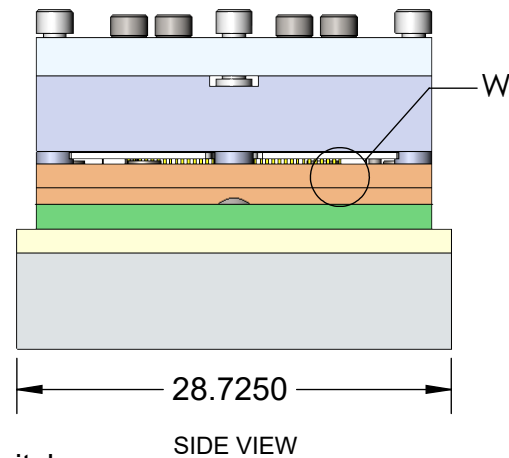
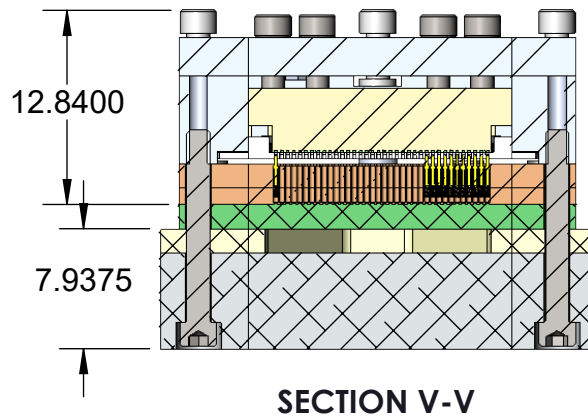
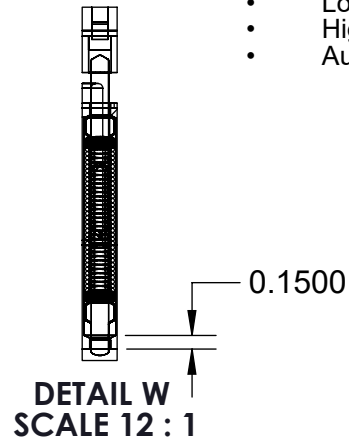
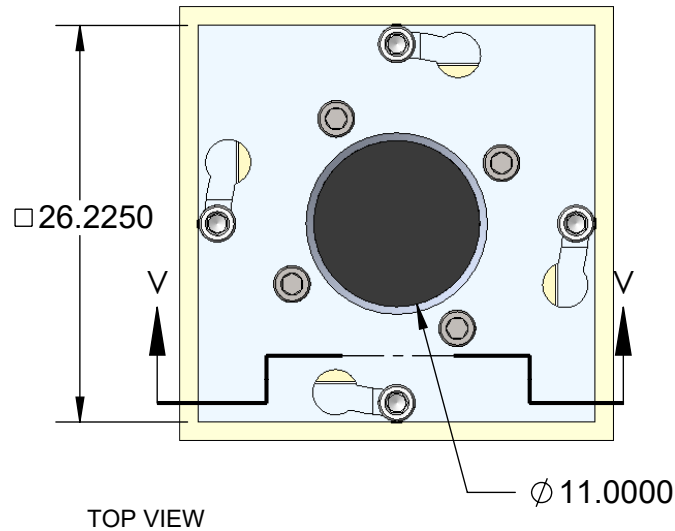


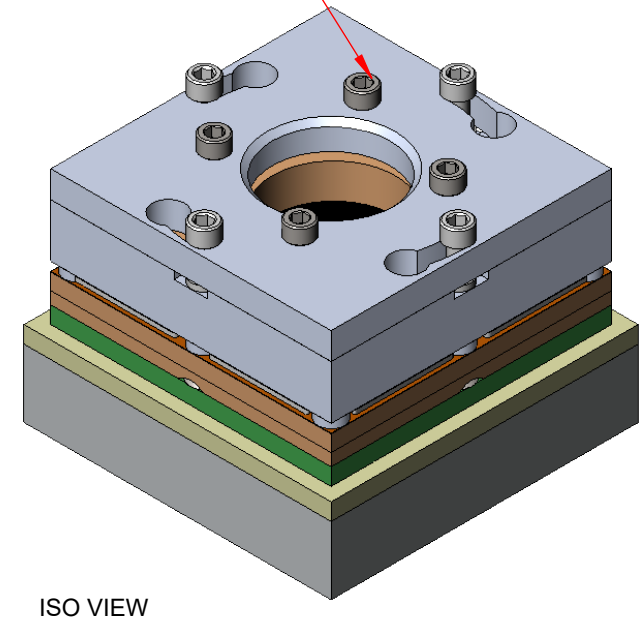
SBT-QFP DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS

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



Recommended torque is
6 in oz per screw



Description: SBT-QFP144 Socket, 18x18mm T-T, 0.4mm pitch

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.

SBT-QFE-3001 Drawing



Ironwood Electronics, Inc.
Tele: (800) 404-0204
www.ironwoodelectronics.com

Material: N/A
Finish: N/A
Weight: 29.60

STATUS: Released

ENG: S. Huang

FILE: SBT-QFE-3001 Dwg

SHEET: 1 OF 5

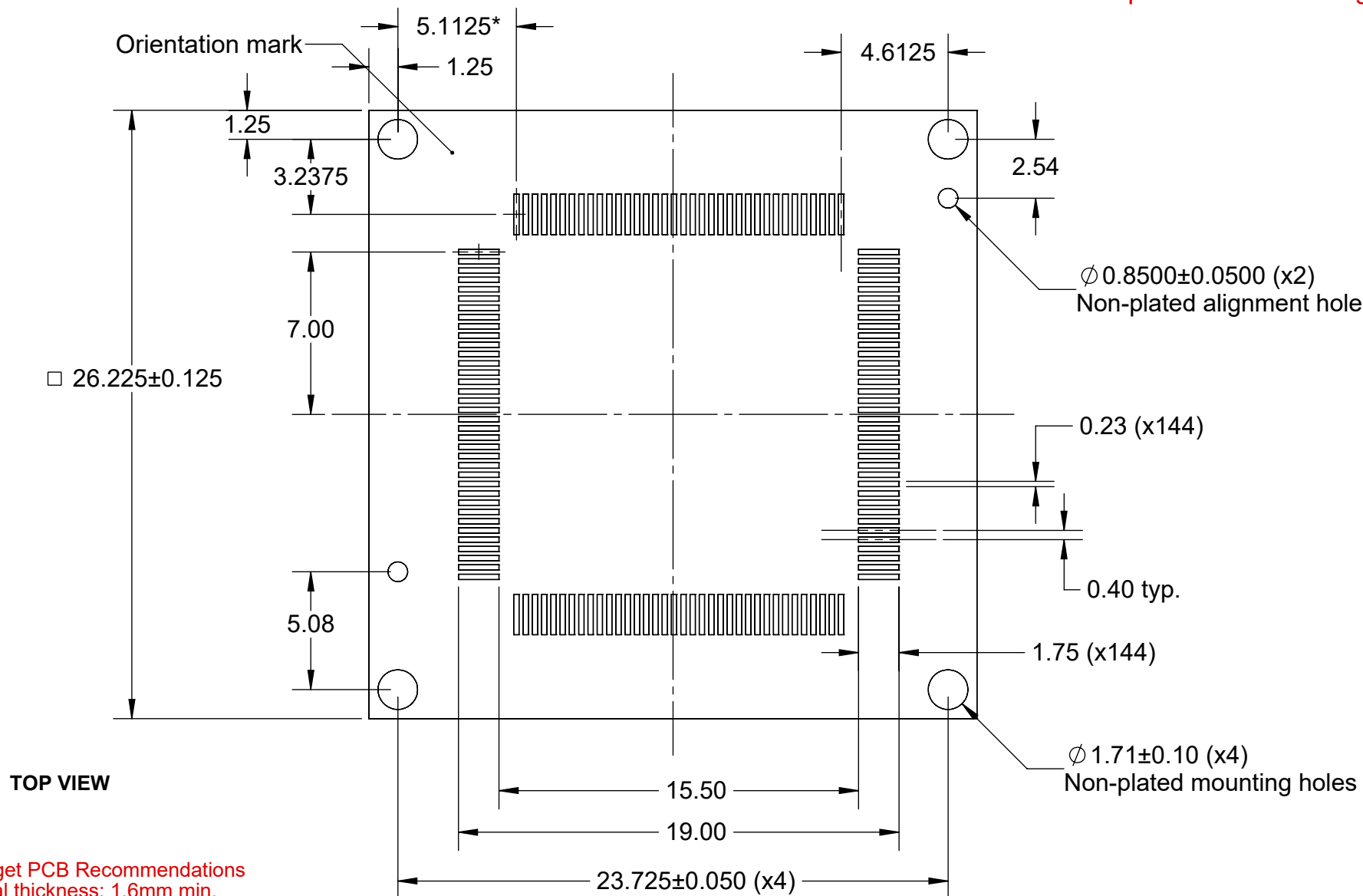
DRAWN BY: M. Raske

DATE: 11/04/2013

REV. B

SCALE: 2:1

*Note: QFP pattern is not symmetrical with respect to the mounting holes.




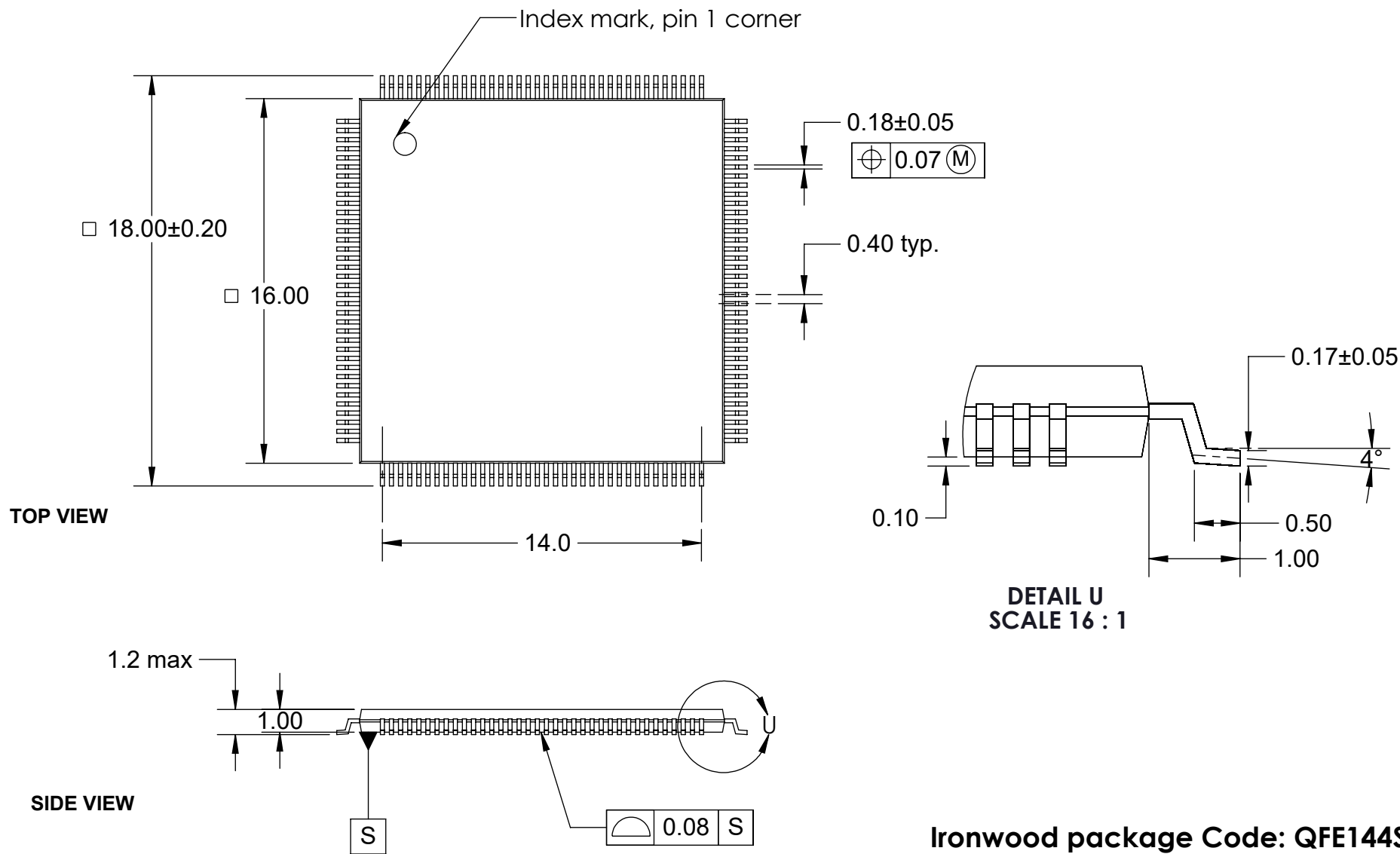
Target PCB Recommendations
Total thickness: 1.6mm min.
Plating: Gold or Solder finish
PCB Pad height: Same or higher than solder mask

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.

| | | | | |
|--|---|------------------------|--------------------|------------|
| without notice. | | | | |
| SBT-QFE-3001 Drawing | | STATUS: Released | SHEET: 2 OF 5 | REV. B |
|  | Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com | ENG: S. Huang | DRAWN BY: M. Raske | SCALE: 4:1 |
| | | FILE: SBT-QFE-3001 Dwg | DATE: 11/04/2013 | |
| | | | | |
| Material: N/A Finish: N/A Weight: 29.60 | | | | |




Ironwood package Code: QFE144SJ

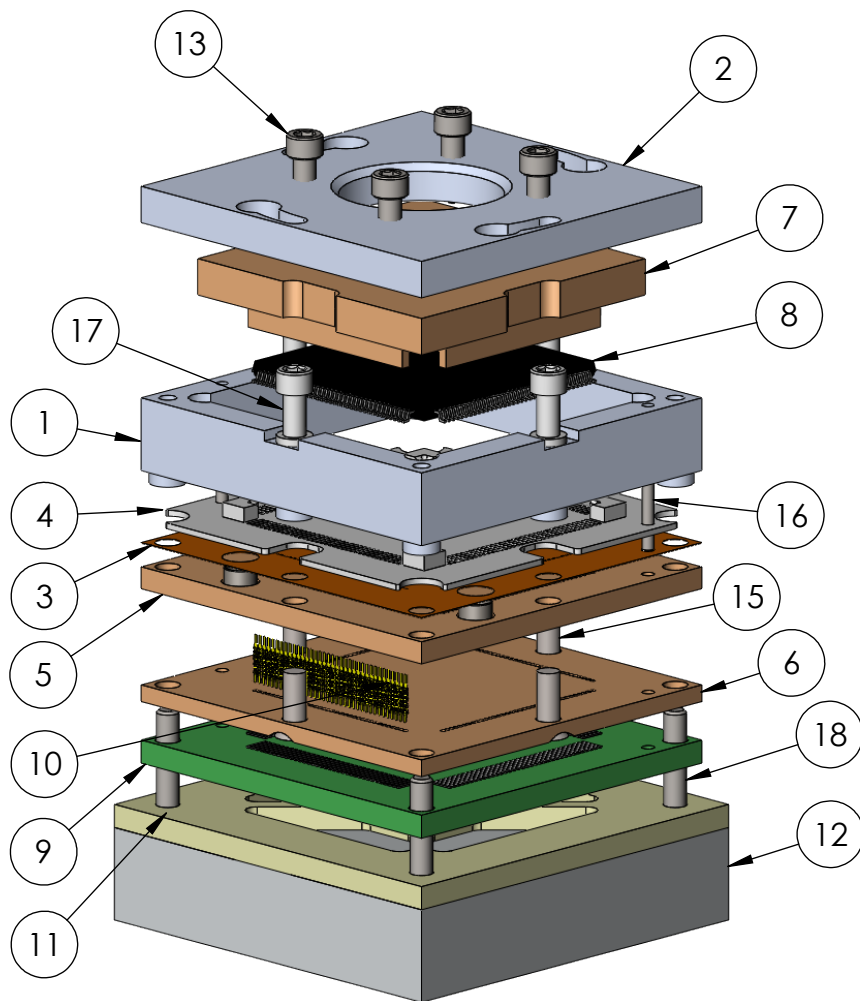
1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.

Description: Compatible QFE

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

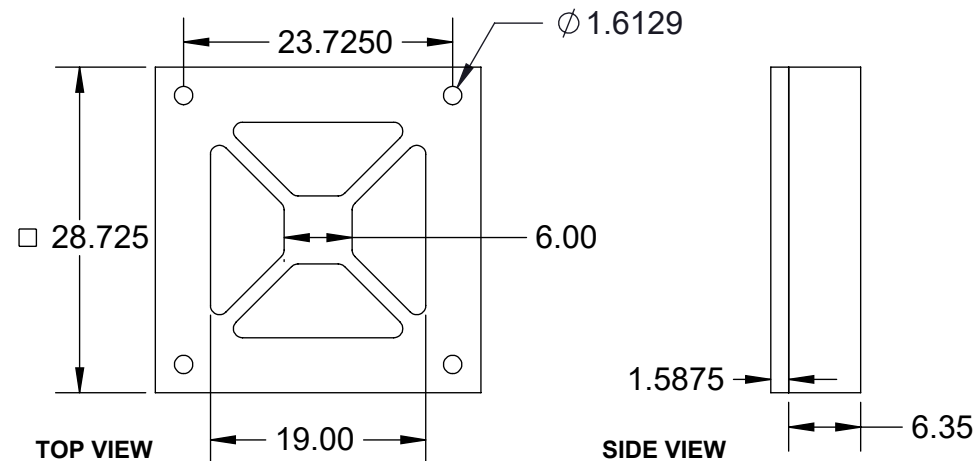
Tolerances: Hole diameters ±0.03mm [±0.001"], Pitches (from true position) ±0.025mm [±0.001"], substrate thickness tolerance ±10%, all other tolerances ±0.13mm [±0.005"] unless stated otherwise. Materials and specifications are subject to change without notice.

| | | | | |
|---|---|---|---|----------------------|
| SBT-QFE-3001 Drawing  Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com | Material: N/A Finish: N/A Weight: 29.60 | STATUS: Released ENG: S. Huang FILE: SBT-QFE-3001 Dwg | SHEET: 3 OF 5 DRAWN BY: M. Raske DATE: 11/04/2013 | REV. B SCALE: 4:1 |
|---|---|---|---|----------------------|



ISO EXPLORED VIEW

| ITEM NO. | DESCRIPTION | Material |
|----------|---|-------------------------|
| 1 | SBT socket base for 21x21mm IC | 7075-T6 Aluminum Alloy |
| 2 | SBT socket lid for 21mm IC open top | 7075-T6 Aluminum Alloy |
| 3 | pin orientation guide, QFE144 0.4mm pitch | Kapton Polyimide/Cirlex |
| 4 | floating guide QFE144 0.4mm pitch | PEEK Ceramic filled |
| 5 | Middle Guide, QFE144 0.4mm pitch | Semitron MDS 100 |
| 6 | Bottom Guide, QFE144 0.4mm pitch | Semitron MDS 100 |
| 7 | Compression Plate QFE144 0.4mm pitch | Ultem 1000 |
| 8 | CFE QFE144 0.4mm pitch Chip | FR4 High temp |
| 9 | Test Board QFE144 0.4mm pitch | FR4 High temp |
| 10 | SBT Pin, 0.4mm pitch | N/A |
| 11 | Insulation plate, 21x21mm IC | High Temp FR4 |
| 12 | CBT/SBT Backing plate 21mm Ni plated | 7075-T6, Plate (SS) |
| 13 | Socket Head cap Screw, 0-80, 3/16" lg | Stainless Steel (18-8) |
| 14 | Floating Guide Spring | Alloy Steel (SS) |
| 15 | #0-80, 90 deg., head pin guide screw, Peek material | PEEK unfilled |
| 16 | Dowel pin, 1/32" X 1/4", SS | Stainless Steel (18-8) |
| 17 | #0-80 Shoulder Screw, 1.59mm thread length | Stainless Steel (303) |
| 18 | #0-80 x 0.5, SH Cap Screw | 18-8 Stainless Steel |



Insulation plate and Backing plate detail

Description: Socket Spec

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.

SBT-QFE-3001 Drawing



Ironwood Electronics, Inc.
Tele: (800) 404-0204
www.ironwoodelectronics.com

Material: N/A
Finish: N/A
Weight: 29.60

STATUS: Released

ENG: S. Huang

FILE: SBT-QFE-3001 Dwg

SHEET: 4 OF 5

DRAWN BY: M. Raske

DATE: 11/04/2013


REV. B

SCALE: 3:1

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

Description: Sheet1

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.

| | | | | | |
|--|---|---------------------------------|------------------------|--------------------|------------|
| SBT-QFE-3001 Drawing | | Material: Finish: Weight: | STATUS: Released | SHEET: 5 OF 5 | REV. B |
|  | ©2015 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com | | ENG: S. Huang | DRAWN BY: M. Raske | SCALE: 3:1 |
| | | | FILE: SBT-QFE-3001 Dwg | DATE: 11/04/2013 | |