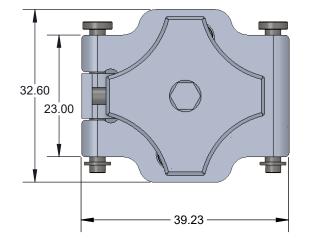
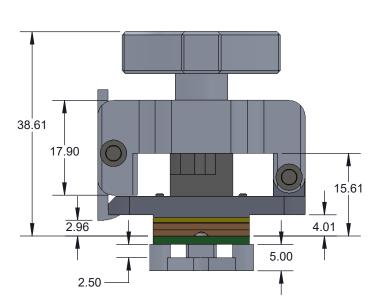
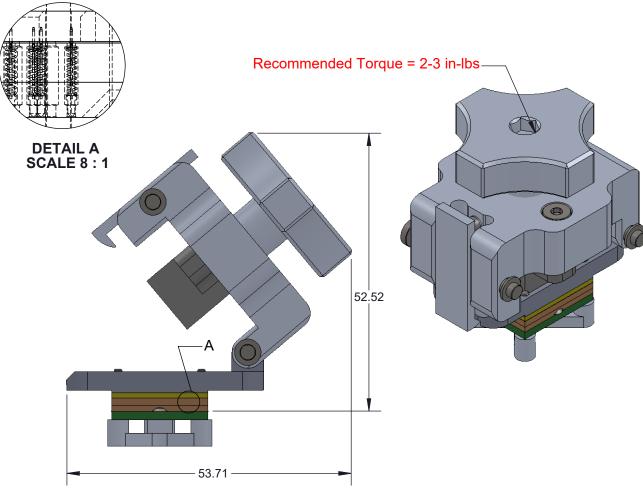
# Clamshell Spring Pin Socket - Direct mount, solderless

### **Features**

- Wide temperature range (-55C to +180C).
  High current capability (up to 4A).
  Excellent signal integrity at high frequencies.
  Low and stable contact resistance for reliable production yield.
  Highly compliant to accommodate wide IC package co-planarity variations.
  Clamshell lid







## Description: CBT-LGA 12x12mm 0.6mm LGA180 triple row

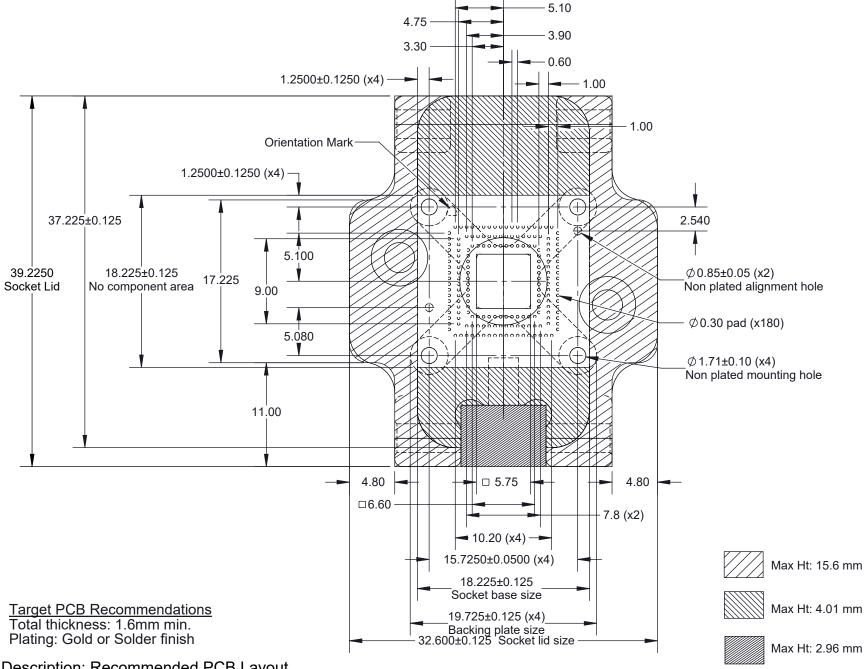
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

Tolerances: Hole diameters ±0.03mm [±0.001"], Pitches (from true position) ±0.025mm [±0.001"], substrate thickness tolerance ±10%, all other tolerances ±0.13mm [±0.005"] unless stated otherwise. Materials and specifications are subject to change without notice

| CBT-LGA-5006 Drawing |  |  |
|----------------------|--|--|
| 4                    | Ironwood Electronics, Inc.<br>Tele: (800) 404-0204 |  |

www.ironwoodélectronics.com

| STATUS: Released       | SHEET: 1 OF 5      | REV. C       |
|------------------------|--------------------|--------------|
| ENG: S. Huang          | DRAWN BY: M. Raske | SCALE: 1.4:1 |
| FILE: CBT-LGA-5006 Dwg | DATE: 12-12-2013   |              |



### Description: Recommended PCB Layout

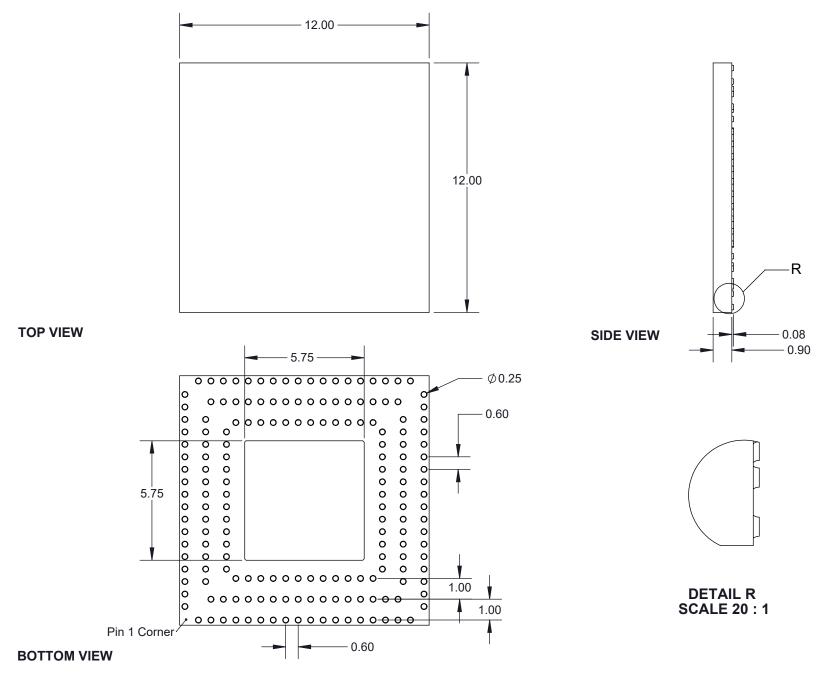
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

Tolerances: Hole diameters ±0.03mm [±0.001"], Pitches (from true position) ±0.025mm [±0.001"], substrate thickness tolerance ±10%, all other tolerances ±0.13mm [±0.005"] unless stated otherwise. Materials and specifications are subject to change without notice.

### **CBT-LGA-5006 Drawing** STATUS: Released SHEET: 2 OF 5 Material: N/A Finish: N/A Ironwood Electronics, Inc. ENG: S. Huang DRAWN BY: M. Raske Weight: 65.39 Tele: (800) 404-0204 www.ironwoodélectronics.com FILE: CBT-LGA-5006 Dwg DATE: 12-12-2013

REV. C

SCALE: 2.5:1



### **Description: Compatible LGA**

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

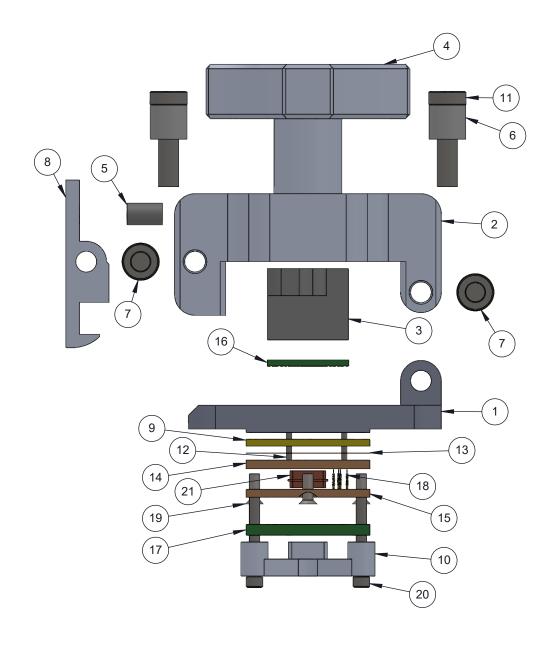
Tolerances: Hole diameters ±0.03mm [±0.001"], Pitches (from true position) ±0.025mm [±0.001"], substrate thickness tolerance ±10%, all other tolerances ±0.13mm [±0.005"] unless stated otherwise. Materials and specifications are subject to change without notice.

## CBT-LGA-5006 Drawing



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| STATUS: Released       | SHEET: 3 OF 5      | REV. C       |
|------------------------|--------------------|--------------|
| ENG: S. Huang          | DRAWN BY: M. Raske | SCALE: 5.5:1 |
| FILE: CBT-LGA-5006 Dwg | DATE: 12-12-2013   |              |



| <u>Description: Skt comp</u> |
|------------------------------|
|------------------------------|

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

Tolerances: Hole diameters ±0.03mm [±0.001"], Pitches (from true position) ±0.025mm [±0.001"], substrate thickness tolerance ±10%, all other tolerances ±0.13mm [±0.005"] unless stated otherwise. Materials and specifications are subject to change without notice.

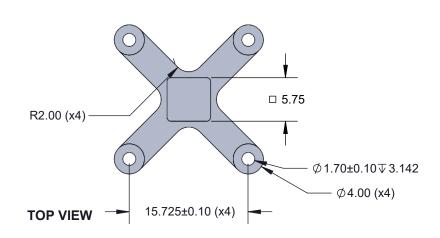
| ITEM<br>NO. | DESCRIPTION  | Material                              |
|-------------|--|---------------------------------------|
| 1           | CBT Socket Base 13mm   | 7075-T6 Aluminum Alloy                |
| 2           | Clam shell lid for 17mm IC   | 7075-T6 Aluminum Alloy                |
| 3           | Compression Plate 12mm   | 7075-T6 Alumium Alloy                 |
| 4           | M10 Comression Screw   | 7075-T6 Aluminum Alloy                |
| 5           | Precision Compression Spring,<br>Zinc-Plated Music Wire, 1/2"<br>Length, .12" OD, .016" Wire | Zinc Plated Music Wire                |
| 6           | Spring Clamshell lid assembly  | Steel Music Wire                      |
| 7           | Hinge Pin and Snap Ring, 3mm<br>OD, 25mm long, SS  | Stainless Steel (ferritic)            |
| 8           | Clamshell Latch  | 7075-T6 Aluminum Alloy                |
| 9           | IC Guide 12x12mm   | Torlon 4203                           |
| 10          | 13x13mm Clamshell Backing<br>Plate w/ square post  | 7075-T6 Aluminum Alloy                |
| 11          | Screw, M3 x 12mm, Low Head<br>Cap, SS  | 18-8 Stainless Steel                  |
| 12          | Dowel pin, 1/32" X 1/4", SS  | Stainless Steel (18-8)                |
| 13          | Pin Orientation Guide - LGA180<br>0.6mm pitch 12mm triple row                                | Kapton Polyimide/Cirlex               |
| 14          | Top Spring Pin Guide - LGA180<br>0.6mm 12mm  | Semitron MDS 100                      |
| 15          | Bottom Spring Pin Guide -<br>LGA180 0.6mm pitch 12mm   | Semitron MDS 100                      |
| 16          | IC, LGA180 0.6mm pitch 12mm triple row   | High Temp FR4                         |
| 17          | PCB LGA180 0.6mm 12mm triple row   | High Temp FR4                         |
| 18          | SBT-LGA/QFN Pogo Pin, 0.5mm-<br>0.8mm  | Contact Mtrl: BeCu, Au Plated over Ni |
| 19          | #0-80, 90 deg., head pin guide<br>screw, Peek material                                       | PEEK unfilled                         |
| 20          | #0-80 x 0.5, SH Cap Screw  | 18-8 Stainless Steel                  |
| 21          | Copper Ground Slug 12mm QFN  | Copper                                |

| CBT-LGA-5006 | <b>Drawing</b> |
|--------------|----------------|
|--------------|----------------|

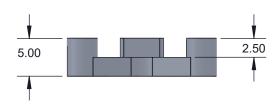
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| STATUS: Released       | SHEET: 4 OF 5      | REV. C       |
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| ENG: S. Huang          | DRAWN BY: M. Raske | SCALE: 1.8:1 |
| FILE: CBT-LGA-5006 Dwg | DATE: 12-12-2013   |              |







### **SIDE VIEW**

### Description: Backing plate and pin detail

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

Tolerances: Hole diameters ±0.03mm [±0.001"], Pitches (from true position) ±0.025mm [±0.001"], substrate thickness tolerance ±10%, all other tolerances ±0.13mm [±0.005"] unless stated otherwise. Materials and specifications are subject to change without notice.

| Rev | Date     |    | Description                              |
|-----|----------|----|--|
| Α   | 12/12/13 |    | Original                                 |
| В   | 07/23/14 | DH | Changed IC guide material to Torlon      |
| O   | 32/24/16 |    | Replaced plastic screws with peek screws |
|     |          |    |  |

| <b>-</b> |
|----------|
|          |
|          |
| 78       |
| V.       |
|          |

CBT-LGA-5006 Drawing

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| STATUS: Released       | SHEET: 5 OF 5      | REV. C       |
|------------------------|--------------------|--------------|
| ENG: S. Huang          | DRAWN BY: M. Raske | SCALE: 1.8:1 |
| FILE: CBT-LGA-5006 Dwg | DATE: 12-12-2013   |              |