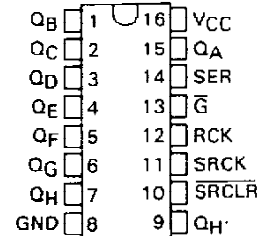- **8-Bit Serial-In, Parallel-Out Shift Registers with Storage**

- **Choice of 3-State ('LS595) or Open-Collector ('LS596) Parallel Outputs**

- **Shift Register Has Direct Clear**

- **Accurate Shift Frequency: DC to 20 MHz**
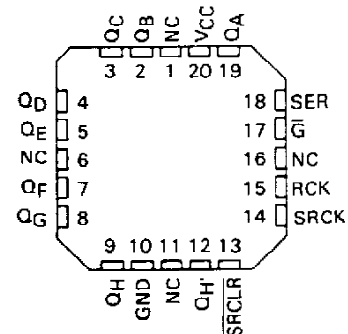
description

These devices each contain an 8-bit serial-in, parallel-out shift register that feeds an 8-bit D-type storage register. The storage register has parallel 3-state ('LS595) or open-collector ('LS596) outputs. Separate clocks are provided for both the shift register and the storage register. The shift register has a direct-overriding clear, serial input, and serial output pins for cascading.

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

SN54LS595, SN54LS596 . . . J OR W PACKAGE
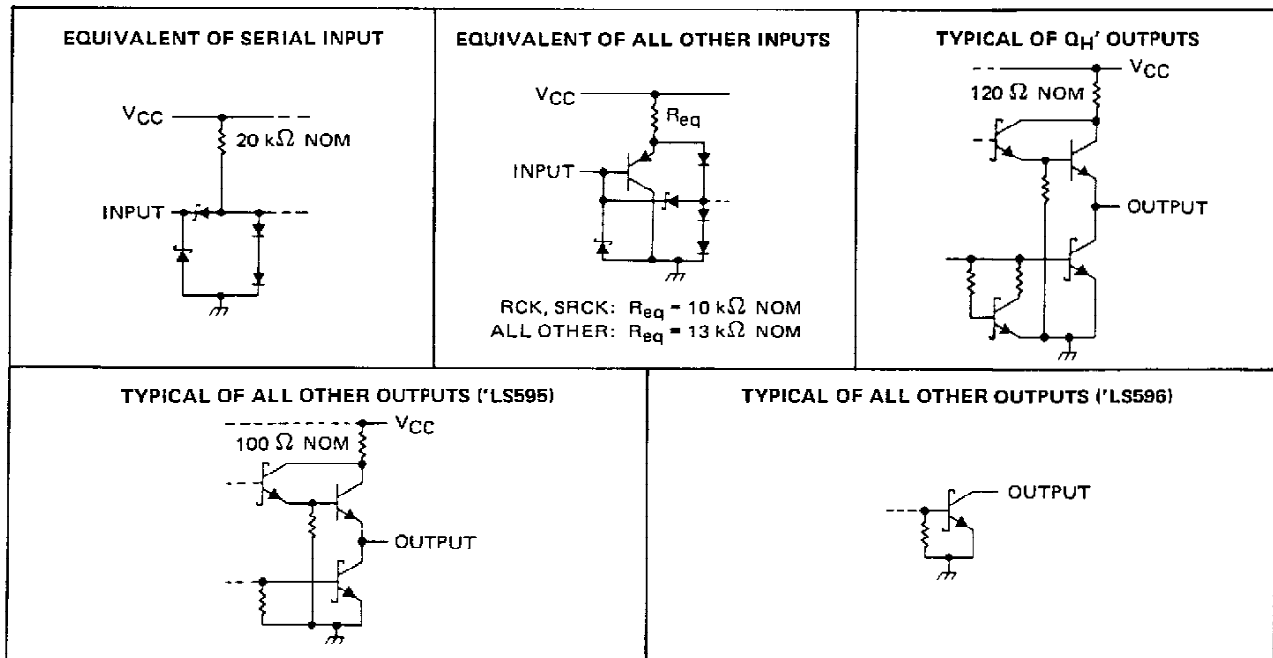**SN74LS595, SN74LS596 . . . N PACKAGE**
(TOP VIEW)

Q_B	1	16	V_{CC}
Q_C	2	15	Q_A
Q_D	3	14	SER
Q_E	4	13	$\overline{G}$
Q_F	5	12	RCK
Q_G	6	11	SRCK
Q_H	7	10	$\overline{SRCLR}$
GND	8	9	$Q_{H'}$

SN54LS595, SN54LS596 . . . FK PACKAGE
(TOP VIEW)

NC - No internal connection

schematics of inputs and outputs

| EQUIVALENT OF SERIAL INPUT | EQUIVALENT OF ALL OTHER INPUTS | TYPICAL OF $Q_{H'}$ OUTPUTS |
| TYPICAL OF ALL OTHER OUTPUTS ('LS595) | TYPICAL OF ALL OTHER OUTPUTS ('LS596) | |

TEXAS INSTRUMENTS

POST OFFICE BOX 655012 • DALLAS, TEXAS 75265

logic diagram (positive logic)
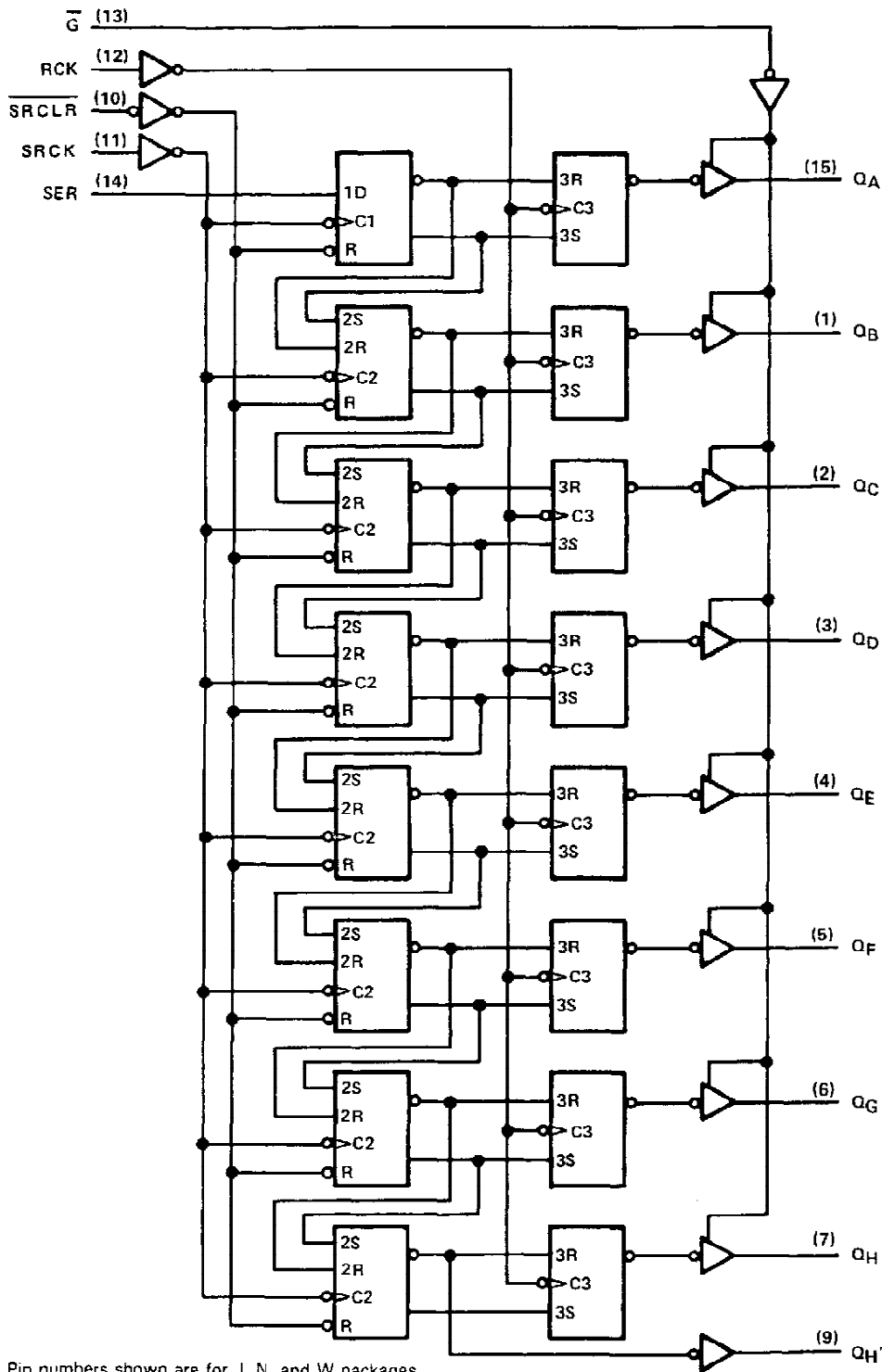
Pin numbers shown are for J, N, and W packages.

logic symbols†

'LS595

'LS596
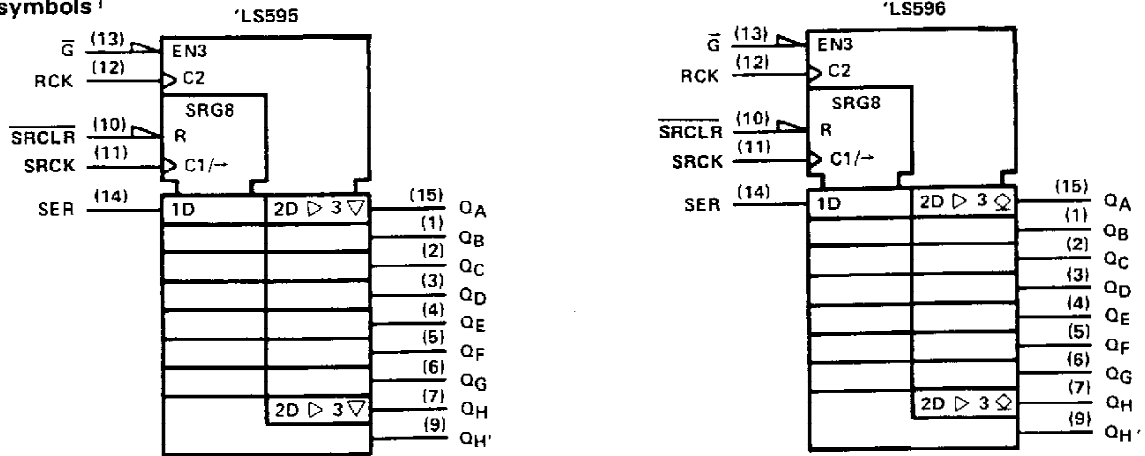
†These symbols are in accordance with ANSI/IEEE Std. 91-1984 and IEC Publication 617-12.
Pin numbers shown are for J, N, and W packages.

absolute maximum ratings over operating free-air temperature range (unless otherwise noted)

Supply voltage, V_{CC} (see Note 1) .... 7 V
Input voltage .... 7 V
Off-state output voltage .... 5.5 V
Operating free-air temperature range: SN54LS595, SN54LS596 .... −55°C to 125°C
                               SN74LS595, SN74LS596 .... 0°C to 70°C
Storage temperature range .... −65°C to 150°C

NOTE 1: Voltage values are with respect to the network ground terminal.

recommended operating conditions

			SN54LS'			SN74LS'			UNIT
			MIN	NOM	MAX	MIN	NOM	MAX	
V_{CC}	Supply voltage		4.5	5	5.5	4.75	5	5.25	V
V_{IH}	High-level input voltage		2			2			V
V_{IL}	Low-level input voltage				0.7			0.8	V
V_{OH}	High-level output voltage	Q_A thru Q_H, 'LS596 only			5.5			5.5	V
I_{OH}	High-level output current	Q_H'			−1			−1	mA
		Q_A thru Q_H, 'LS595 only			−1			−2.6	
I_{OL}	Low-level output current	Q_H'			8			16	mA
		Q			12			24	
f_{SRCK}	Shift clock frequency		0		20	0		20	MHz
$t_{w(SRCK)}$	Duration of shift clock pulse		25			25			ns
$t_{w(RCK)}$	Duration of register clock pulse		20			20			ns
$t_{w(\overline{SRCLR})}$	Duration of shift clear pulse, low level		20			20			ns
t_{su}	Setup time	SRCLR inactive before SRCK ↑	20			20			ns
		SER before SRCK ↑	20			20			
		SRCK ↑ before RCK ↑ (see Note 2)	40			40			
		SRCLR low before RCK ↑	40			40			
t_h	Hold time	SER after SRCK ↑	0			0			ns
T_A	Operating free-air temperature		−55		125	0		70	°C

NOTE 2: This setup time ensures the register will see stable data from the shift-register outputs. The clocks may be connected together, in which case the storage register state will be one clock pulse behind the shift register.

electrical characteristics over recommended operating free-air temperature range (unless otherwise noted)

PARAMETER		TEST CONDITIONS †		SN54LS' MIN	SN54LS' TYP‡	SN54LS' MAX	SN74LS' MIN	SN74LS' TYP‡	SN74LS' MAX	UNIT
V_{IK}		V_{CC} = MIN, I_I = – 18 mA				– 1.5			– 1.5	V
V_{OH}	'LS595 Q	V_{CC} = MIN, V_{IH} = 2 V, V_{IL} = MAX	I_{OH} = – 1 mA	2.4	3.2					V
			I_{OH} – – 2.6 mA				2.4	3.1		
	Q_H'		I_{OH} = – 1 mA	2.4	3.2		2.4	3.2		
I_{OH}	'LS596 Q	V_{CC} = MIN, V_{IH} = 2 V, V_{IL} = MAX, V_{OH} = 5.5 V				0.1			0.1	mA
V_{OL}	Q	V_{CC} = MIN, V_{IH} = 2 V, V_{IL} = MAX	I_{OL} – 12 mA		0.25	0.4		0.25	0.4	V
			I_{OL} – 24 mA					0.35	0.5	
	Q_H'		I_{OL} = 8 mA		0.25	0.4		0.25	0.4	
			I_{OL} = 16 mA					0.35	0.5	
I_{OZH}	'LS595 Q	V_{CC} = MAX, V_{IH} = 2 V, V_{IL} = MAX, V_{OH} = 2.7 V				20			20	µA
I_{OZL}	'LS595 Q	V_{CC} = MAX, V_{IH} = 2 V, V_{IL} = MAX, V_{OH} = 0.4 V				– 20			– 20	µA
I_I		V_{CC} = MAX, V_I = 7 V				0.1			0.1	mA
I_{IH}		V_{CC} = MAX, V_I – 2.7 V				20			20	µA
I_{IL}	SER	V_{CC} = MAX, V_I = 0.4 V				– 0.4			– 0.4	mA
	All others					– 0.2			– 0.2	
I_{OS} §	'LS595 Q	V_{CC} = MAX, V_O = 0 V		– 30		– 130	– 30		– 130	mA
	Q_H'			– 20		– 100	– 20		– 100	
I_{CCH}	'LS595	V_{CC} = MAX,			33	50		33	50	mA
	'LS596				30	45		30	45	
I_{CCL}	'LS595	All possible inputs grounded,			42	65		42	65	mA
	'LS596	All outputs open			36	55		36	55	
I_{CCZ}	'LS595				44	65		44	65	mA

† For conditions shown as MIN or MAX, use the appropriate value specified under recommended operating conditions.
‡ All typical values are at V_{CC} = 5 V, T_A = 25°C.
§ Not more than one output should be shorted at a time, and duration of the short-circuit should not exceed one second.

TEXAS
INSTRUMENTS
POST OFFICE BOX 655012 • DALLAS, TEXAS 75265

switching characteristics, V_{CC} = 5 V, T_A = 25°C (see note 3)

PARAMETER	FROM (INPUT)	TO (OUTPUT)	TEST CONDITIONS		'LS595 MIN	'LS595 TYP	'LS595 MAX	'LS596 MIN	'LS596 TYP	'LS596 MAX	UNIT
t_{PLH}	SRCK↑	Q_H'	R_L = 1kΩ,	C_L = 30 pF		12	18		14	21	ns
t_{PHL}						17	25		20	30	ns
t_{PLH}	RCK↑	Q_A thru Q_H				12	18		28	42	ns
t_{PHL}			R_L = 667 Ω,	C_L = 45 pF		24	35		24	35	ns
t_{PZH}	$\overline{G}$↓	Q_A thru Q_H				20	30				ns
t_{PZL}						25	38				ns
t_{PHZ}	$\overline{G}$↑	Q_A thru Q_H	R_L = 667 Ω,	C_L = 5 pF		20	30				ns
t_{PLZ}						25	38				ns
t_{PLH}	$\overline{G}$↑	Q_A thru Q_H	R_L = 667 Ω,	C_L = 45 pF					40	60	ns
t_{PHL}	$\overline{G}$↓	Q_A thru Q_H							25	38	ns
t_{PHL}	$\overline{SRCLR}$↓	Q_H'	R_L = 1 kΩ,	C_L = 30 pF		24	35		24	35	ns

NOTE 3: Load circuits and voltage waveforms are shown in Section 1.

PACKAGING INFORMATION

Orderable Device	Status [1]	Package Type	Package Drawing	Pins	Package Qty	Eco Plan [2]	Lead/ Ball Finish	MSL Peak Temp [3]	Samples (Requires Login)
5962-86717012A	ACTIVE	LCCC	FK	20	1	TBD	Call TI	Call TI	
5962-8671701EA	ACTIVE	CDIP	J	16	1	TBD	Call TI	Call TI	
5962-8671701EA	ACTIVE	CDIP	J	16	1	TBD	Call TI	Call TI	
5962-8671701FA	ACTIVE	CFP	W	16	1	TBD	Call TI	Call TI	
5962-8671701FA	ACTIVE	CFP	W	16	1	TBD	Call TI	Call TI	
SN54LS595J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type	
SN54LS595J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type	
SN74LS595D	ACTIVE	SOIC	D	16	40	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
SN74LS595D	ACTIVE	SOIC	D	16	40	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
SN74LS595DE4	ACTIVE	SOIC	D	16	40	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
SN74LS595DE4	ACTIVE	SOIC	D	16	40	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
SN74LS595DG4	ACTIVE	SOIC	D	16	40	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
SN74LS595DG4	ACTIVE	SOIC	D	16	40	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
SN74LS595DR	ACTIVE	SOIC	D	16	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
SN74LS595DR	ACTIVE	SOIC	D	16	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
SN74LS595DRE4	ACTIVE	SOIC	D	16	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
SN74LS595DRE4	ACTIVE	SOIC	D	16	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
SN74LS595DRG4	ACTIVE	SOIC	D	16	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
SN74LS595DRG4	ACTIVE	SOIC	D	16	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	
SN74LS595N	ACTIVE	PDIP	N	16	25	Pb-Free (RoHS)	CU NIPDAU	N / A for Pkg Type	
SN74LS595N	ACTIVE	PDIP	N	16	25	Pb-Free (RoHS)	CU NIPDAU	N / A for Pkg Type	

Orderable Device	Status [1]	Package Type	Package Drawing	Pins	Package Qty	Eco Plan [2]	Lead/ Ball Finish	MSL Peak Temp [3]	Samples (Requires Login)
SN74LS595N3	OBSOLETE	PDIP	N	16		TBD	Call TI	Call TI	
SN74LS595N3	OBSOLETE	PDIP	N	16		TBD	Call TI	Call TI	
SN74LS595NE4	ACTIVE	PDIP	N	16	25	Pb-Free (RoHS)	CU NIPDAU	N / A for Pkg Type	
SN74LS595NE4	ACTIVE	PDIP	N	16	25	Pb-Free (RoHS)	CU NIPDAU	N / A for Pkg Type	
SN74LS596D	OBSOLETE	SOIC	D	16		TBD	Call TI	Call TI	
SN74LS596D	OBSOLETE	SOIC	D	16		TBD	Call TI	Call TI	
SN74LS596N	ACTIVE	PDIP	N	16	25	Pb-Free (RoHS)	CU NIPDAU	N / A for Pkg Type	
SN74LS596N	ACTIVE	PDIP	N	16	25	Pb-Free (RoHS)	CU NIPDAU	N / A for Pkg Type	
SN74LS596NE4	ACTIVE	PDIP	N	16	25	Pb-Free (RoHS)	CU NIPDAU	N / A for Pkg Type	
SN74LS596NE4	ACTIVE	PDIP	N	16	25	Pb-Free (RoHS)	CU NIPDAU	N / A for Pkg Type	
SNJ54LS595FK	ACTIVE	LCCC	FK	20	1	TBD	POST-PLATE	N / A for Pkg Type	
SNJ54LS595FK	ACTIVE	LCCC	FK	20	1	TBD	POST-PLATE	N / A for Pkg Type	
SNJ54LS595J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type	
SNJ54LS595J	ACTIVE	CDIP	J	16	1	TBD	A42	N / A for Pkg Type	
SNJ54LS595W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type	
SNJ54LS595W	ACTIVE	CFP	W	16	1	TBD	A42	N / A for Pkg Type	

[1] The marketing status values are defined as follows:
ACTIVE: Product device recommended for new designs.
LIFEBUY: TI has announced that the device will be discontinued, and a lifetime-buy period is in effect.
NRND: Not recommended for new designs. Device is in production to support existing customers, but TI does not recommend using this part in a new design.
PREVIEW: Device has been announced but is not in production. Samples may or may not be available.
OBSOLETE: TI has discontinued the production of the device.

[2] Eco Plan - The planned eco-friendly classification: Pb-Free (RoHS), Pb-Free (RoHS Exempt), or Green (RoHS & no Sb/Br) - please check http://www.ti.com/productcontent for the latest availability information and additional product content details.
TBD: The Pb-Free/Green conversion plan has not been defined.
Pb-Free (RoHS): TI's terms "Lead-Free" or "Pb-Free" mean semiconductor products that are compatible with the current RoHS requirements for all 6 substances, including the requirement that lead not exceed 0.1% by weight in homogeneous materials. Where designed to be soldered at high temperatures, TI Pb-Free products are suitable for use in specified lead-free processes.
Pb-Free (RoHS Exempt): This component has a RoHS exemption for either 1) lead-based flip-chip solder bumps used between the die and package, or 2) lead-based die adhesive used between the die and leadframe. The component is otherwise considered Pb-Free (RoHS compatible) as defined above.
Green (RoHS & no Sb/Br): TI defines "Green" to mean Pb-Free (RoHS compatible), and free of Bromine (Br) and Antimony (Sb) based flame retardants (Br or Sb do not exceed 0.1% by weight in homogeneous material)

[3] MSL, Peak Temp. -- The Moisture Sensitivity Level rating according to the JEDEC industry standard classifications, and peak solder temperature.

Important Information and Disclaimer: The information provided on this page represents TI's knowledge and belief as of the date that it is provided. TI bases its knowledge and belief on information provided by third parties, and makes no representation or warranty as to the accuracy of such information. Efforts are underway to better integrate information from third parties. TI has taken and continues to take reasonable steps to provide representative and accurate information but may not have conducted destructive testing or chemical analysis on incoming materials and chemicals. TI and TI suppliers consider certain information to be proprietary, and thus CAS numbers and other limited information may not be available for release.

In no event shall TI's liability arising out of such information exceed the total purchase price of the TI part(s) at issue in this document sold by TI to Customer on an annual basis.

OTHER QUALIFIED VERSIONS OF SN54LS595, SN74LS595 :

● Catalog: SN74LS595

● Military: SN54LS595

NOTE: Qualified Version Definitions:

    ● Catalog - TI's standard catalog product

    ● Military - QML certified for Military and Defense Applications

TAPE AND REEL INFORMATION

REEL DIMENSIONS

TAPE DIMENSIONS

A0	Dimension designed to accommodate the component width
B0	Dimension designed to accommodate the component length
K0	Dimension designed to accommodate the component thickness
W	Overall width of the carrier tape
P1	Pitch between successive cavity centers
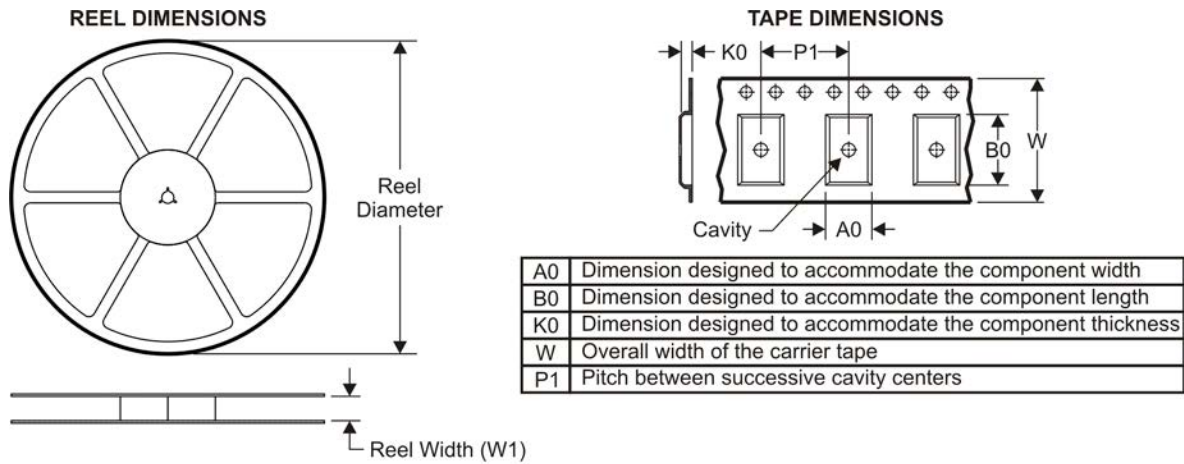
QUADRANT ASSIGNMENTS FOR PIN 1 ORIENTATION IN TAPE
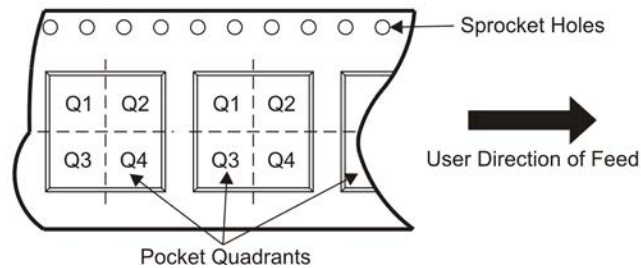
*All dimensions are nominal

Device	Package Type	Package Drawing	Pins	SPQ	Reel Diameter (mm)	Reel Width W1 (mm)	A0 (mm)	B0 (mm)	K0 (mm)	P1 (mm)	W (mm)	Pin1 Quadrant
SN74LS595DR	SOIC	D	16	2500	330.0	16.4	6.5	10.3	2.1	8.0	16.0	Q1

TAPE AND REEL BOX DIMENSIONS

*All dimensions are nominal

Device	Package Type	Package Drawing	Pins	SPQ	Length (mm)	Width (mm)	Height (mm)
SN74LS595DR	SOIC	D	16	2500	333.2	345.9	28.6
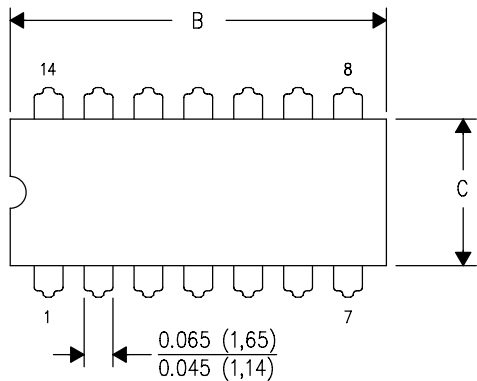
DIM ＼ PINS **	14	16	18	20
A	0.300 (7,62) BSC	0.300 (7,62) BSC	0.300 (7,62) BSC	0.300 (7,62) BSC
B MAX	0.785 (19,94)	.840 (21,34)	0.960 (24,38)	1.060 (26,92)
B MIN	——	——	——	——
C MAX	0.300 (7,62)	0.300 (7,62)	0.310 (7,87)	0.300 (7,62)
C MIN	0.245 (6,22)	0.245 (6,22)	0.220 (5,59)	0.245 (6,22)

B

14 ... 8

0.065 (1,65) / 0.045 (1,14)

1 ... 7

C

0.005 (0,13) MIN

0.060 (1,52) / 0.015 (0,38)

0.200 (5,08) MAX

Seating Plane

0.130 (3,30) MIN

0.026 (0,66) / 0.014 (0,36)

0.100 (2,54)

A

0°−15°

0.014 (0,36) / 0.008 (0,20)
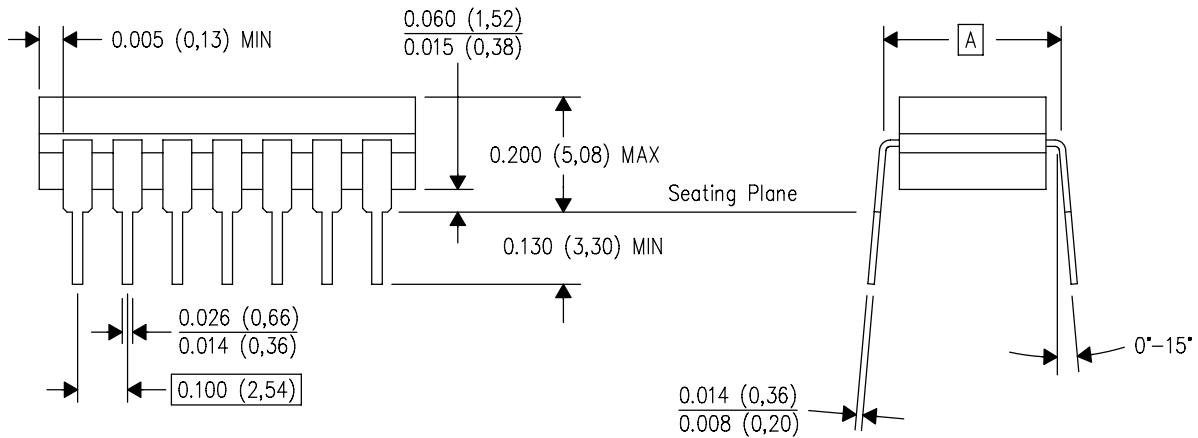
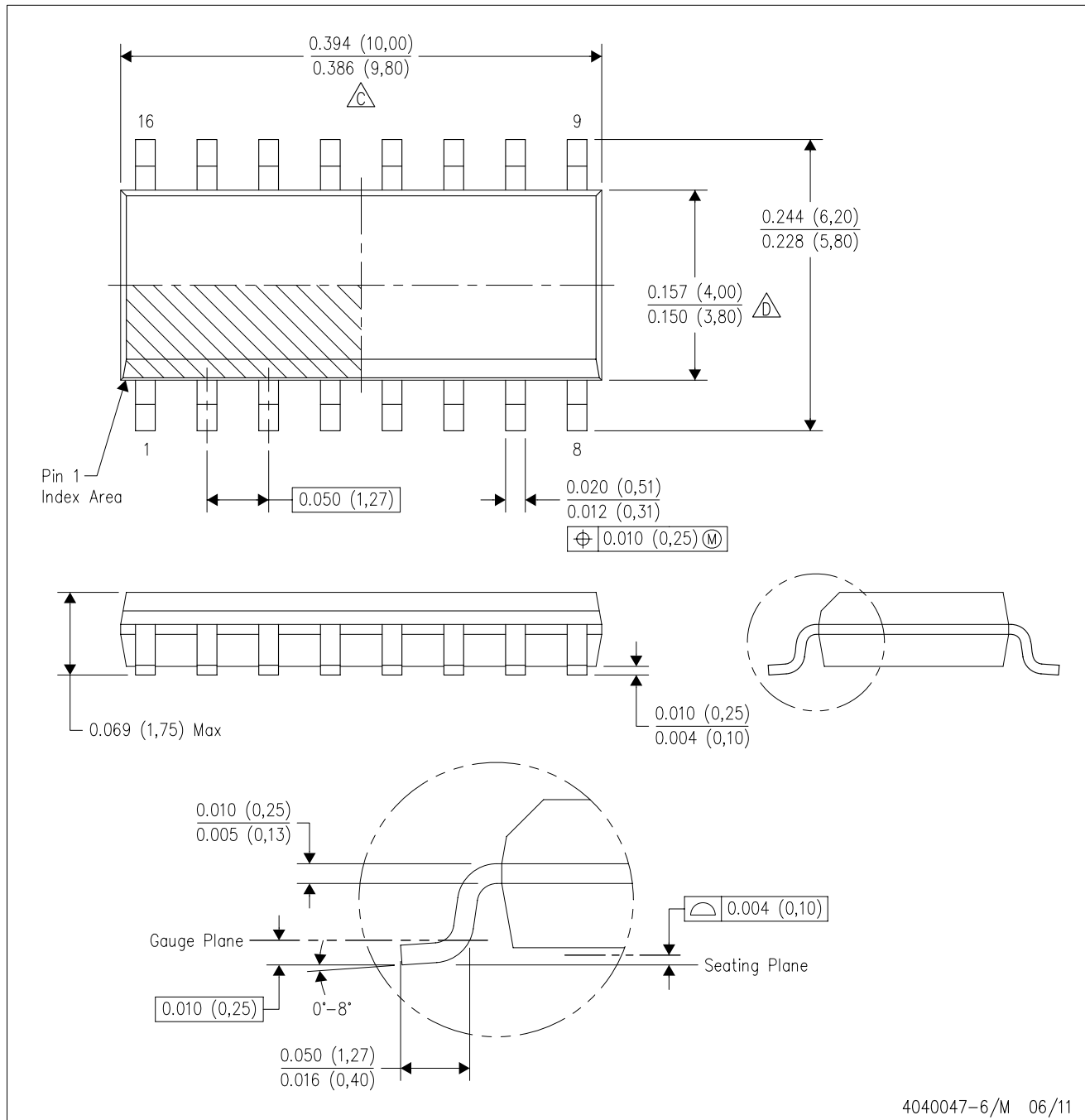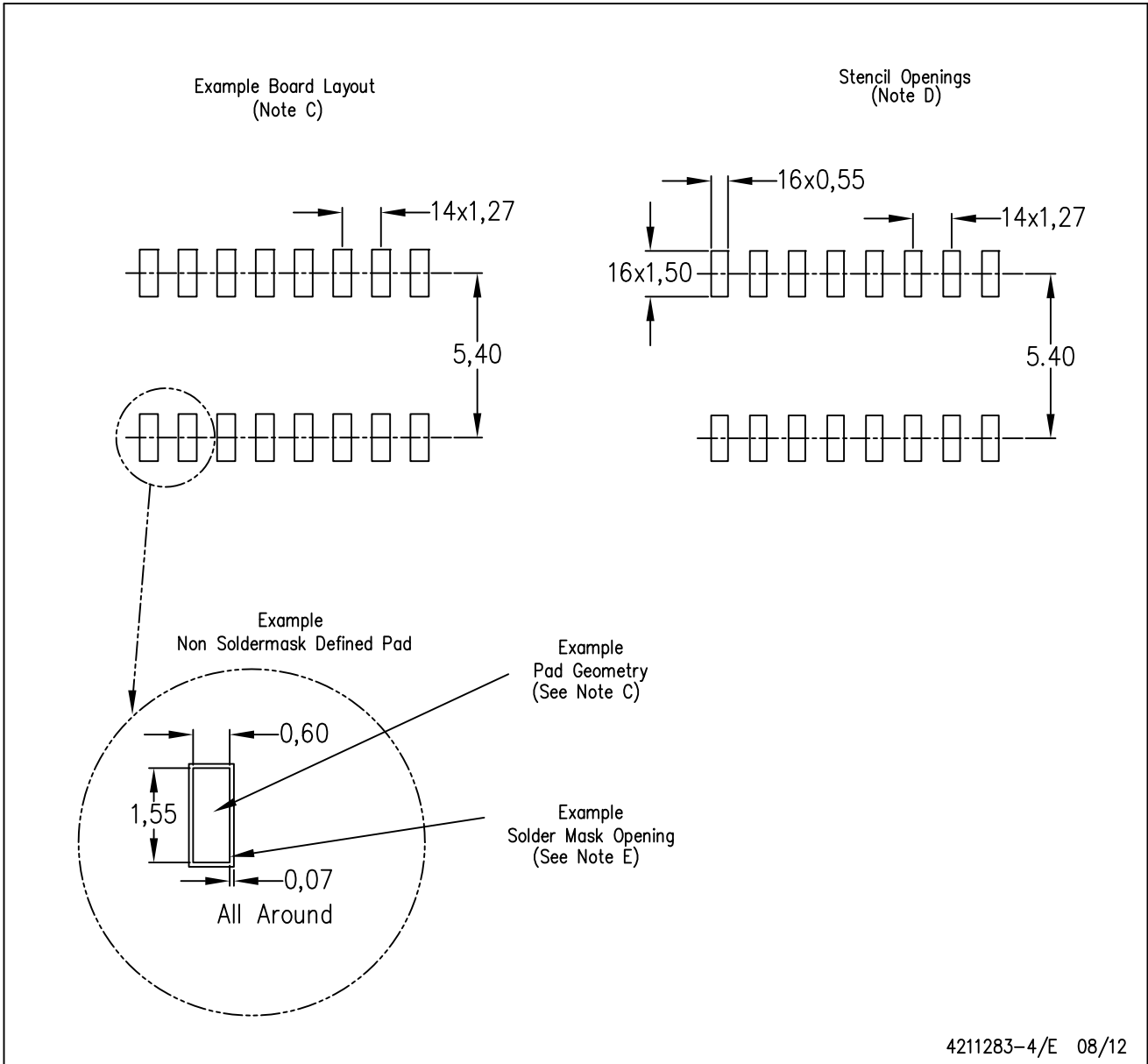4040083/F 03/03

NOTES:　A.　All linear dimensions are in inches (millimeters).
　　　　　B.　This drawing is subject to change without notice.
　　　　　C.　This package is hermetically sealed with a ceramic lid using glass frit.
　　　　　D.　Index point is provided on cap for terminal identification only on press ceramic glass frit seal only.
　　　　　E.　Falls within MIL STD 1835 GDIP1−T14, GDIP1−T16, GDIP1−T18 and GDIP1−T20.

W (R−GDFP−F16)   **CERAMIC DUAL FLATPACK**
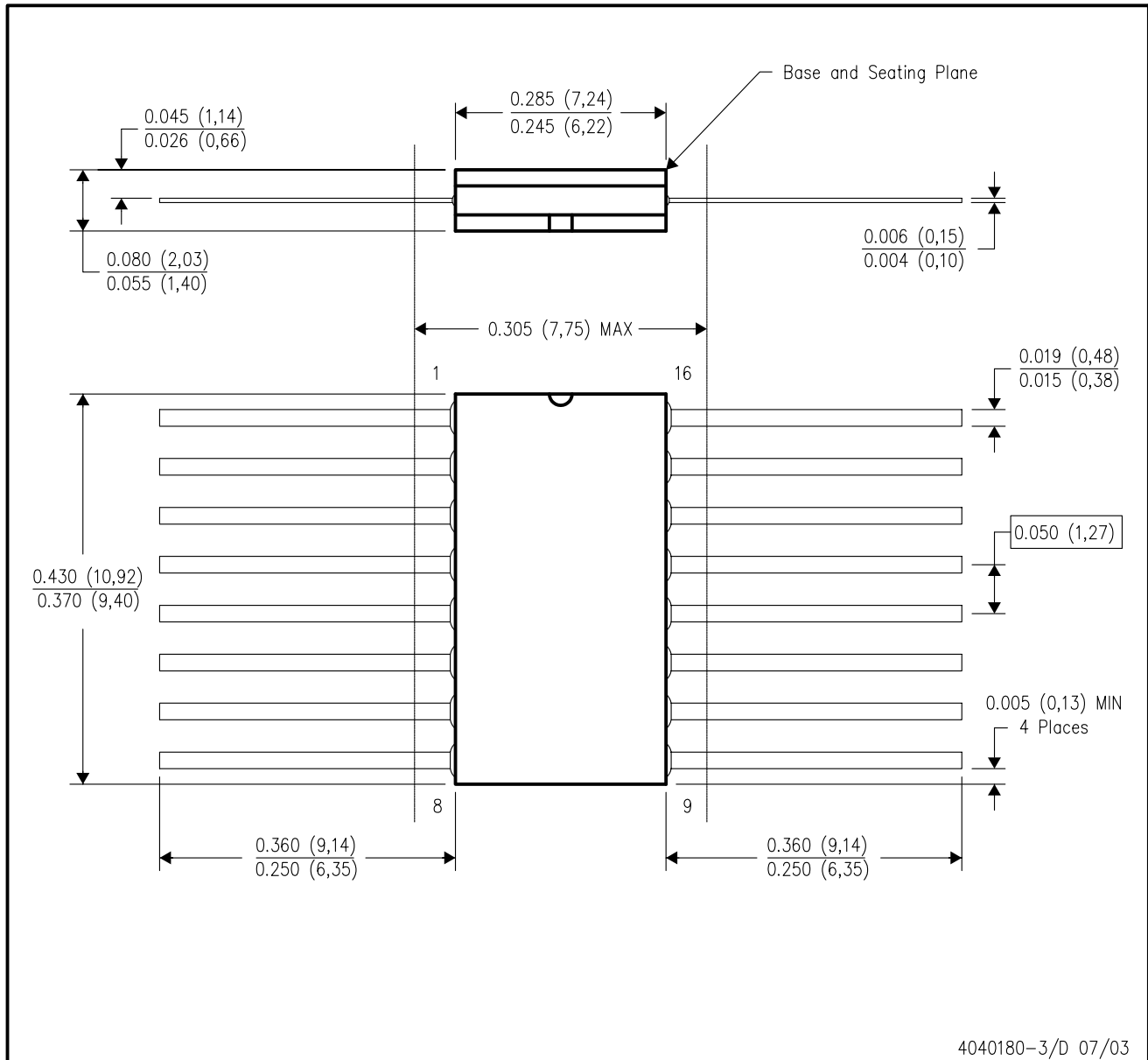
Base and Seating Plane

0.285 (7,24) / 0.245 (6,22)

0.045 (1,14) / 0.026 (0,66)

0.080 (2,03) / 0.055 (1,40)

0.006 (0,15) / 0.004 (0,10)

0.305 (7,75) MAX

1   16

0.019 (0,48) / 0.015 (0,38)

0.050 (1,27)

0.430 (10,92) / 0.370 (9,40)

0.005 (0,13) MIN
4 Places

8   9

0.360 (9,14) / 0.250 (6,35)

0.360 (9,14) / 0.250 (6,35)

4040180−3/D 07/03

NOTES: A. All linear dimensions are in inches (millimeters).
             B. This drawing is subject to change without notice.
             C. This package can be hermetically sealed with a ceramic lid using glass frit.
             D. Index point is provided on cap for terminal identification only.
             E. Falls within MIL STD 1835 GDFP1−F16 and JEDEC MO−092AC

FK (S−CQCC−N**)   LEADLESS CERAMIC CHIP CARRIER
28 TERMINAL SHOWN
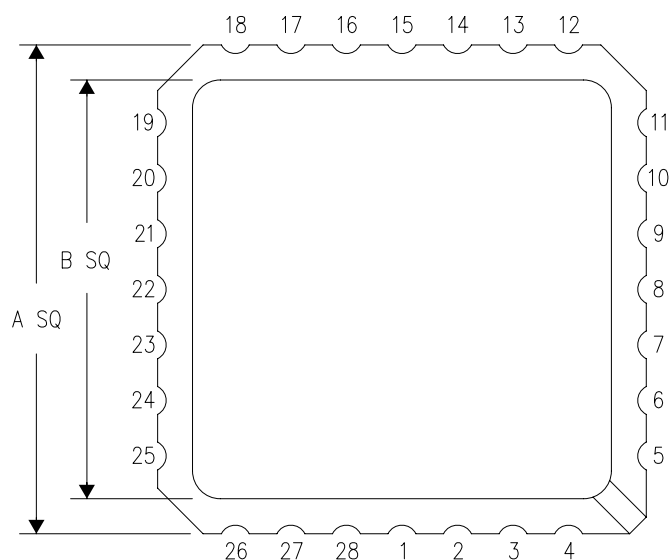
NO. OF TERMINALS **	A		B	
	MIN	MAX	MIN	MAX
20	0.342 (8,69)	0.358 (9,09)	0.307 (7,80)	0.358 (9,09)
28	0.442 (11,23)	0.458 (11,63)	0.406 (10,31)	0.458 (11,63)
44	0.640 (16,26)	0.660 (16,76)	0.495 (12,58)	0.560 (14,22)
52	0.740 (18,78)	0.761 (19,32)	0.495 (12,58)	0.560 (14,22)
68	0.938 (23,83)	0.962 (24,43)	0.850 (21,6)	0.858 (21,8)
84	1.141 (28,99)	1.165 (29,59)	1.047 (26,6)	1.063 (27,0)

0.020 (0,51) / 0.010 (0,25)

0.020 (0,51) / 0.010 (0,25)

0.080 (2,03) / 0.064 (1,63)

0.055 (1,40) / 0.045 (1,14)

0.045 (1,14) / 0.035 (0,89)

0.028 (0,71) / 0.022 (0,54)

0.050 (1,27)

0.045 (1,14) / 0.035 (0,89)
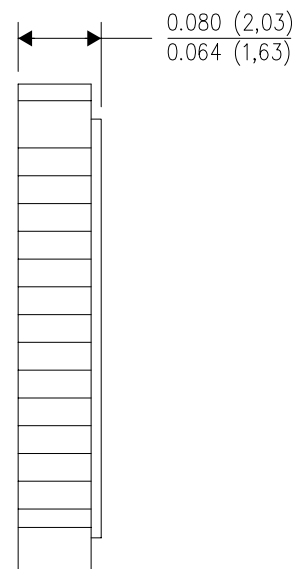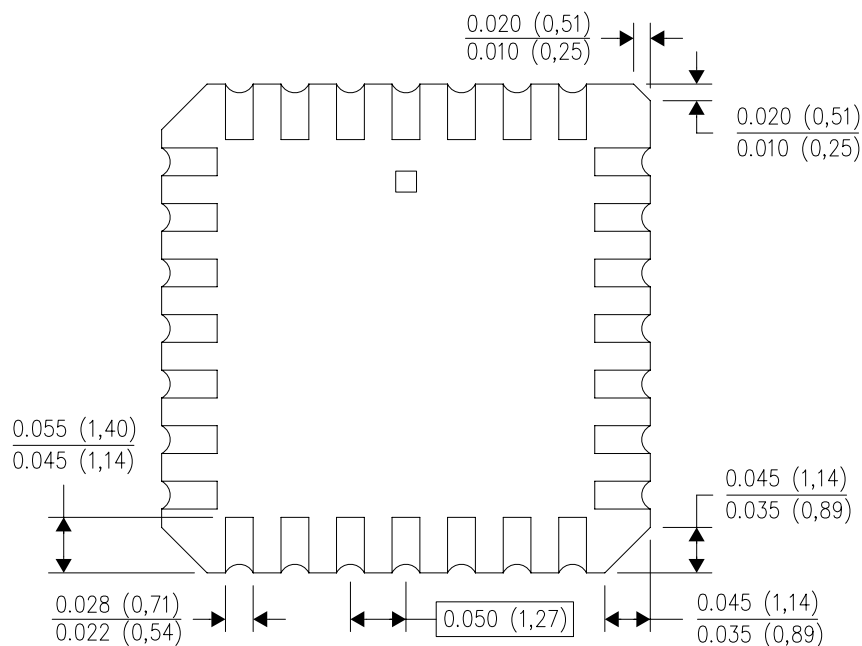
4040140/D 01/11

NOTES:
    A. All linear dimensions are in inches (millimeters).
    B. This drawing is subject to change without notice.
    C. This package can be hermetically sealed with a metal lid.
    D. Falls within JEDEC MS−004

TEXAS INSTRUMENTS
www.ti.com

N (R−PDIP−T**)
16 PINS SHOWN

PLASTIC DUAL−IN−LINE PACKAGE
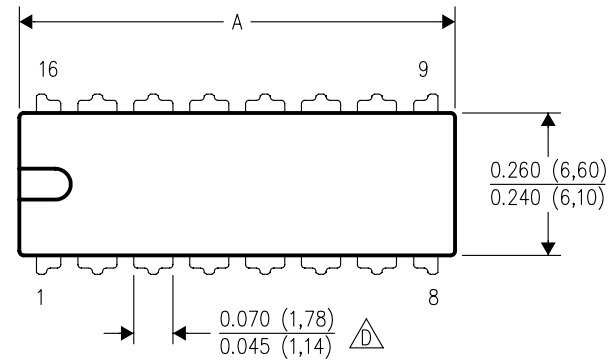
DIM ＼ PINS **	14	16	18	20
A MAX	0.775 (19,69)	0.775 (19,69)	0.920 (23,37)	1.060 (26,92)
A MIN	0.745 (18,92)	0.745 (18,92)	0.850 (21,59)	0.940 (23,88)
⚠C MS−001 VARIATION	AA	BB	AC	AD

A

16   9

0.260 (6,60)
0.240 (6,10)

1   8

0.070 (1,78)
0.045 (1,14) ⚠D

0.045 (1,14) ⚠D
0.030 (0,76)

0.020 (0,51) MIN

0.200 (5,08) MAX

Seating Plane

0.125 (3,18) MIN

0.100 (2,54)

0.021 (0,53)
0.015 (0,38)

⊕ 0.010 (0,25) Ⓜ

14/18 Pin Only
20 Pin vendor option ⚠D

0.325 (8,26)
0.300 (7,62)

0.015 (0,38)

Gauge Plane

0.010 (0,25) NOM

0.430 (10,92) MAX
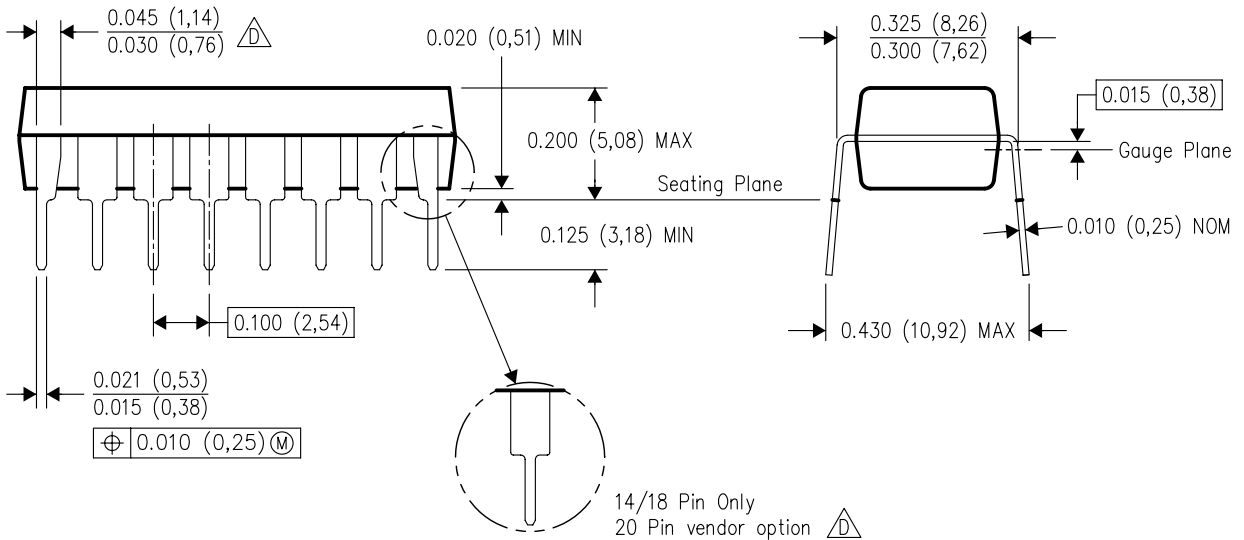
4040049/E 12/2002

NOTES: A. All linear dimensions are in inches (millimeters).
          B. This drawing is subject to change without notice.
      ⚠C   Falls within JEDEC MS−001, except 18 and 20 pin minimum body length (Dim A).
      ⚠D   The 20 pin end lead shoulder width is a vendor option, either half or full width.

D (R−PDSO−G16)   PLASTIC SMALL OUTLINE

0.394 (10,00)
0.386 (9,80)
/C\

16   9

0.244 (6,20)
0.228 (5,80)

0.157 (4,00)
0.150 (3,80) /D\

1   8

Pin 1
Index Area

0.050 (1,27)

0.020 (0,51)
0.012 (0,31)

⊕ | 0.010 (0,25) Ⓜ

0.069 (1,75) Max

0.010 (0,25)
0.004 (0,10)

0.010 (0,25)
0.005 (0,13)

0.004 (0,10)

Gauge Plane

Seating Plane

0.010 (0,25)   0°−8°

0.050 (1,27)
0.016 (0,40)

4040047−6/M   06/11

NOTES: A.   All linear dimensions are in inches (millimeters).
         B.   This drawing is subject to change without notice.
       /C\   Body length does not include mold flash, protrusions, or gate burrs. Mold flash, protrusions, or gate burrs shall
             not exceed 0.006 (0,15) each side.
       /D\   Body width does not include interlead flash. Interlead flash shall not exceed 0.017 (0,43) each side.
         E.   Reference JEDEC MS−012 variation AC.

D (R−PDSO−G16)   PLASTIC SMALL OUTLINE

Example Board Layout
(Note C)

←14x1,27

5,40

Stencil Openings
(Note D)

16x0,55

16x1,50

←14x1,27

5.40

Example
Non Soldermask Defined Pad

Example
Pad Geometry
(See Note C)

←0,60

1,55

←0,07

All Around

Example
Solder Mask Opening
(See Note E)

4211283−4/E 08/12

NOTES: A. All linear dimensions are in millimeters.
          B. This drawing is subject to change without notice.
          C. Publication IPC−7351 is recommended for alternate designs.
          D. Laser cutting apertures with trapezoidal walls and also rounding corners will offer better paste release. Customers should
              contact their board assembly site for stencil design recommendations. Refer to IPC−7525 for other stencil recommendations.
          E. Customers should contact their board fabrication site for solder mask tolerances between and around signal pads.

TEXAS
INSTRUMENTS
www.ti.com

IMPORTANT NOTICE

Products		Applications	
Audio	www.ti.com/audio	Automotive and Transportation	www.ti.com/automotive
Amplifiers	amplifier.ti.com	Communications and Telecom	www.ti.com/communications
Data Converters	dataconverter.ti.com	Computers and Peripherals	www.ti.com/computers
DLP® Products	www.dlp.com	Consumer Electronics	www.ti.com/consumer-apps
DSP	dsp.ti.com	Energy and Lighting	www.ti.com/energy
Clocks and Timers	www.ti.com/clocks	Industrial	www.ti.com/industrial
Interface	interface.ti.com	Medical	www.ti.com/medical
Logic	logic.ti.com	Security	www.ti.com/security
Power Mgmt	power.ti.com	Space, Avionics and Defense	www.ti.com/space-avionics-defense
Microcontrollers	microcontroller.ti.com	Video and Imaging	www.ti.com/video
RFID	www.ti-rfid.com		
OMAP Applications Processors	www.ti.com/omap	**TI E2E Community**	e2e.ti.com
Wireless Connectivity	www.ti.com/wirelessconnectivity		