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# 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***

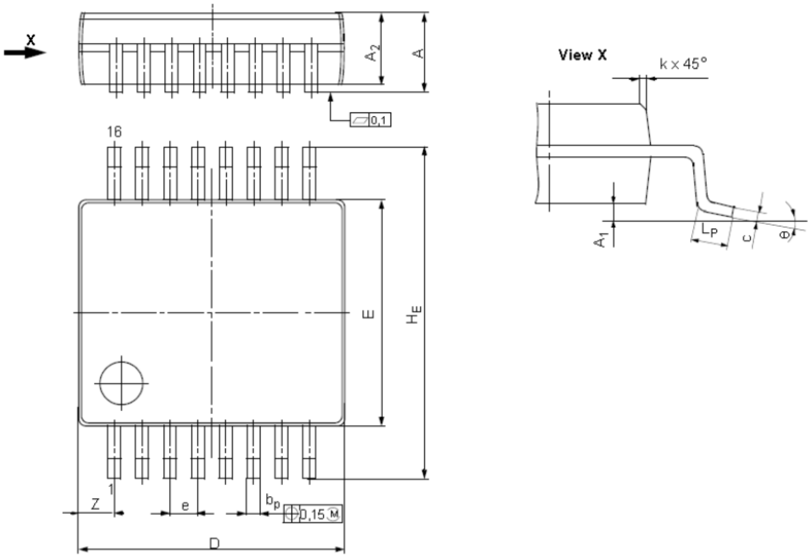


***Table 1.1 Package Dimension***

| 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 | $\theta_{min}$ | 0° |
| $b_{Pmin}$ | 0.25 | $e_{nom}$ | 0.65 | $\theta_{max}$ | 10° |
| $b_{Pmax}$ | 0.38 | * without mold-flash | | | |

*Table 1.2 Package Marking*

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

## 2 Temperature Profile

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

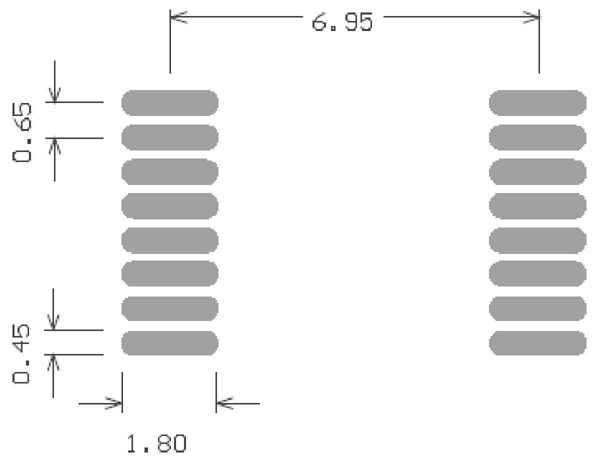
## 3 Storage Conditions

*Table 3.1 Storage Conditions*

| Parameter | Min | Typ | Max | Unit | Conditions |
|---|---|---|---|---|---|
| $t_{Storage}$, Dry Pack | | | 36 | months | Outside of the dry pack:<br>≤ 40°C temperature and<br>≤ 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<br>**Important:** Drying before assembly is required. |
| $t_{Storage}$, Tape/Reel (Without Dry Pack) | | | 168 | hours | ≤ 30°C temperature and<br>≤ 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.<br>Update for contact information and imagery for cover and headings. |
|  | April 26, 2016 | Changed to IDT branding. |

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