

Contents

1	SSOP16 Package	2
2	Temperature Profile.....	3
3	Storage Conditions.....	3
4	Recommended Printed Circuit Board (PCB) Footprint	4
5	Related Documents.....	4
6	Glossary	5
7	Document Revision History.....	5

List of Figures

Figure 1.1	Package View	2
Figure 4.1	Recommended PCB Footprint.....	4

List of Tables

Table 1.1	Package Dimension.....	2
Table 1.2	Package Marking	3
Table 3.1	Storage Conditions	3

1 SSOP16 Package

The standard package of the ZSC31050 is a SSOP16 (5.3mm body width) with lead-pitch 0.65mm. Refer to the *ZSC31050 Data Sheet* for pin assignments.

Weight: ≤ 0.3 g

Package Body Material: Low-stress epoxy

Lead Material: FeNi-Alloy or Cu-Alloy

Lead Finish: solder plating

Lead Form: Z-bends

Figure 1.1 Package View

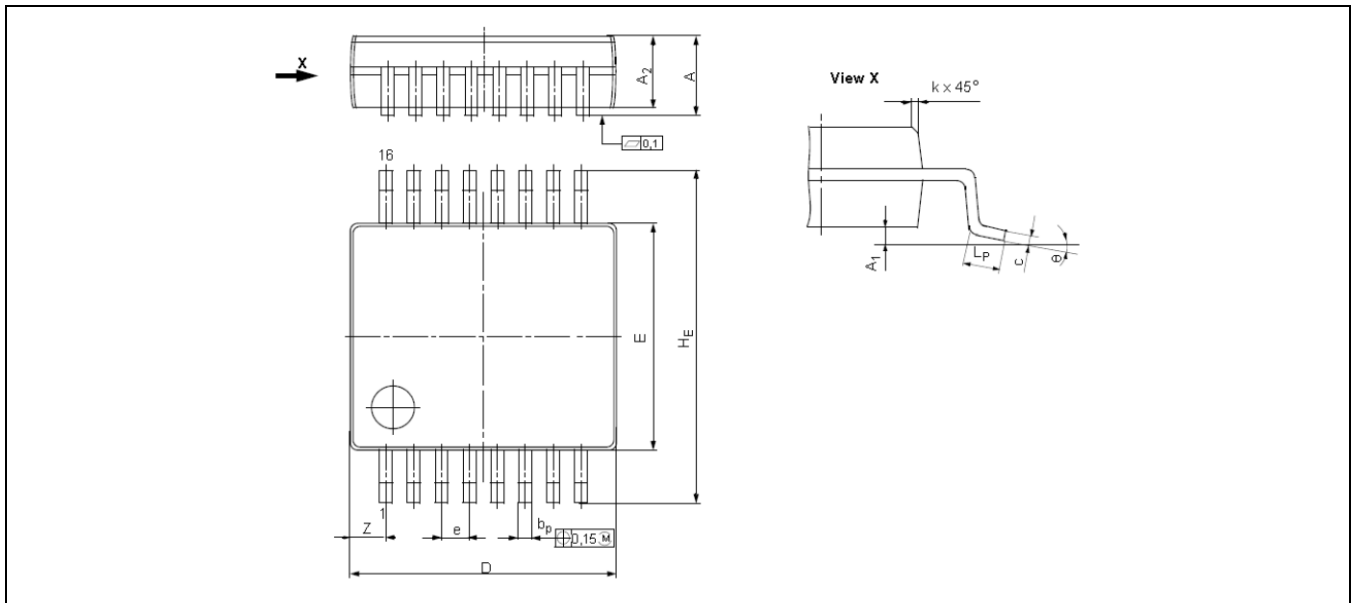


Table 1.1 Package Dimension

Package Dimensions					
Dimension	Value	Dimension	Value	Dimension	Value
A_{max}	1.99	C_{min}	0.09	H_{Emin}	7.65
A_{min}	1.73	C_{max}	0.20	H_{Emax}	7.90
$A1_{min}$	0.05	D_{min}^*	6.07	k_{min}	0.25
$A1_{max}$	0.21	D_{max}^*	6.33	LP_{min}	0.63
$A2_{min}$	1.68	E_{min}^*	5.20	Z_{max}	0.89
$A2_{max}$	1.78	E_{max}^*	5.38	θ_{min}	0°
b_{Pmin}	0.25	e_{nom}	0.65	θ_{max}	10°
b_{Pmax}	0.38	* without mold-flash			

Table 1.2 Package Marking

Top Side		Comments
1 st Line	ZMDI	
2 nd Line	31050%\$G1	% = Revision Identifier; \$ = Temperature Range Identifier; examples: ZSC31050FEG1, ZSC31050FAG1; ZSC31050FIG1
3 rd Line	YYWW	Package Assembly Date: YEAR, YEAR, WEEK, WEEK

2 Temperature Profile

Refer to calculation sheet *ZMDI Temperature Profile Calculation Sheet* for details.

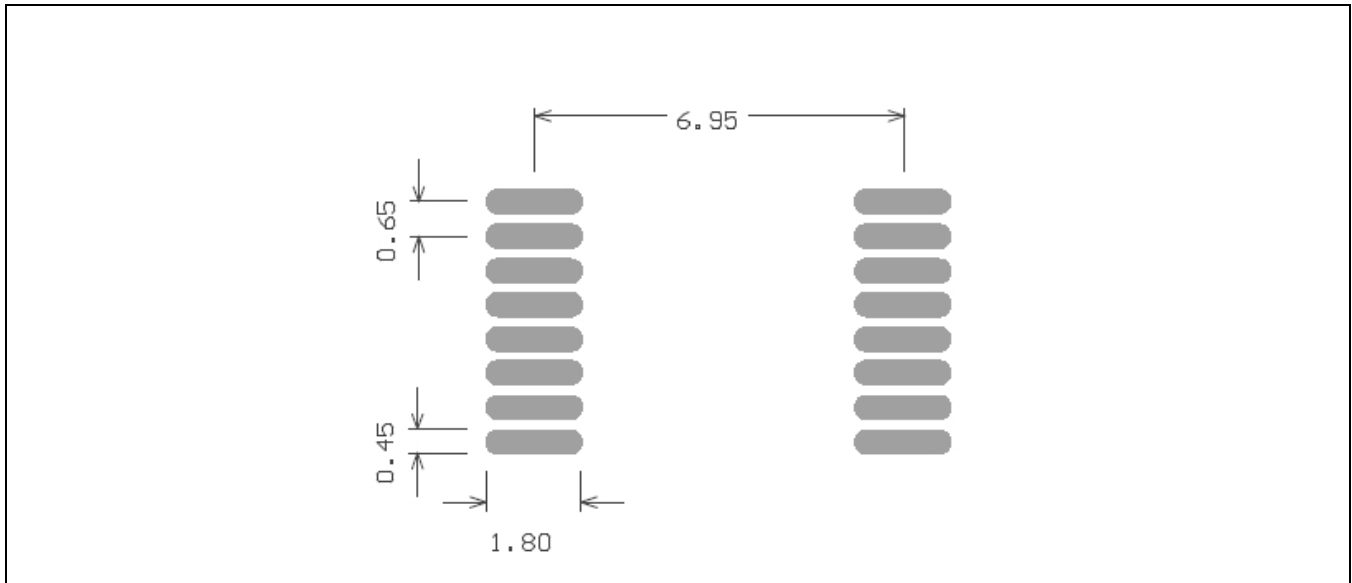
3 Storage Conditions

Table 3.1 Storage Conditions

Parameter	Min	Typ	Max	Unit	Conditions
t _{Storage} , Dry Pack			36	months	Outside of the dry pack: ≤ 40°C temperature and ≤ 90% relatively humidity
t _{Storage} , Tape/Reel (Without Dry Pack)			24	months	-10°C to 50°C and storage at a relative humidity with no condensation Important: Drying before assembly is required.
t _{Storage} , Tape/Reel (Without Dry Pack)			168	hours	≤ 30°C temperature and ≤ 60% relatively humidity

4 Recommended Printed Circuit Board (PCB) Footprint

Figure 4.1 Recommended PCB Footprint



5 Related Documents

Document
ZSC31050 Feature Sheet
ZSC31050 Data Sheet
IDT Temperature Profile Calculation Sheet
ZSC31050 Technical Note – Die Dimensions and Pad Locations *

Visit the ZSC31050 product page (www.IDT.com/ZSC31050) or contact your nearest sales office for the latest version of these documents.

* Documents marked with an asterisk (*) are available on request only.

6 Glossary

Term	Description
SSC	Sensor Signal Conditioner
SSOP	Shrink Small Outline Package

7 Document Revision History

Revision	Date	Description
1.00	May 16, 2013	First release of document as combined die and package information technical note.
1.10	October 15, 2015	Separation of document into separate technical notes for die dimensions and for SSOP16 dimensions. Update for contact information and imagery for cover and headings.
	April 26, 2016	Changed to IDT branding.

IMPORTANT NOTICE AND DISCLAIMER

RENESAS ELECTRONICS CORPORATION AND ITS SUBSIDIARIES (“RENESAS”) PROVIDES TECHNICAL SPECIFICATIONS AND RELIABILITY DATA (INCLUDING DATASHEETS), 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 OR 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 developers skilled in the art designing with Renesas products. You are solely responsible for (1) selecting the appropriate products for your application, (2) designing, validating, and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, or other requirements. These resources are subject to change without notice. Renesas grants you permission to use these resources only for development of an application that uses Renesas products. Other reproduction or use of these resources is strictly prohibited. No license is granted to any other Renesas intellectual property or to any third party intellectual property. Renesas disclaims responsibility for, and you will fully indemnify Renesas and its representatives against, any claims, damages, costs, losses, or liabilities arising out of your use of these resources. Renesas' products are provided only subject to Renesas' Terms and Conditions of Sale or other applicable terms agreed to in writing. No use of any Renesas resources expands or otherwise alters any applicable warranties or warranty disclaimers for these products.

(Rev.1.0 Mar 2020)

Corporate Headquarters

TOYOSU FORESIA, 3-2-24 Toyosu,
Koto-ku, Tokyo 135-0061, Japan
www.renesas.com

Contact Information

For further information on a product, technology, the most up-to-date version of a document, or your nearest sales office, please visit:
www.renesas.com/contact/

Trademarks

Renesas and the Renesas logo are trademarks of Renesas Electronics Corporation. All trademarks and registered trademarks are the property of their respective owners.