









SN74AUC1G07

SCES373R - SEPTEMBER 2001 - REVISED JUNE 2017

SN74AUC1G07 Single Buffer/Driver With Open-Drain Output

1 Features

- Latch-Up Performance Exceeds 100 mA Per JESD 78, Class II
- ESD Protection Exceeds JESD 22
 - 2000-V Human-Body Model (A114-A)
 - 200-V Machine Model (A115-A)
 - 1000-V Charged-Device Model (C101)
- Available in the Texas Instruments NanoFree™ Package
- Optimized for 1.8-V Operation and Is 3.6-V I/O Tolerant to Support Mixed-Mode Signal Operation
- I_{off} Supports Partial Power Down Mode and Back Drive Protection
- Sub-1-V Operable
- Max t_{pd} of 2.5 ns at 1.8 V
- Low Power Consumption, 10-µA Maximum I_{CC}
- ±8-mA Output Drive at 1.8 V

2 Applications

- AV Receiver
- Audio Dock: Portable
- Blu-Ray Player and Home Theater
- Embedded PC
- MP3 Player/Recorder (Portable Audio)
- Personal Digital Assistant (PDA)
- Power: Telecom/Server AC/DC Supply: Single Controller: Analog and Digital
- Solid State Drive (SSD): Client and Enterprise
- TV: LCD/Digital and High-Definition (HDTV)
- Tablet: Enterprise
- Video Analytics: Server
- Wireless Headset, Keyboard, and Mouse

Logic Diagram (Positive Logic)

A _____ Y

3 Description

This single buffer/driver is operational at 0.8-V to 2.7-V $V_{CC},$ but is designed specifically for 1.65-V to 1.95-V V_{CC} operation.

The output of the SN74AUC1G07 is open drain and can be connected to other open-drain outputs to implement active-low wired-OR or active-high wired-AND functions.

NanoFree[™] package technology is a major breakthrough in IC packaging concepts, using the die as the package.

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

For more information about AUC Little Logic devices, see *Applications of Texas Instruments AUC Sub-1-V Little Logic Devices*, SCEA027.

Device Information⁽¹⁾

PART NUMBER	PACKAGE	BODY SIZE (NOM)				
SN74AUC1G07DBV	SOT-23 (5)	2.90 mm × 1.60 mm				
SN74AUC1G07DCK	SC70 (5)	2.00 mm × 1.25 mm				
SN74AUC1G07YZP	DSBGA (5)	1.75 mm × 1.25 mm				

(1) For all available packages, see the orderable addendum at the end of the data sheet.



Applications 1

2

Detailed Description7 Description 1 8 Functional Block Diagram 7 8.1 Revision History..... 2 Device Functional Modes......7 8.2 Pin Configuration and Functions 3 9 Specifications...... 4 Absolute Maximum Ratings 4 ESD Ratings..... 4 nditions.....4

10		hanical, Packaging, and Orderable	8
	9.6	Glossary	8
	9.5	Electrostatic Discharge Caution	8
	9.4	Trademarks	8
	9.3	Community Resources	8
	9.2	Receiving Notification of Documentation Updates	8
	9.1	Documentation Support	8

Table of Contents 6.8 Operating Characteristics...... 5 Features 1

7

6.3	Recommended Operating Conditions 4
6.4	Thermal Information 5
6.5	Electrical Characteristics 5
6.6	Switching Characteristics: C _L = 15 pF 5
6.7	Switching Characteristics: C _L = 30 pF 5

4 Revision History

1

2

3

4

5

6

6.1

6.2

NOTE: Page numbers for previous revisions may differ from page numbers in the current version.

Changes from Revision Q (July 2007) to Revision R

Added Device Information table, ESD Ratings table, Thermal Information table, Feature Description section, Device	
Functional Modes, Device and Documentation Support section, and Mechanical, Packaging, and Orderable	
Information section	. 1
Deleted Ordering Information see Mechanical, Packaging, and Orderable Information section at the end of the data	
sheet	. 1
Deleted DRV package throughout data shoet	4

-	Deleted DIVI package throughout data sheet	
•	Changed output in <i>Function Table</i> from: "H" to: "Hi-Z"	7

XAS

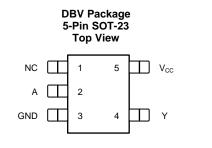
www.ti.com

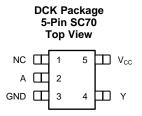
Page

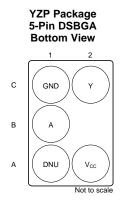




5 Pin Configuration and Functions







See mechanical drawings for dimensions.

DNU – Do not use

NC – No internal connection

Pin Functions

PIN		1/0	DESCRIPTION				
NAME	DBV, DCK	YZP	I/O	DESCRIPTION			
А	2	B1	I	Logic input			
DNU	—	A1	_	Do not use			
NC	1	—	_	No internal connection			
GND	3	C1	_	Ground			
V _{CC}	5	A2	_	Positive supply			
Y	4	C2	0	Open-drain output			



6 Specifications

6.1 Absolute Maximum Ratings

over operating free-air temperature range (unless otherwise noted)⁽¹⁾

				MIN	MAX	UNIT
V_{CC}	Supply voltage			-0.5	3.6	V
VI	Input voltage ⁽²⁾				3.6	V
Vo	Output voltage ⁽²⁾		-0.5	3.6	V	
I _{IK}	Input clamp current	V ₁ < 0			-50	mA
I _{OK}	Output clamp current	V _O < 0			-50	mA
I _O	Continuous output current				±20	mA
	Continuous current through V _{CC} or GND				±100	mA
T _{stg}	Storage temperature			-65	150	°C

(1) Stresses beyond those listed under Absolute Maximum Ratings may cause permanent damage to the device. These are stress ratings only, which do not imply functional operation of the device at these or any other conditions beyond those indicated under Recommended Operating Conditions. Exposure to absolute-maximum-rated conditions for extended periods may affect device reliability.

(2) The input negative-voltage and output voltage ratings may be exceeded if the input and output current ratings are observed.

6.2 ESD Ratings

			VALUE	UNIT
V _(ESD)		Human-body model (HBM), per ANSI/ESDA/JEDEC JS-001 ⁽¹⁾		
	Electrostatic discharge	Charged-device model (CDM), per JEDEC specification JESD22-C101 $^{\left(2\right) }$	1000	V
		Machine Model (A115-A)	200	

(1) JEDEC document JEP155 states that 500-V HBM allows safe manufacturing with a standard ESD control process.

(2) JEDEC document JEP157 states that 250-V CDM allows safe manufacturing with a standard ESD control process.

6.3 Recommended Operating Conditions

 $See^{(1)}$

			MIN	MAX	UNIT
V _{CC}	Supply voltage		0.8	2.7	V
		$V_{CC} = 0.8 V$	V _{CC}		
VIH	High-level input voltage	$V_{CC} = 1.1 \text{ V to } 1.95 \text{ V}$	0.65 × V _{CC}		V
		V_{CC} = 2.3 V to 2.7 V	1.7		
		V _{CC} = 0.8 V		0	
VIL	Low-level input voltage	V _{CC} = 1.1 V to 1.95 V		$0.35 \times V_{CC}$	V
		$V_{CC} = 2.3 \text{ V to } 2.7 \text{ V}$		0.7	
VI	Input voltage		0	3.6	V
Vo	Output voltage		0	3.6	V
		V _{CC} = 0.8 V		0.7	
	Low-level output current	V _{CC} = 1.1 V		3	
I _{OL}		$V_{CC} = 1.4 V$		5	mA
		V _{CC} = 1.65 V		8	
		V _{CC} = 2.3 V		9	
$\Delta t / \Delta v$	Input transition rise or fall rate			15	ns/V
T _A	Operating free-air temperature		-40	85	°C

 All unused inputs of the device must be held at V_{CC} or GND to ensure proper device operation. See Implications of Slow or Floating CMOS Inputs, SCBA004.

6.4 Thermal Information

			SN74AUC1G07		
	THERMAL METRIC ⁽¹⁾	DBV (SOT-23)	DCK (SC70)	YZP (DSBGA)	UNIT
		5 PINS	5 PINS	5 PINS	
R_{\thetaJA}	Junction-to-ambient thermal resistance	206	252	132	°C/W

(1) For more information about traditional and new thermal metrics, see the Semiconductor and IC Package Thermal Metrics application report.

6.5 Electrical Characteristics

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

PA	RAMETER	TEST CONDITIONS	V _{cc}	MIN TYP ⁽¹⁾	MAX	UNIT
		I _{OL} = 100 μA	0.8 V to 2.7 V		0.2	
		I _{OL} = 0.7 mA	0.8 V	0.25		
V _{OL}		$I_{OL} = 3 \text{ mA}$	1.1 V		0.3	V
		$I_{OL} = 5 \text{ mA}$	1.4 V		0.4	v
		I _{OL} = 8 mA	1.65 V		0.45	
		I _{OL} = 9 mA	2.3 V		0.6	
I _I	A input	V _I = V _{CC} or GND	0 to 2.7 V		±5	μA
I _{off}		V_{I} or $V_{O} = 2.7 V$	0		±10	μA
I _{CC}		$V_{I} = V_{CC} \text{ or } GND, \qquad I_{O} = 0$	0.8 V to 2.7 V		10	μA
Ci		V _I = V _{CC} or GND	2.5 V	3		pF
Co		$V_{O} = V_{CC}$ or GND	2.5 V	3.5		pF

(1) All typical values are at $T_A = 25^{\circ}C$.

6.6 Switching Characteristics: C_L = 15 pF

over recommended operating free-air temperature range, $C_L = 15 \text{ pF}$ (unless otherwise noted) (see Figure 1)

PARAMETER	FROM (INPUT)	-	-	TO (OUTPUT)	V _{CC} = 0.8 V	V _{CC} = ± 0.	1.2 V 1 V	V _{CC} = ± 0.			_C = 1.8 : 0.15 V		V _{CC} = ± 0.		UNIT
			ТҮР	MIN	MAX	MIN	MAX	MIN	TYP	MAX	MIN	MAX			
t _{pd}	A	Y	4.7	0.3	3.3	0.2	2.4	0.2	1.1	2.3	0.2	1.8	ns		

6.7 Switching Characteristics: $C_L = 30 \text{ pF}$

over recommended operating free-air temperature range, $C_L = 30 \text{ pF}$ (unless otherwise noted) (see Figure 1)

PARAMETER	FROM (INPUT)	TO		_C = 1.8 0.15 \		V _{CC} = 2.5 V ± 0.2 V		UNIT
	(INPUT)	(OUTPUT)	MIN	TYP	MAX	MIN	MAX	
t _{pd}	А	Y	0.8	1.9	2.5	0.2	1.8	ns

6.8 **Operating Characteristics**

 $T_A = 25^{\circ}C$

PARAMETER		TEST CONDITIONS			V _{CC} = 1.8 V		UNIT
		CONDITIONO	TYP	TYP	TYP	TYP	
C _{pd}	Power dissipation capacitance	f = 10 MHz	2	3	3	5	pF

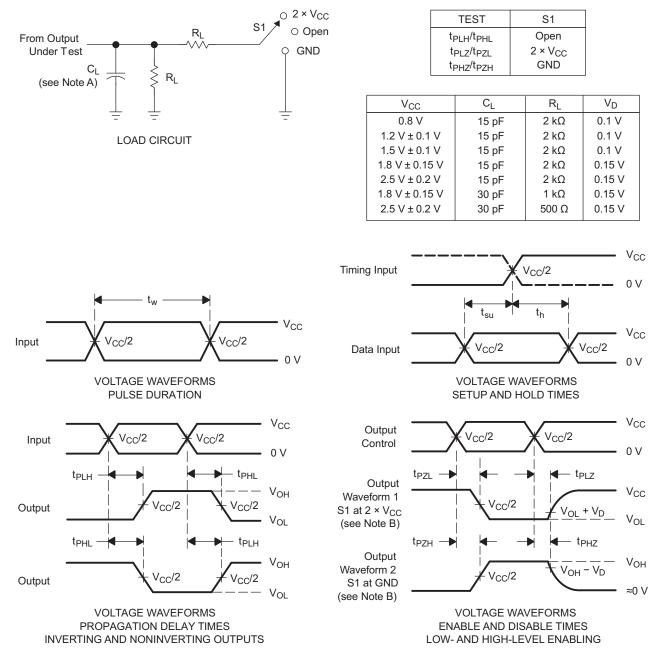
SN74AUC1G07

SCES373R - SEPTEMBER 2001 - REVISED JUNE 2017

TEXAS INSTRUMENTS

www.ti.com

7 Parameter Measurement Information



NOTES: A. C_L includes probe and jig capacitance.

- B. Waveform 1 is for an output with internal conditions such that the output is low except when disabled by the output control. Waveform 2 is for an output with internal conditions such that the output is high, except when disabled by the output control.
- C. All input pulses are supplied by generators having the following characteristics: PRR \leq 10 MHz, Z_O = 50 Ω , slew rate \geq 1 V/ns.
- D. The outputs are measured one at a time, with one transition per measurement.
- E. t_{PLZ} and t_{PHZ} are the same as t_{dis} .
- F. t_{PZL} and t_{PZH} are the same as t_{en} .
- G. t_{PLH} and t_{PHL} are the same as t_{pd} .
- H. All parameters and waveforms are not applicable to all devices.

Figure 1. Load Circuit and Voltage Waveforms



8 Detailed Description

8.1 Functional Block Diagram



Figure 2. Logic Diagram (Positive Logic)

8.2 Device Functional Modes

Table 1 lists the functional modes of the SN74AUC1G07.

Table 1. Function Table

INPUT A	OUTPUT Y
Н	Hi-Z
L	L

Texas Instruments

www.ti.com

9 Device and Documentation Support

9.1 Documentation Support

9.1.1 Related Documentation

For related documentation see the following:

- Applications of Texas Instruments AUC Sub-1-V Little Logic Devices, SCEA027
- Implications of Slow or Floating CMOS Inputs, SCBA004

9.2 Receiving Notification of Documentation Updates

To receive notification of documentation updates, navigate to the device product folder on ti.com. In the upper right corner, click on *Alert me* to register and receive a weekly digest of any product information that has changed. For change details, review the revision history included in any revised document.

9.3 Community Resources

The following links connect to TI community resources. Linked contents are provided "AS IS" by the respective contributors. They do not constitute TI specifications and do not necessarily reflect TI's views; see TI's Terms of Use.

TI E2E[™] Online Community *TI's Engineer-to-Engineer (E2E) Community.* Created to foster collaboration among engineers. At e2e.ti.com, you can ask questions, share knowledge, explore ideas and help solve problems with fellow engineers.

Design Support TI's Design Support Quickly find helpful E2E forums along with design support tools and contact information for technical support.

9.4 Trademarks

NanoFree, E2E are trademarks of Texas Instruments. All other trademarks are the property of their respective owners.

9.5 Electrostatic Discharge Caution



This integrated circuit can be damaged by ESD. Texas Instruments recommends that all integrated circuits be handled with appropriate precautions. Failure to observe proper handling and installation procedures can cause damage.

ESD damage can range from subtle performance degradation to complete device failure. Precision integrated circuits may be more susceptible to damage because very small parametric changes could cause the device not to meet its published specifications.

9.6 Glossary

SLYZ022 — TI Glossary.

This glossary lists and explains terms, acronyms, and definitions.

10 Mechanical, Packaging, and Orderable Information

The following pages include mechanical, packaging, and orderable information. This information is the most current data available for the designated devices. This data is subject to change without notice and revision of this document. For browser-based versions of this data sheet, refer to the left-hand navigation.

Copyright © 2001–2017, Texas Instruments Incorporated



PACKAGING INFORMATION

Orderable Device	Status	Package Type	•	Pins	•	Eco Plan	Lead finish/	MSL Peak Temp	Op Temp (°C)	Device Marking	Samples
	(1)		Drawing		Qty	(2)	Ball material	(3)		(4/5)	
SN74AUC1G07DBVR	ACTIVE	SOT-23	DBV	5	3000	RoHS & Green	NIPDAU SN	Level-1-260C-UNLIM	-40 to 85	(U07F, U07R)	Samples
SN74AUC1G07DBVRG4	ACTIVE	SOT-23	DBV	5	3000	RoHS & Green	NIPDAU	Level-1-260C-UNLIM	-40 to 85	U07F	Samples
SN74AUC1G07DBVT	ACTIVE	SOT-23	DBV	5	250	RoHS & Green	NIPDAU SN	Level-1-260C-UNLIM	-40 to 85	(U07F, U07R)	Samples
SN74AUC1G07DCKR	ACTIVE	SC70	DCK	5	3000	RoHS & Green	NIPDAU	Level-1-260C-UNLIM	-40 to 85	(UV5, UVF, UVR)	Samples
SN74AUC1G07DCKRG4	ACTIVE	SC70	DCK	5	3000	RoHS & Green	NIPDAU	Level-1-260C-UNLIM	-40 to 85	(UV5, UVF, UVR)	Samples
SN74AUC1G07DCKT	ACTIVE	SC70	DCK	5	250	RoHS & Green	NIPDAU	Level-1-260C-UNLIM	-40 to 85	(UV5, UVF, UVR)	Samples
SN74AUC1G07YZPR	ACTIVE	DSBGA	YZP	5	3000	RoHS & Green	SNAGCU	Level-1-260C-UNLIM	-40 to 85	UVN	Samples

⁽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⁾ RoHS: TI defines "RoHS" to mean semiconductor products that are compliant with the current EU RoHS requirements for all 10 RoHS substances, including the requirement that RoHS substance do not exceed 0.1% by weight in homogeneous materials. Where designed to be soldered at high temperatures, "RoHS" products are suitable for use in specified lead-free processes. TI may reference these types of products as "Pb-Free".

RoHS Exempt: TI defines "RoHS Exempt" to mean products that contain lead but are compliant with EU RoHS pursuant to a specific EU RoHS exemption.

Green: TI defines "Green" to mean the content of Chlorine (CI) and Bromine (Br) based flame retardants meet JS709B low halogen requirements of <=1000ppm threshold. Antimony trioxide based flame retardants must also meet the <=1000ppm threshold requirement.

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

⁽⁴⁾ There may be additional marking, which relates to the logo, the lot trace code information, or the environmental category on the device.

(5) Multiple Device Markings will be inside parentheses. Only one Device Marking contained in parentheses and separated by a "~" will appear on a device. If a line is indented then it is a continuation of the previous line and the two combined represent the entire Device Marking for that device.



PACKAGE OPTION ADDENDUM

⁽⁶⁾ Lead finish/Ball material - Orderable Devices may have multiple material finish options. Finish options are separated by a vertical ruled line. Lead finish/Ball material values may wrap to two lines if the finish value exceeds the maximum column width.

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.

PACKAGE MATERIALS INFORMATION

www.ti.com

Texas Instruments

TAPE AND REEL INFORMATION





QUADRANT ASSIGNMENTS FOR PIN 1 ORIENTATION IN TAPE



*All dimensions are nominal		-								-		
Device	Package Type	Package Drawing		SPQ	Reel Diameter (mm)	Reel Width W1 (mm)	A0 (mm)	B0 (mm)	K0 (mm)	P1 (mm)	W (mm)	Pin1 Quadrant
SN74AUC1G07DBVR	SOT-23	DBV	5	3000	180.0	8.4	3.23	3.17	1.37	4.0	8.0	Q3
SN74AUC1G07DBVR	SOT-23	DBV	5	3000	178.0	9.0	3.23	3.17	1.37	4.0	8.0	Q3
SN74AUC1G07DBVRG4	SOT-23	DBV	5	3000	178.0	9.0	3.23	3.17	1.37	4.0	8.0	Q3
SN74AUC1G07DBVT	SOT-23	DBV	5	250	180.0	8.4	3.23	3.17	1.37	4.0	8.0	Q3
SN74AUC1G07DBVT	SOT-23	DBV	5	250	178.0	9.0	3.3	3.2	1.4	4.0	8.0	Q3
SN74AUC1G07DCKR	SC70	DCK	5	3000	180.0	8.4	2.47	2.3	1.25	4.0	8.0	Q3
SN74AUC1G07DCKR	SC70	DCK	5	3000	178.0	9.0	2.4	2.5	1.2	4.0	8.0	Q3
SN74AUC1G07DCKR	SC70	DCK	5	3000	178.0	9.2	2.4	2.4	1.22	4.0	8.0	Q3
SN74AUC1G07DCKT	SC70	DCK	5	250	178.0	9.0	2.4	2.5	1.2	4.0	8.0	Q3
SN74AUC1G07DCKT	SC70	DCK	5	250	178.0	9.2	2.4	2.4	1.22	4.0	8.0	Q3
SN74AUC1G07YZPR	DSBGA	YZP	5	3000	178.0	9.2	1.02	1.52	0.63	4.0	8.0	Q1

TEXAS INSTRUMENTS

www.ti.com

PACKAGE MATERIALS INFORMATION

24-Apr-2020



*All dimensions are nominal							
Device	Package Type	Package Drawing	Pins	SPQ	Length (mm)	Width (mm)	Height (mm)
SN74AUC1G07DBVR	SOT-23	DBV	5	3000	202.0	201.0	28.0
SN74AUC1G07DBVR	SOT-23	DBV	5	3000	180.0	180.0	18.0
SN74AUC1G07DBVRG4	SOT-23	DBV	5	3000	180.0	180.0	18.0
SN74AUC1G07DBVT	SOT-23	DBV	5	250	202.0	201.0	28.0
SN74AUC1G07DBVT	SOT-23	DBV	5	250	180.0	180.0	18.0
SN74AUC1G07DCKR	SC70	DCK	5	3000	202.0	201.0	28.0
SN74AUC1G07DCKR	SC70	DCK	5	3000	180.0	180.0	18.0
SN74AUC1G07DCKR	SC70	DCK	5	3000	180.0	180.0	18.0
SN74AUC1G07DCKT	SC70	DCK	5	250	180.0	180.0	18.0
SN74AUC1G07DCKT	SC70	DCK	5	250	180.0	180.0	18.0
SN74AUC1G07YZPR	DSBGA	YZP	5	3000	220.0	220.0	35.0

YZP0005



PACKAGE OUTLINE

DSBGA - 0.5 mm max height

DIE SIZE BALL GRID ARRAY



- 1. All linear dimensions are in millimeters. Any dimensions in parenthesis are for reference only. Dimensioning and tolerancing per ASME Y14.5M.
- 2. This drawing is subject to change without notice.



YZP0005

EXAMPLE BOARD LAYOUT

DSBGA - 0.5 mm max height

DIE SIZE BALL GRID ARRAY



NOTES: (continued)

3. Final dimensions may vary due to manufacturing tolerance considerations and also routing constraints. For more information, see Texas Instruments literature number SNVA009 (www.ti.com/lit/snva009).

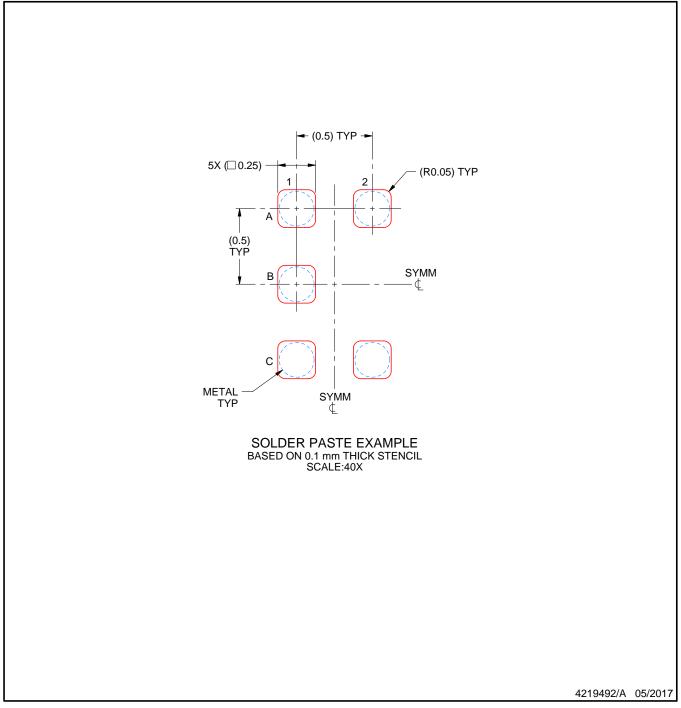


YZP0005

EXAMPLE STENCIL DESIGN

DSBGA - 0.5 mm max height

DIE SIZE BALL GRID ARRAY



NOTES: (continued)

4. Laser cutting apertures with trapezoidal walls and rounded corners may offer better paste release.



DCK (R-PDSO-G5)

PLASTIC SMALL-OUTLINE PACKAGE



- NOTES: A. All linear dimensions are in millimeters.
 - B. This drawing is subject to change without notice.
 - C. Body dimensions do not include mold flash or protrusion. Mold flash and protrusion shall not exceed 0.15 per side.
 - D. Falls within JEDEC MO-203 variation AA.



LAND PATTERN DATA



NOTES:

- A. All linear dimensions are in millimeters.B. This drawing is subject to change without notice.
- C. Customers should place a note on the circuit board fabrication drawing not to alter the center solder mask defined pad.
- D. Publication IPC-7351 is recommended for alternate designs.
- E. 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. Example stencil design based on a 50% volumetric metal load solder paste. Refer to IPC-7525 for other stencil recommendations.



DBV0005A



PACKAGE OUTLINE

SOT-23 - 1.45 mm max height

SMALL OUTLINE TRANSISTOR



NOTES:

- 1. All linear dimensions are in millimeters. Any dimensions in parenthesis are for reference only. Dimensioning and tolerancing per ASME Y14.5M. 2. This drawing is subject to change without notice. 3. Refernce JEDEC MO-178.

- 4. Body dimensions do not include mold flash, protrusions, or gate burrs. Mold flash, protrusions, or gate burrs shall not exceed 0.25 mm per side.



DBV0005A

EXAMPLE BOARD LAYOUT

SOT-23 - 1.45 mm max height

SMALL OUTLINE TRANSISTOR



NOTES: (continued)

5. Publication IPC-7351 may have alternate designs.

6. Solder mask tolerances between and around signal pads can vary based on board fabrication site.



DBV0005A

EXAMPLE STENCIL DESIGN

SOT-23 - 1.45 mm max height

SMALL OUTLINE TRANSISTOR



NOTES: (continued)

7. Laser cutting apertures with trapezoidal walls and rounded corners may offer better paste release. IPC-7525 may have alternate design recommendations.

8. Board assembly site may have different recommendations for stencil design.



IMPORTANT NOTICE AND DISCLAIMER

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATA SHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with TI products. You are solely responsible for (1) selecting the appropriate TI products for your application, (2) designing, validating and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, regulatory or other requirements.

These resources are subject to change without notice. TI grants you permission to use these resources only for development of an application that uses the TI products described in the resource. Other reproduction and display of these resources is prohibited. No license is granted to any other TI intellectual property right or to any third party intellectual property right. TI disclaims responsibility for, and you will fully indemnify TI and its representatives against, any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

TI's products are provided subject to TI's Terms of Sale or other applicable terms available either on ti.com or provided in conjunction with such TI products. TI's provision of these resources does not expand or otherwise alter TI's applicable warranties or warranty disclaimers for TI products.

TI objects to and rejects any additional or different terms you may have proposed.

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265 Copyright © 2022, Texas Instruments Incorporated