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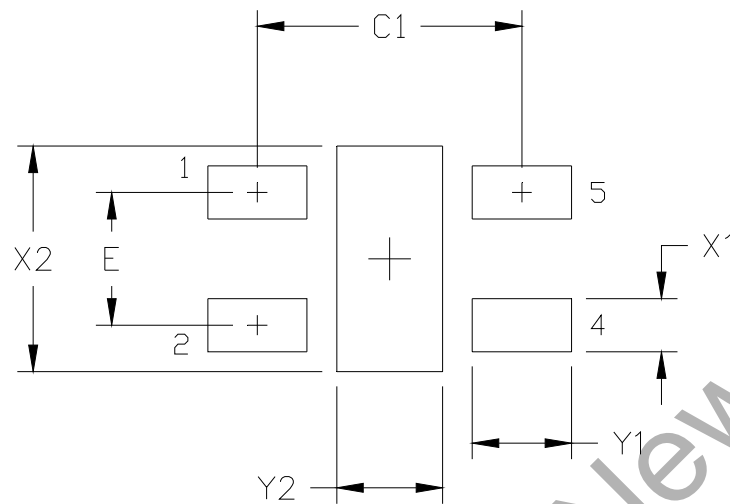


Figure 8. PCB Land Pattern Dimensions

Table 15. PCB Land Pattern Dimensions

Symbol	mm
C1	2.00
E	1.00
X1	0.40
Y1	0.75
X2	1.70
Y2	0.80

**Notes:**

**General**

1. All dimensions shown are in millimeters (mm).
2. This Land Pattern Design is based on the IPC-7351 guidelines.
3. All dimensions shown are at Maximum Material Condition (MMC). Least Material Condition (LMC) is calculated based on a Fabrication Allowance of 0.05 mm.

**Solder Mask Design**

4. All metal pads are to be non-solder mask defined (NSMD). Clearance between the solder mask and the metal pad is to be 60  $\mu\text{m}$  minimum, all the way around the pad.

**Stencil Design**

5. A stainless steel, laser-cut and electro-polished stencil with trapezoidal walls should be used to assure good solder paste release.
6. The stencil thickness should be 0.125 mm (5 mils).
7. The ratio of stencil aperture to land pad size should be 1:1 for all perimeter pins.
8. A 2x1 array of 0.55 mm square openings on 0.90 mm pitch should be used for the center ground pad to achieve a target solder coverage of 50%.

**Card Assembly**

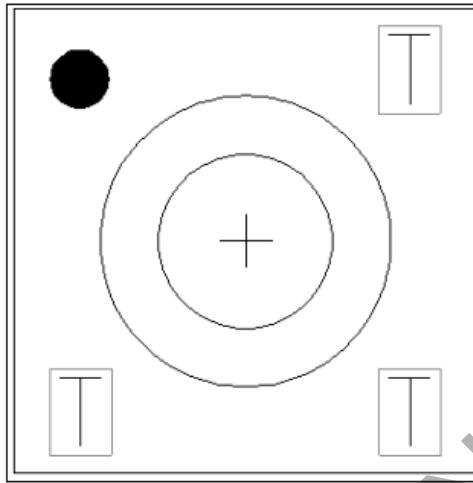
9. A No-Clean, Type-3 solder paste is recommended.
10. The recommended card reflow profile is per the JEDEC/IPC J-STD-020 specification for Small Body Components.

# Si7034-A10

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## 11. Top Marking

### 11.1. Si7034 Top Marking



### 11.2. Top Marking Explanation

<b>Mark Method:</b>	Laser
<b>Font Size:</b>	0.30 mm
<b>Line 1 Marking:</b>	Circle = 0.25 mm Diameter, Pin #1 Indicator T = Manufacturing Trace Code Digit 1
<b>Line 2 Marking:</b>	TT = Manufacturing Trace Code Digits 2-3

## 12. Additional Reference Resources

- AN607: Si70xx Humidity and Temperature Sensor Designer's Guide

Not Recommended for New Designs

## DOCUMENT CHANGE LIST

### Revision 0.11 to Revision 0.3

- Updates to Section 1. “Electrical Specifications”.
- Updated Table 2. “General Specifications”.
- Updated Figure 1. “I<sup>2</sup>C Interface Timing Diagram”.
- Updated Table 12. “I<sup>2</sup>C Command Table”.
- Updated Section 4.4. “PCB Assembly”.
- Updated Section 5.2. “Reading and Writing User Registers”.
- Updated Section 5.3. “Measuring Relative Humidity”.
- Updated Section 5.4. “Measuring Temperature”.
- Updated Section 5.6. “Electronic Serial Number”.
- Updated Section 6. “Control Registers”.
- Updated Section 7. “Pin Descriptions”.
- Updated Section 8. “Package Outline”.

### Revision 0.3 to Revision 0.4

- Updated Features on page 1.
- Updated Block Diagram.
- Updated Table 1.
- Updated Table 2.
- Updated Table 3.
- Updated Table 4.
- Updated Table 5.
- Updated Table 6.
- Updated Table 7.
- Updated Table 8.
- Updated Section 4.4.
- Updated Table 12.
- Updated Section 5.
- Added Section 6.
- Updated Table 13.
- Updated Section 9.
- Updated Section 10.

### Revision 0.4 to Revision 0.5

- Added ESD specifications to Table 7.
- Revised Heater Control Register settings.
- Updated Firmware Revision command address.
- Corrected pin numbering in Figure 7 and Figure 8.
- Updated Table 4, “Humidity Sensor,” on page 7.
- Updated Table 5, “Temperature Sensor,” on page 8.
- Changed power supply voltage range to  $\pm 10\%$ .

### Revision 0.5 to Revision 0.8

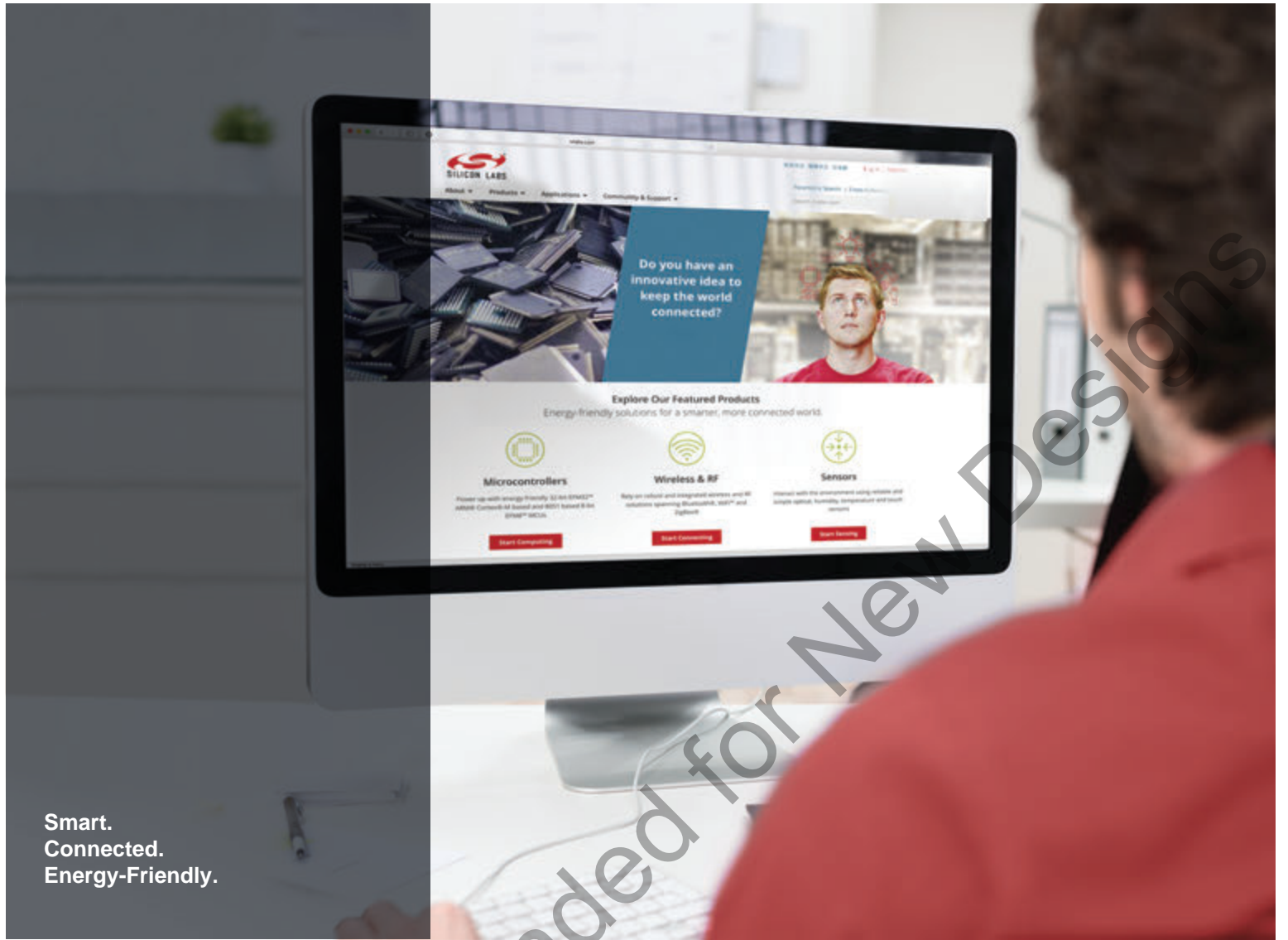
- Updated Table 6, “Thermal Characteristics,” on page 9.
- Updated Table 2.
- Updated Table 10.
- Updated Section 5.3.
- Updated Section 5.4.
- Updated Section 11.

### Revision 0.8 to Revision 0.9

- Updated Table 2.
- Updated footnotes in Table 3.
- Updated Table 4.
- Updated descriptions in Table 10.
- Updated Table 13.
- Updated Section 5.1.
- Updated Section 5.3.
- Added Section 5.5.
- Updated Section 6.

### Revision 0.9 to Revision 1.0

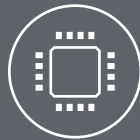
- Updated features on page 1.
- Updated Table 2.
- Updated Figure 4
- Updated Section 5.1.



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Silicon Laboratories Inc.  
400 West Cesar Chavez  
Austin, TX 78701  
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