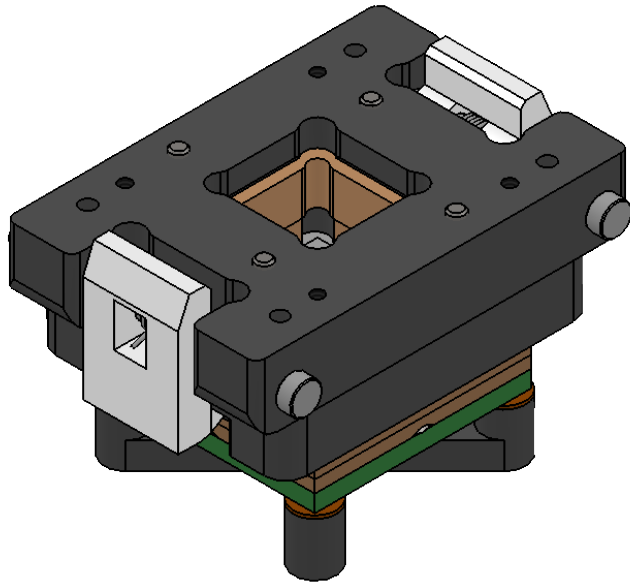
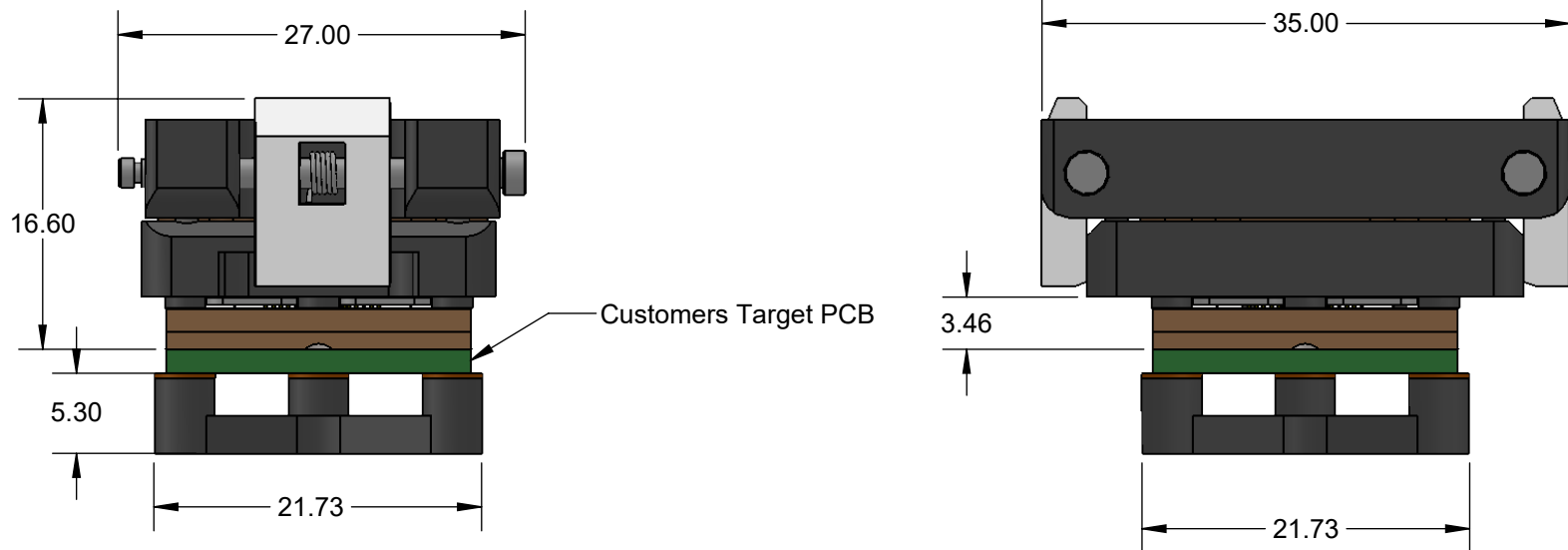


OPEN TOP DUAL LATCH CBT-BGA DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS




- 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 co-planarity variations
 - Automated probe manufacturing enables low cost and short lead time

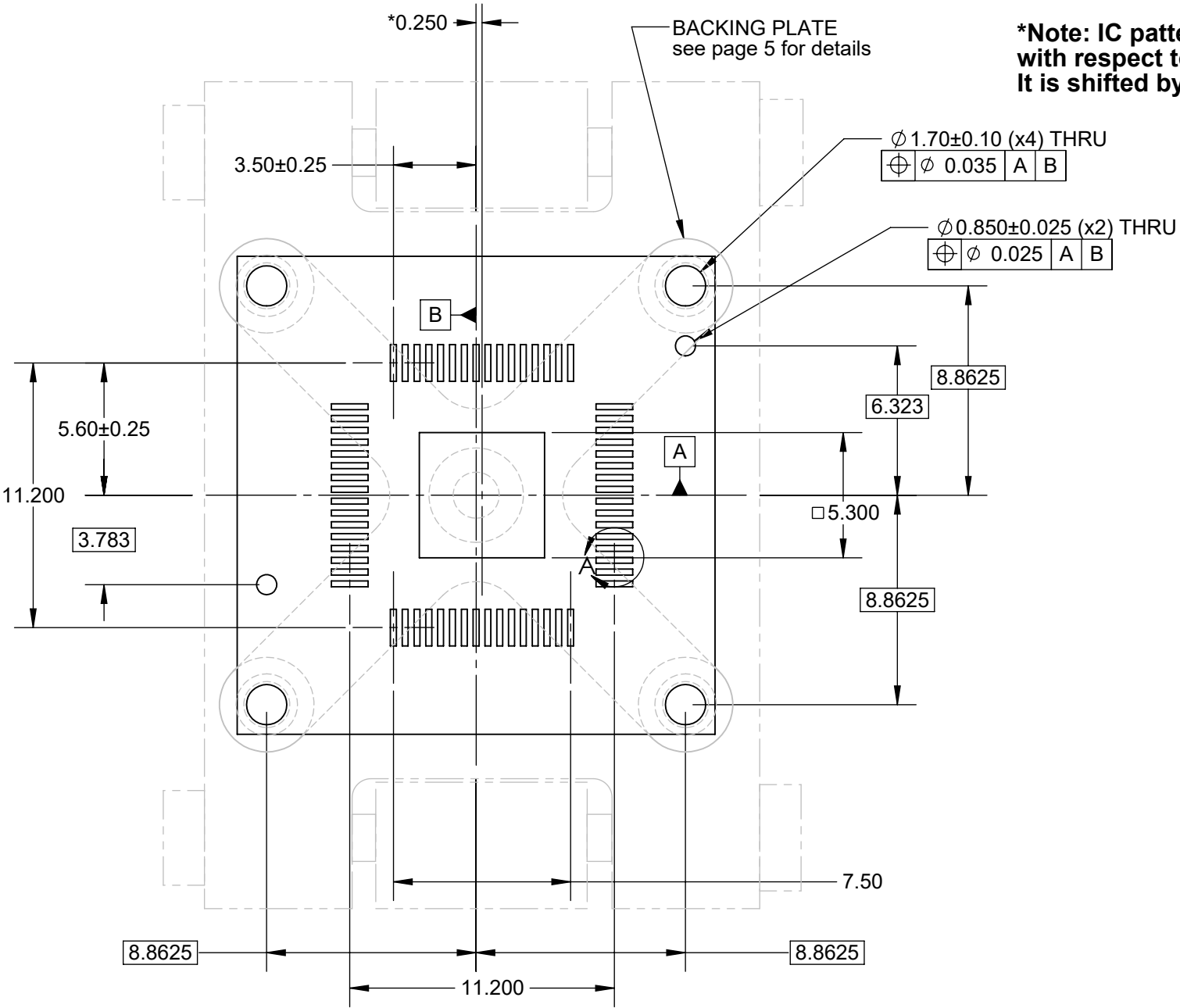


Description: Open Top CBT socket for 0.5mm pitch 10mm sq 12mm tip-tip 64 pin QFP package

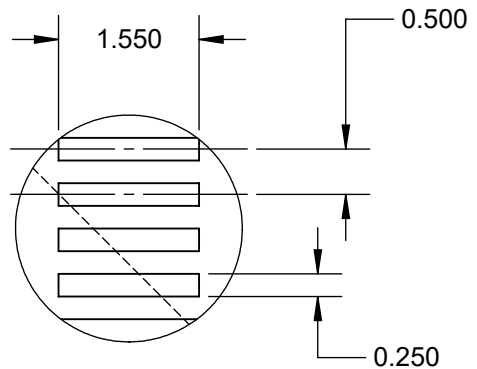
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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

| | | | | |
|---|---|--|---|----------------------|
|  CBT-QFE-3001 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com | Material: N/A Finish: N/A Weight: 19.61 | STATUS: Released ENG: S, Faiz FILE: CBT-QFE-3001 Dwg | SHEET: 1 OF 5 DRAWN BY: M. Raske DATE: 01/15/2014 | REV. B SCALE: 2:1 |
| | | | | |




***Note: IC pattern is not symmetrical with respect to the mounting holes. It is shifted by 0.25mm to the right of center.**

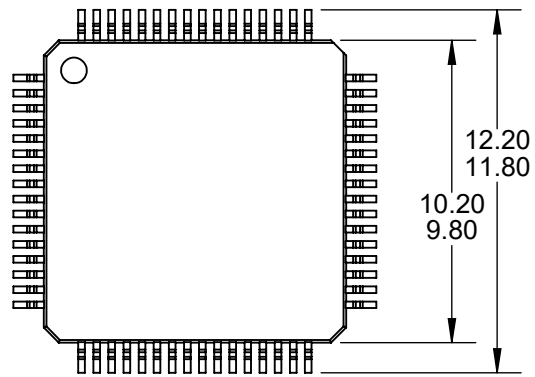


**DETAIL A
SCALE 12 : 1**

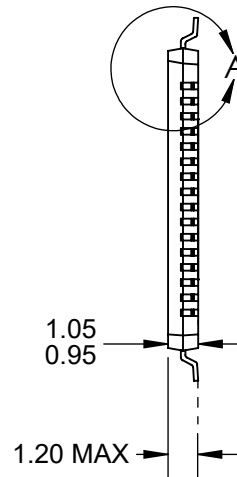
Description: Recommended PCB Layout

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.
 Tolerances: Hole diameters $\pm 0.0254\text{mm}$ [$\pm 0.001"$], Pitches (from true position) $\pm 0.0762\text{mm}$ [$\pm 0.003"$], substrate thickness tolerance $\pm 10\%$, all other tolerances $\pm 0.127\text{mm}$ [$\pm 0.005"$] unless stated otherwise. Materials and specifications are subject to change without notice.

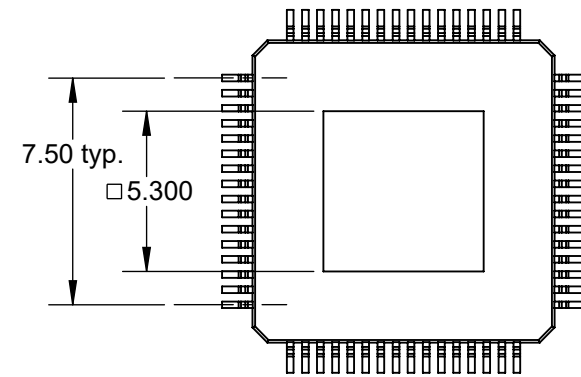
| | | | | |
|---|---|--|---|----------------------|
|  CBT-QFE-3001 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com | Material: N/A Finish: N/A Weight: 19.61 | STATUS: Released ENG: S, Faiz FILE: CBT-QFE-3001 Dwg | SHEET: 2 OF 5 DRAWN BY: M. Raske DATE: 01/15/2014 | REV. B SCALE: 4:1 |
| | | | | |



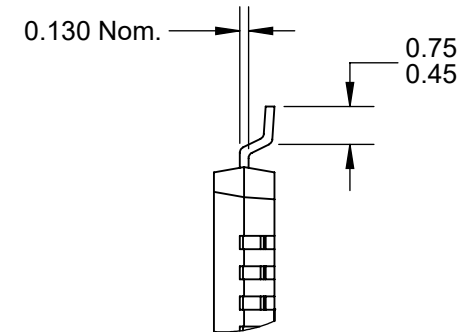
TOP VIEW



SIDE VIEW



BOTTOM VIEW




DETAIL A
SCALE 8 : 1

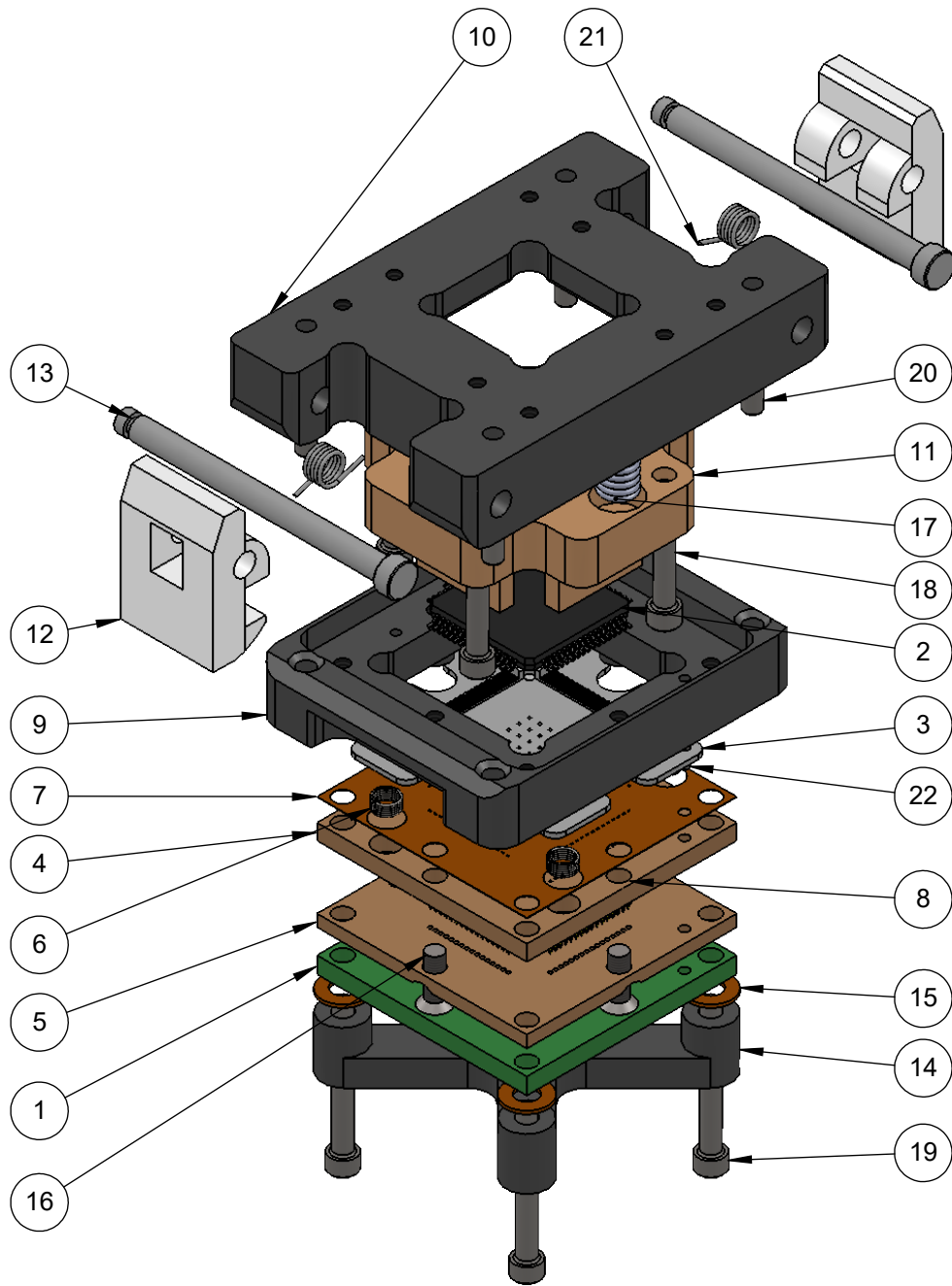
1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
4. Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
5. Parallelism measurement shall exclude any effect of mark on top surface of package.

Description: Compatible Device

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

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

| | | | | |
|---|--|------------------------|--------------------|------------|
|  <p>CBT-QFE-3001 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com</p> | <p>Material: N/A Finish: N/A Weight: 19.61</p> | STATUS: Released | SHEET: 3 OF 5 | REV. B |
| | | ENG: S, Faiz | DRAWN BY: M. Raske | SCALE: 4:1 |
| | | FILE: CBT-QFE-3001 Dwg | DATE: 01/15/2014 | |




| ITEM NO. | DESCRIPTION | Default/QTY. | Material |
|----------|---|--------------|---|
| 1 | Target PCB QFE64SD 0.5mm pitch 10mm sq body 12mm tip to tip | 1 | FR4 High temp |
| 2 | CFE TQFP64_w_E_PAD TEST CHIP | 1 | Material <not specified> |
| 3 | CBT-QFE64 Floating spring pin guide | 1 | PEEK Ceramic filled |
| 4 | Middle guide QFE64 12x12mm T-T | 1 | Semitron MDS 100 |
| 5 | Bottom CBT pin guide QFE64 | 1 | Semitron MDS 100 |
| 6 | Floating Guide Spring | 4 | Alloy Steel (SS) |
| 7 | Pin Orientation Guide QFE64 | 1 | Kapton Polyimide/Cirlex |
| 8 | SBT Pin, 0.4mm pitch | 80 | N/A |
| 9 | Base, CBT double latch | 1 | 7075-T6 Alumium Alloy |
| 10 | Lid, double latch socket | 1 | 7075-T6 Alumium Alloy |
| 11 | Compression plate QFE64 0.5mm pitch | 1 | Ultem 1000 |
| 12 | Clamshell Latch Snap Lid Socket | 2 | PPS/Ultem |
| 13 | Hinge Pin, 2mm OD, 24mm Lg, SS | 2 | Stainless Steel (303) |
| 14 | 15x15mm Clamshell Backing Plate | 1 | 7075-T6 Aluminum Alloy |
| 15 | Insulating washer, 4mm OD. | 5 | Kapton Polyimide/Cirlex |
| 16 | #0-80, 90 deg., head pin guide screw, Peek material | 4 | PEEK unfilled |
| 17 | 302SS Comp. Spring .375" Length, .125" OD, .016" Wire Dia. | 4 | Material <not specified> |
| 18 | #0-80 X .25 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE | 4 | Alloy Steel |
| 19 | #0-80 x 0.5, SH Cap Screw | 4 | Alloy Steel |
| 20 | Dowel Pin, M1.5 X 5mm LG, Hardened Steel | 4 | AISI 347 Annealed Stainless Steel (SS) |
| 21 | Coil Spring, 180 0.109" OD, SS | 2 | Stainless Steel (302) |
| 22 | Dowel pin, 1/32" X 1/4", SS | 2 | Stainless Steel (18-8) |

Description: Socket Assy, Insulation Plate

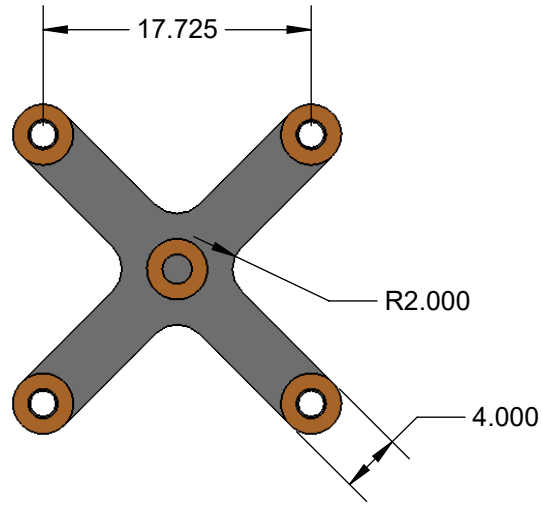
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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

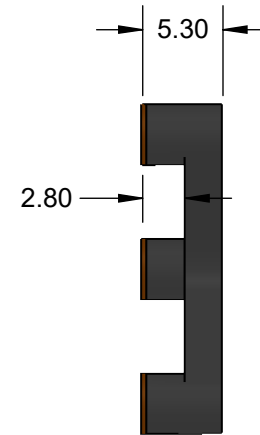
| | | | | |
|---|---|--|---|----------------------|
|  CBT-QFE-3001 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com | Material: N/A Finish: N/A Weight: 19.61 | STATUS: Released ENG: S, Faiz FILE: CBT-QFE-3001 Dwg | SHEET: 4 OF 5 DRAWN BY: M. Raske DATE: 01/15/2014 | REV. B SCALE: 2:1 |
| | | | | |



**PIN DETAIL
SCALE 16:1**



BACKING PLATE DETAIL




Description: PIN, BACKING PLT DETAIL

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

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

| Rev | Date | Initials | Description |
|-----|---------|----------|--|
| B | 3/25/16 | MR | Replaced plastic screws with peek screws |
| | | | |
| | | | |

| | | | | |
|---|---|--|---|----------------------|
|  CBT-QFE-3001 Drawing Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com | Material: N/A Finish: N/A Weight: 19.61 | STATUS: Released ENG: S, Faiz FILE: CBT-QFE-3001 Dwg | SHEET: 5 OF 5 DRAWN BY: M. Raske DATE: 01/15/2014 | REV. B SCALE: 2:1 |
| | | | | |