °C to +125 °C		Unit	
			Min	Typ[1]	Max	Min	Max	Min	Max	
t _W	pulse width	SHCP and STCP HIGH or LOW; see <u>Fig. 9</u> and <u>Fig. 10</u>	5.5	-	-	6.0	-	6.5	-	ns
		SHR and STR HIGH or LOW; see Fig. 13 and Fig. 12	5.2	-	-	5.5	-	6.0	-	ns
t _{su}	set-up time	DS to SHCP; see Fig. 11	3.0	-	-	3.0	-	3.5	-	ns
		SHR to STCP; see Fig. 14	5.0	-	-	5.0	-	5.5	-	ns
		SHCP to STCP; see Fig. 10	5.0	-	-	5.0	-	5.5	-	ns
t _h	hold time	DS to SHCP; see Fig. 11	2.0	-	-	2.0	-	2.5	-	ns
t _{rec}	recovery time	SHR to SHCP; see Fig. 13	2.9	-	-	3.3	-	3.8	-	ns
		STR to STCP; see Fig. 12	3.4	-	-	3.8	-	4.3	-	ns
C _{PD}	power dissipation capacitance	$f_i = 1 \text{ MHz}; V_1 = \text{GND to } V_{\text{CC}}$ [2]	-	55	-	-	-	-	-	pF

[1] Typical values are measured at nominal supply voltage (V_{CC} = 3.3 V and V_{CC} = 5.0 V). [2]

 C_{PD} is used to determine the dynamic power dissipation (P_D in μ W). $P_D = C_{PD} \times V_{CC}^2 \times f_i \times N + \Sigma (C_L \times V_{CC}^2 \times f_o)$ where:

 f_i = input frequency in MHz;

f_o = output frequency in MHz;

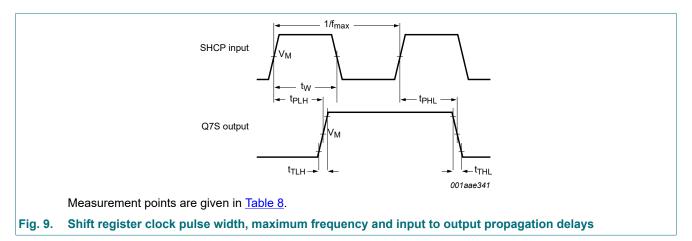
 C_L = output load capacitance in pF;

V_{CC} = supply voltage in V;

N = number of inputs switching;

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

11.1. Waveforms



Nexperia

74AHC594; 74AHCT594

8-bit shift register with output register

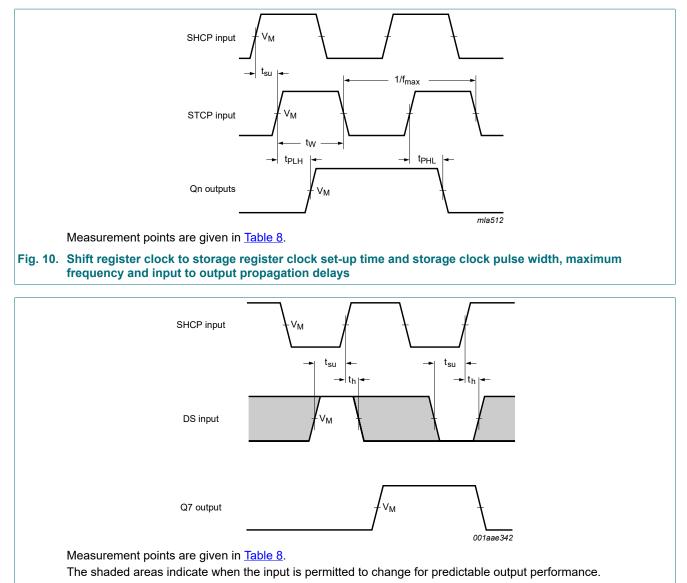
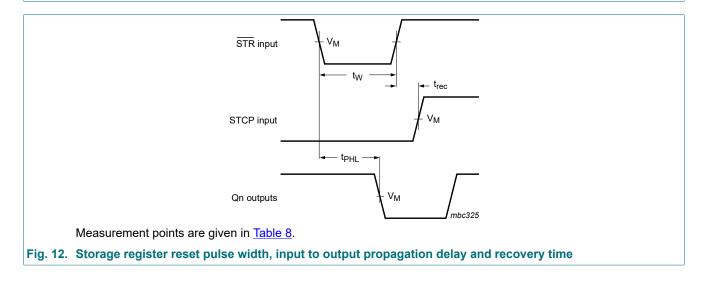
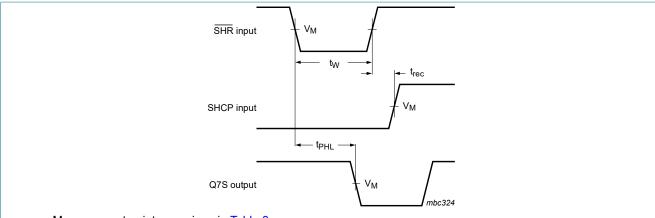


Fig. 11. Shift register clock to data input set-up and hold times



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8-bit shift register with output register



Measurement points are given in <u>Table 8</u>.

Fig. 13. Shift register reset pulse width, input to output propagation delay and recovery time

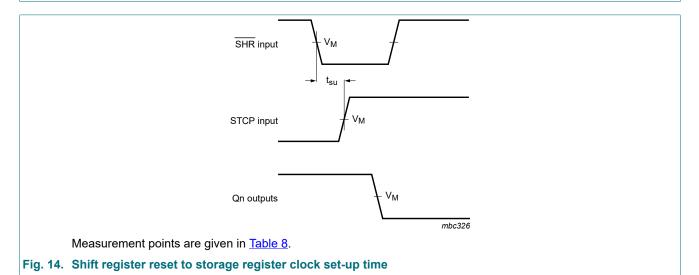
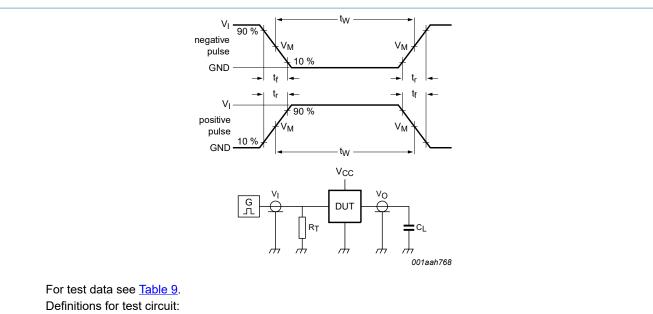


Table 8. Measurement points

Туре	Input	Output
	V _M	V _M
74AHC594	0.5 x V _{CC}	0.5 x V _{CC}
74AHCT594	1.5 V	0.5 x V _{CC}

8-bit shift register with output register



 R_{T} = Termination resistance should be equal to output impedance Z_{o} of the pulse generator.

 C_L = Load capacitance including jig and probe capacitance.

Fig. 15. Test circuit for measuring switching times

Table 9. Test data

Туре	Input		Load	Test
	VI	t _r , t _f	CL	
74AHC594	V _{CC}	≤ 3.0 ns	15 pF, 50 pF	t _{PLH} , t _{PHL}
74AHCT594	3.0 V	≤ 3.0 ns	15 pF, 50 pF	t _{PLH} , t _{PHL}

12. Package outline

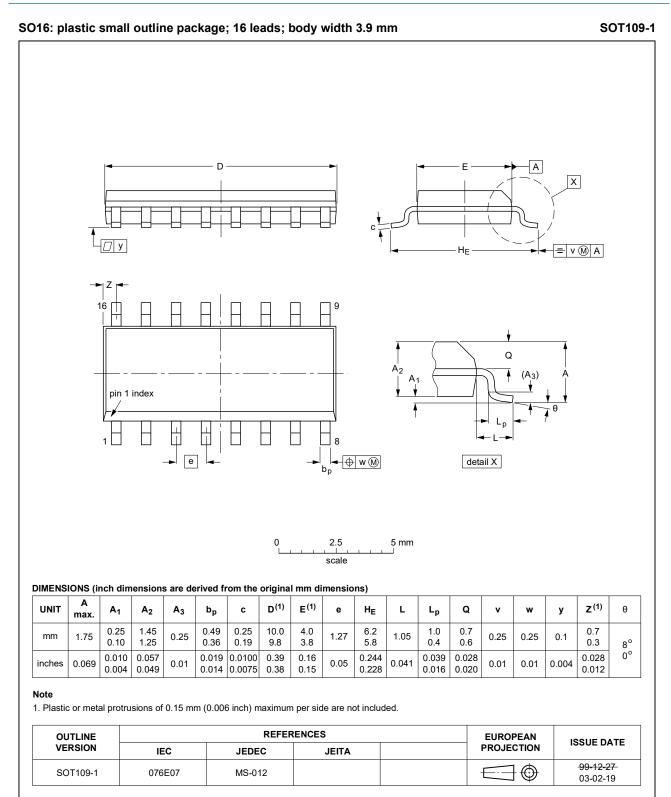


Fig. 16. Package outline SOT109-1 (SO16)

8-bit shift register with output register

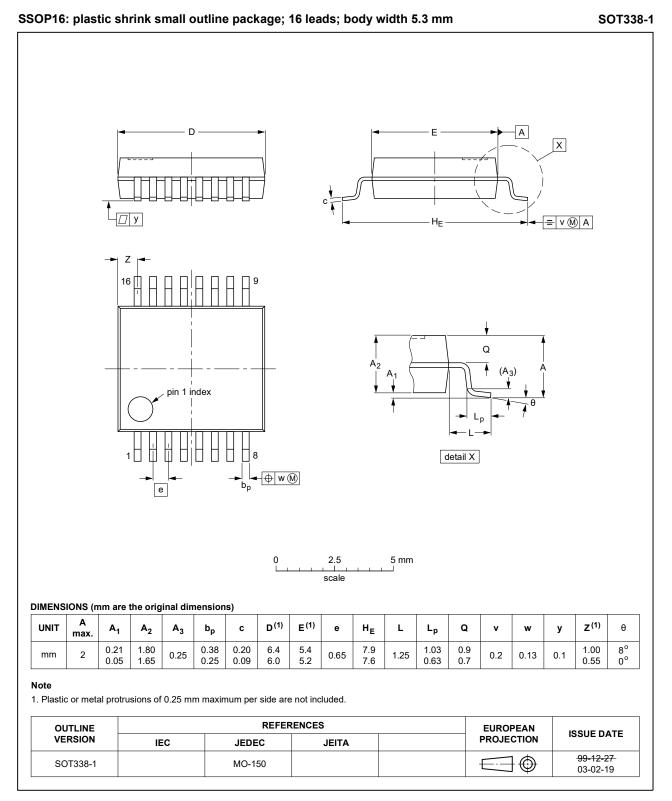


Fig. 17. Package outline SOT338-1 (SSOP16)

8-bit shift register with output register

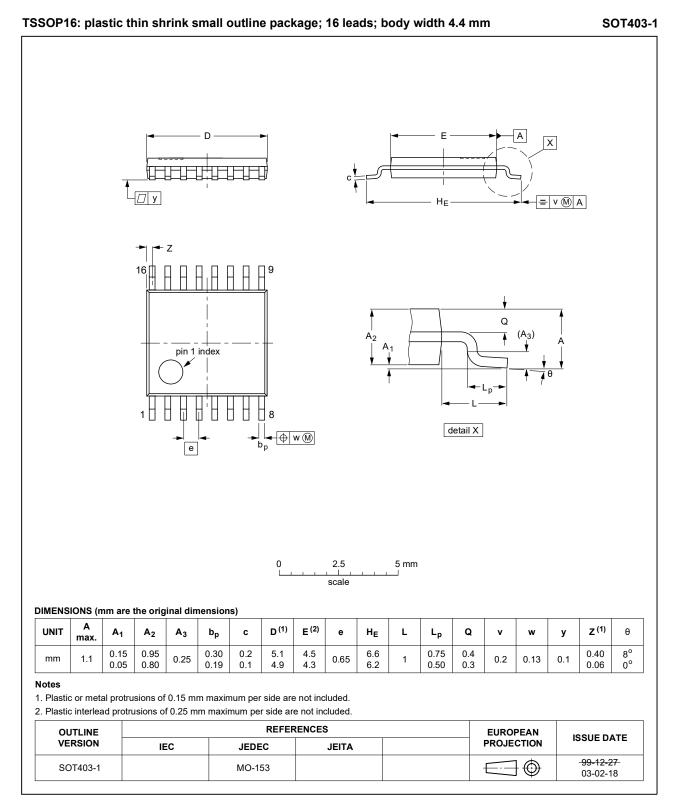
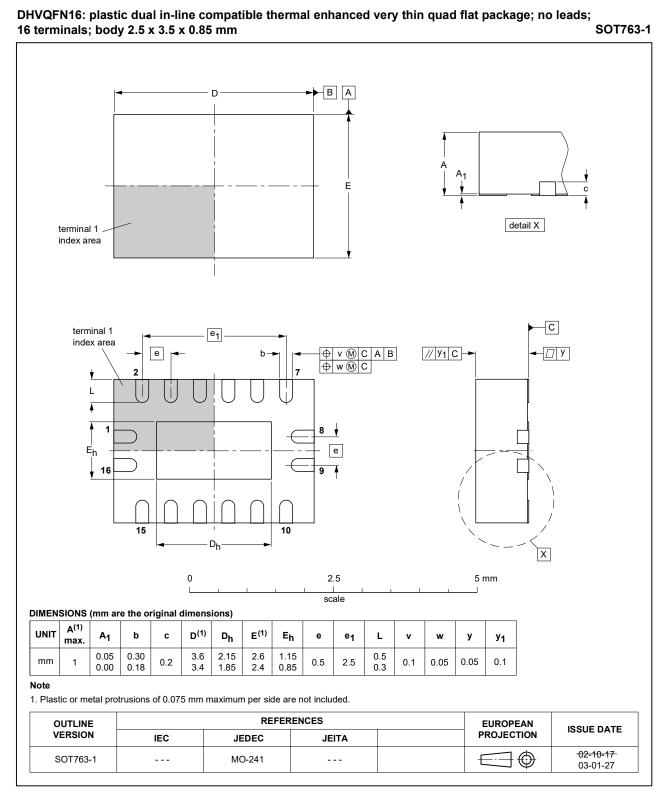


Fig. 18. Package outline SOT403-1 (TSSOP16)

8-bit shift register with output register





13. Abbreviations

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

14. Revision history

Table 11. Revision history						
Document ID	Release date	Data sheet status	Change notice	Supersedes		
74AHC_AHCT594 v.3	20200625	Product data sheet	-	74AHC_AHCT594 v.2		
Modifications:	guidelines c Legal texts Section 2 u	 The format of this data sheet has been redesigned to comply with the identity guidelines of Nexperia. Legal texts have been adapted to the new company name where appropriate. <u>Section 2</u> updated. <u>Table 4</u>: Derating values for P_{tot} total power dissipation updated. 				
74AHC_AHCT594 v.2	20080609	Product data sheet	-	74AHC_AHCT594 v.1		
Modifications:	guidelines o • Legal texts	 The format of this data sheet has been redesigned to comply with the new identity guidelines of NXP Semiconductors. Legal texts have been adapted to the new company name where appropriate. <u>Table 6</u>: the conditions for input leakage current have been changed. 				
74AHC_AHCT594 v.1	20060704	Product data sheet	-	-		

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".
- [3] The product status of device(s) described in this document may have changed since this document was published and may differ in case of multiple devices. The latest product status information is available on the internet at <u>https://www.nexperia.com</u>.

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Product data sheet

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