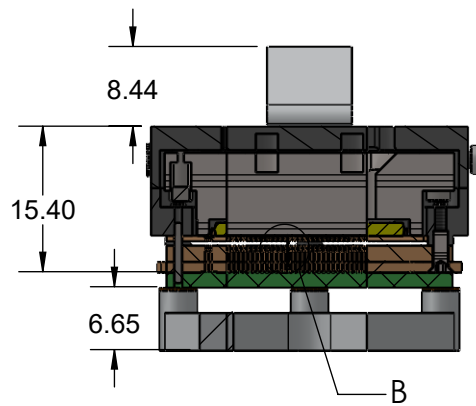
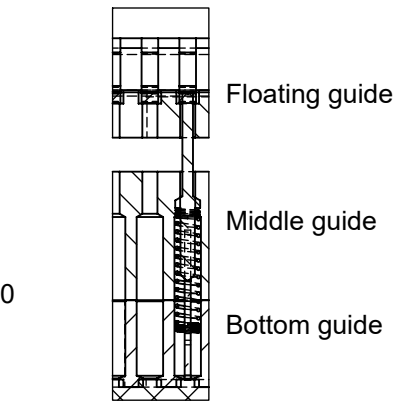


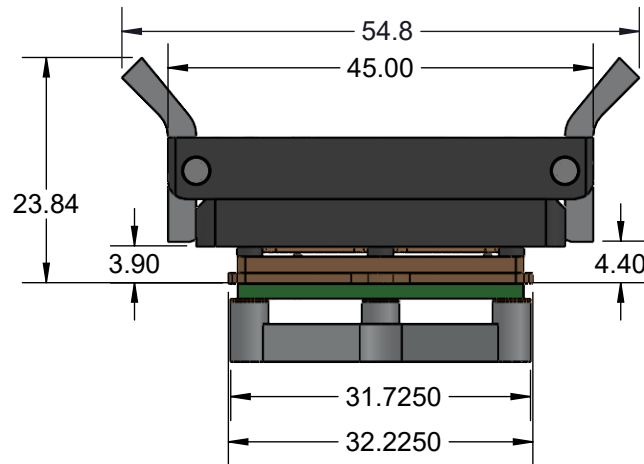
TOP VIEW



SECTION A-A



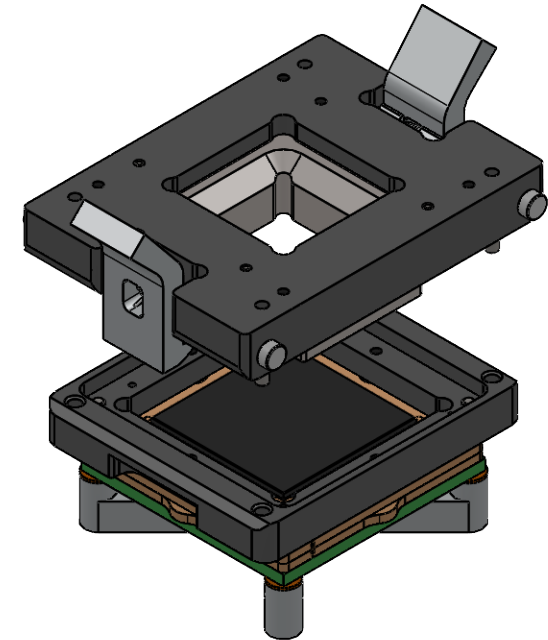
DETAIL B
SCALE 10 : 1



SIDE VIEW

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




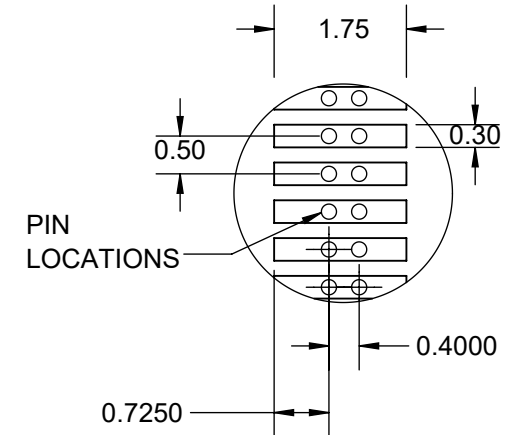
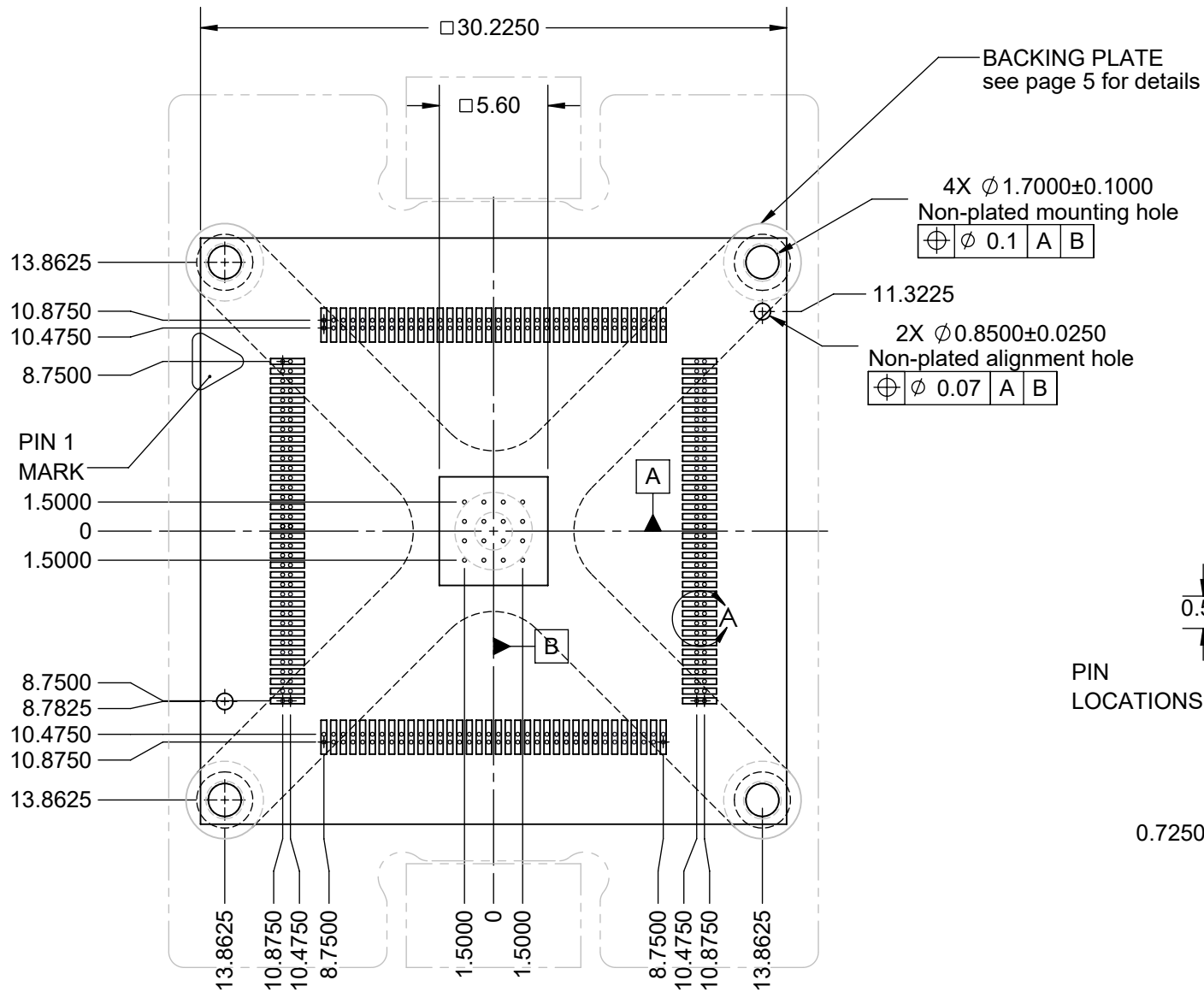
ISO VIEW

Description: Open Top CBT socket for 0.5mm pitch 20mm sq 22mm tip-tip 144 pin QFP package, two pins per lead-kelvin connection

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-3013 Drawing  Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 38.71	STATUS: Released ENG: E. Smolentseva FILE: CBT-QFE-3013 Dwg	SHEET: 1 OF 6 DRAWN BY: M. Raske DATE: 01/02/2018	REV. B SCALE: 1.25:1



DETAIL A
SCALE 10 : 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.

Target PCB Design Recommendations:

Total thickness: 1.59mm min.

Plating: Hard Gold.

CBT-QFE-3013 Drawing



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

Material: N/A
Finish: N/A
Weight: 38.71

STATUS: Released

ENG: E. Smolentseva

FILE: CBT-QFE-3013 Dwg

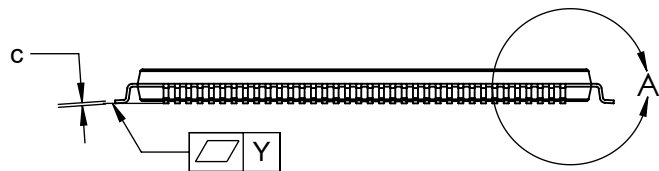
SHEET: 2 OF 6

DRAWN BY: M. Raske

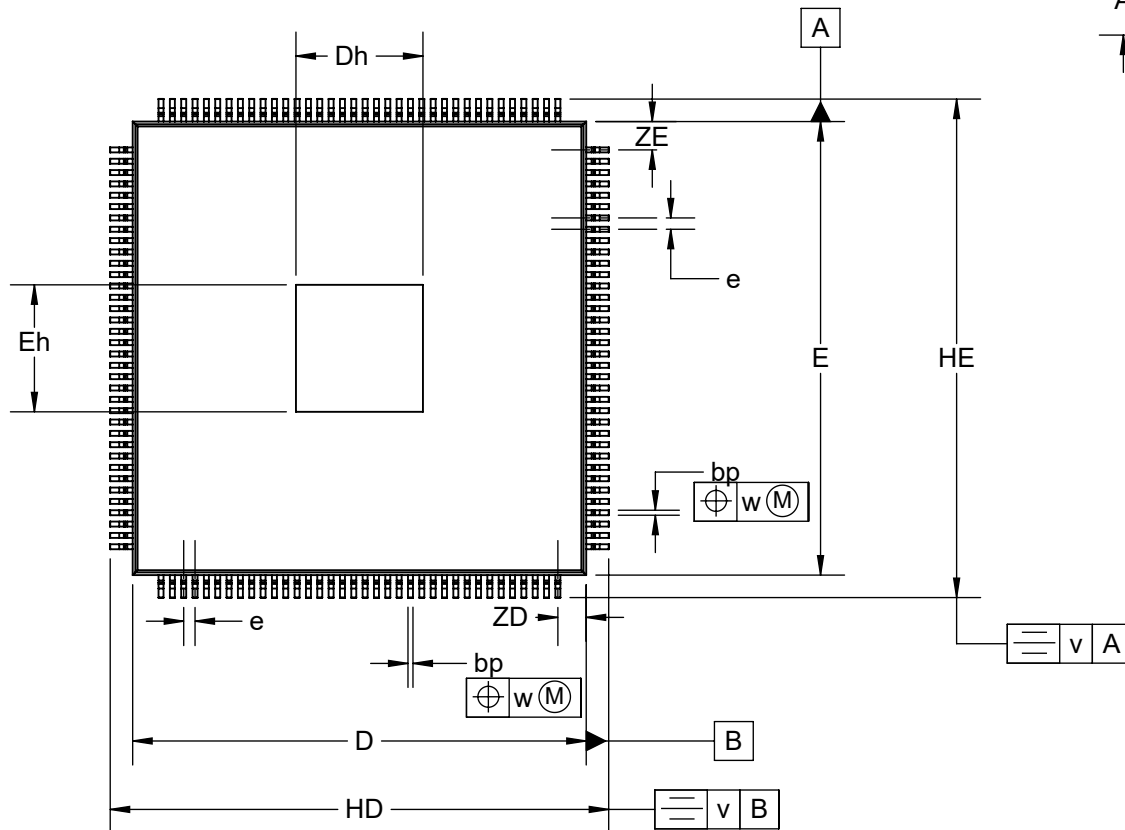
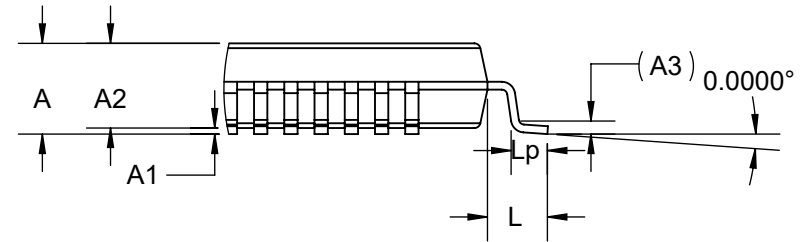
DATE: 01/02/2018

REV. B

SCALE: 3:1



DETAIL A
SCALE 8 : 1




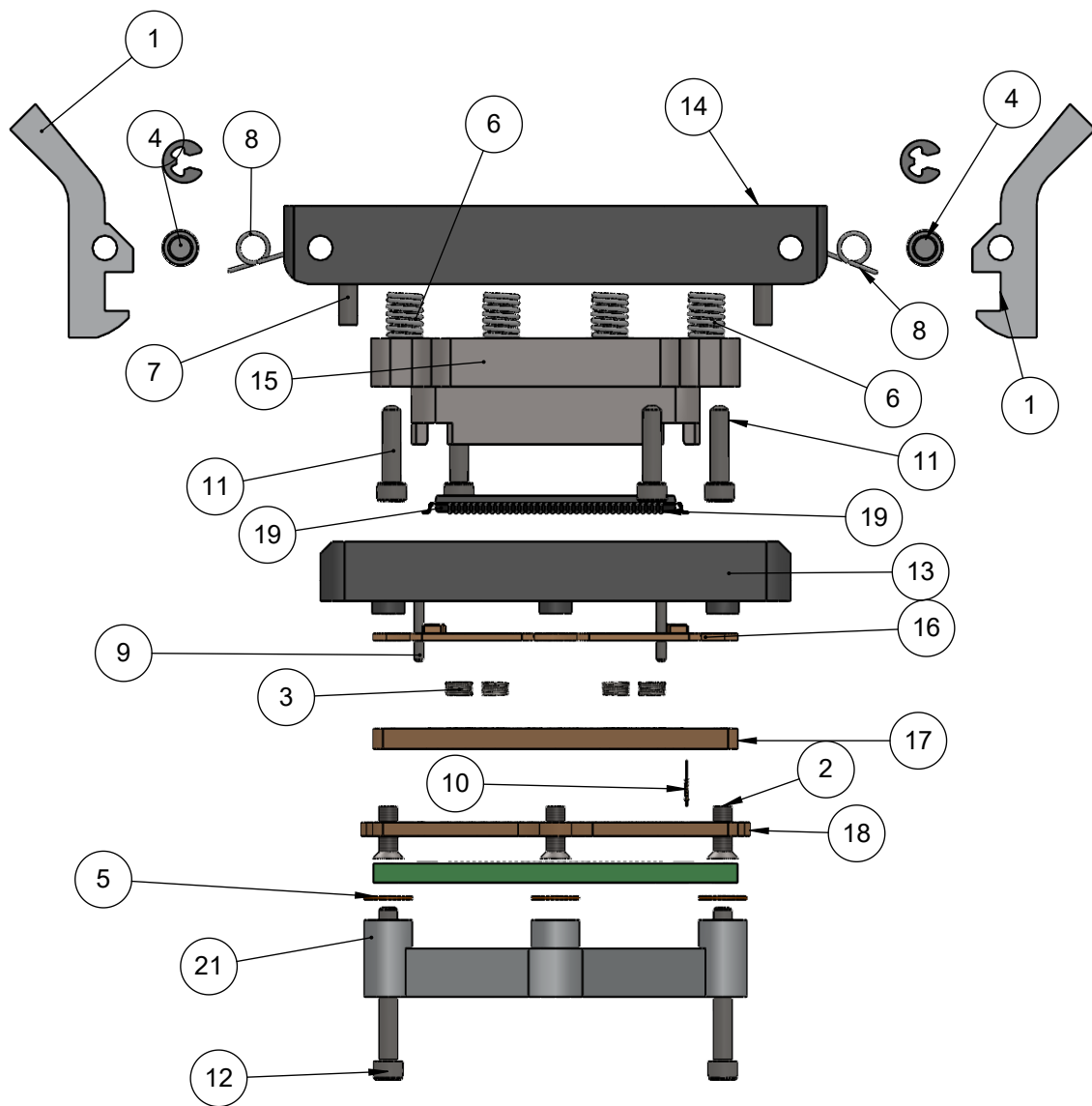
UNIT	A _{max}	A1	A2	A3	bp	c	D	Dh	E	Eh	e	HD	HE	L	Lp	v	w	y	ZD	ZE	0
mm	1.6	0.12 0.05	1.45 1.35	0.25	0.27 0.17	0.20 0.09	20.1 19.9	5.7 5.5	20.1 19.9	5.7 5.5	0.5	22.15 21.85	22.15 21.85	1	0.75 0.45	0.2	0.08	0.08	1.4 1.1	1.4 1.1	7 0

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.

CBT-QFE-3013 Drawing		STATUS: Released		SHEET: 3 OF 6		REV. B	
	Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 38.71		ENG: E. Smolentseva		DRAWN BY: M. Raske	
		FILE: CBT-QFE-3013 Dwg		DATE: 01/02/2018		SCALE: 3:1	




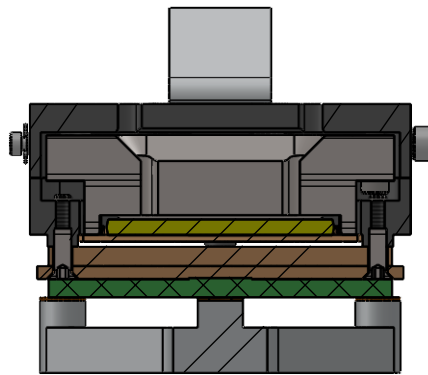
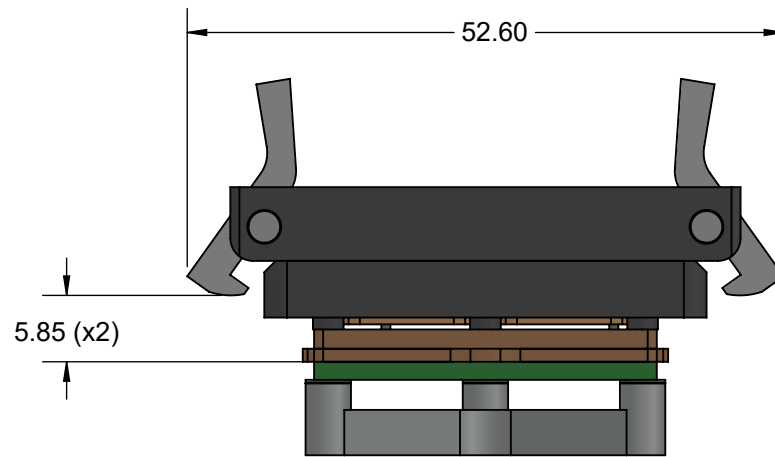
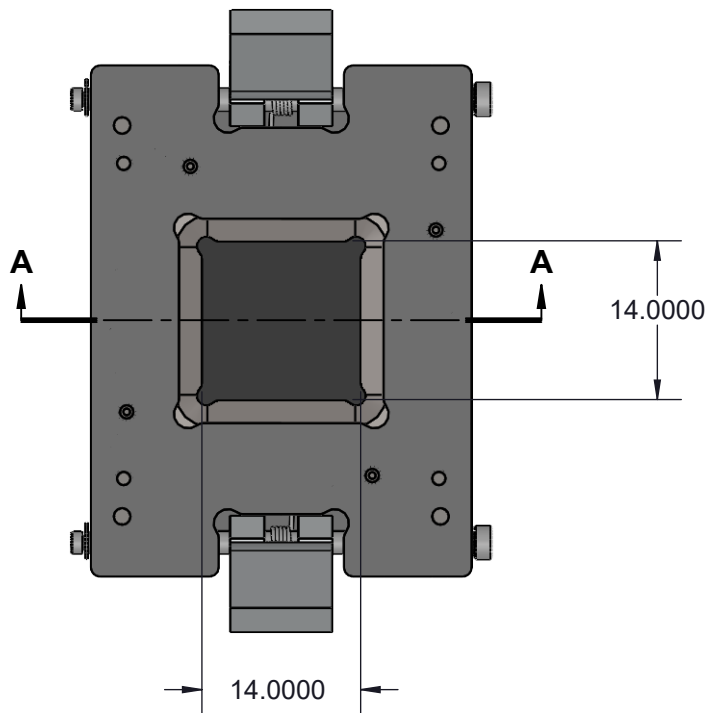
Description: Socket Assy

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

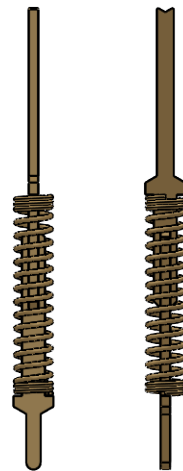
Tolerances: Hole diameters $\pm 0.03\text{mm}$ [$\pm 0.001"$], Pitches (from true position) $\pm 0.025\text{mm}$ [$\pm 0.001"$], substrate thickness tolerance $\pm 10\%$, all other tolerances $\pm 0.13\text{mm}$ [$\pm 0.005"$] unless stated otherwise. Materials and specifications are subject to change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

ITEM NO.	DESCRIPTION	Material
1	Clamshell Latch Snap Lid Socket	7075-T6 Alumium Alloy
2	#0-80, 90 deg., head pin guide screw, Peek material	PEEK unfilled
3	Floating Guide Spring	Alloy Steel (SS)
4	Hinge Pin, 2mm OD, 34mm Lg, SS	Stainless Steel (303)
5	Insulating washer, 4mm OD.	Kapton Polyimide/Cirlex
6	302SS Comp. Spring .375" Length, .125" OD, .016" Wire Dia.	Stainless Steel (302)
7	Dowel Pin, M1.5 X 5mm LG, Hardened Steel	AISI 347 Annealed Stainless Steel (SS)
8	Coil Spring, 180 0.109" OD, SS	Stainless Steel (302)
9	Dowel pin, 1/32" X 1/4", SS	Stainless Steel (18-8)
10	P-P185A Stamped Pin	N/A
11	#0-80 Socket Head Cap 0.25" Lenght 18-8 SS	Stainless Steel (18-8)
12	#0-80 x 0.5, SH Cap Screw	18-8 Stainless Steel
13	CBT socket base double latch	7075-T6 Alumium Alloy
14	Lid, double latch socket	7075-T6 Alumium Alloy
15	Compression plate QFE48 9x9mm T-T, 0.5mm pitch	PEEK
16	Floating pin guide	Semitron MDS 100
17	Middle pin guide	Semitron MDS 100
18	Bottom pin guide	Semitron MDS 100
19	Tchip, QFP144	
20	Test Board QFE144	FR4 High temp
21	SBT/CBT Backing Plate 25mm IC	7075-T6 Aluminum Alloy
22	Snap ring for 2mm Hinge pin 0.15" OD	

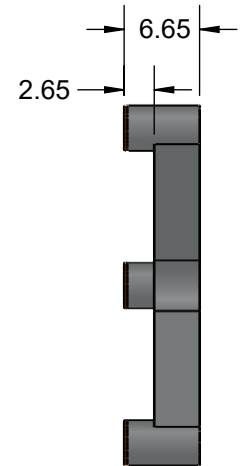
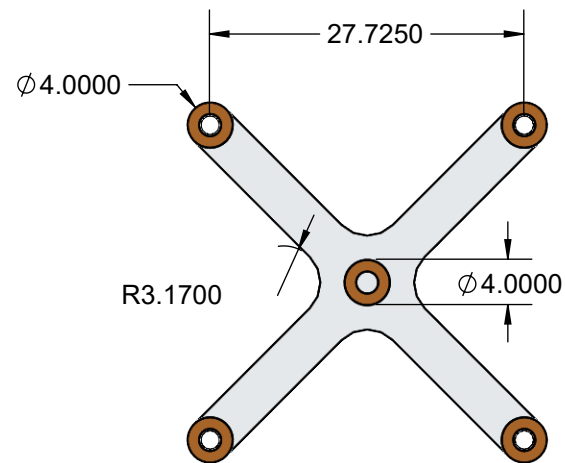
CBT-QFE-3013 Drawing		STATUS: Released		SHEET: 4 OF 6		REV. B	
	Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A		ENG: E. Smolentseva		DRAWN BY: M. Raske	
		Finish: N/A		FILE: CBT-QFE-3013 Dwg		DATE: 01/02/2018	
		Weight: 38.71				SCALE: 1.65:1	



SECTION A-A



**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 $\pm 0.03\text{mm}$ [$\pm 0.001"$], 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-3013 Drawing



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

Material: N/A
Finish: N/A
Weight: 38.71

STATUS: Released

ENG: E. Smolentseva

FILE: CBT-QFE-3013 Dwg

SHEET: 5 OF 6

DRAWN BY: M. Raske

DATE: 01/02/2018

REV. B


SCALE: 1.5:1

Rev	Date	Initials	Description
B	1/19/21	MR	added "two pins per lead / kelvin connection" to Description per MAF

Description: Sheet1

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-3013 Drawing ©2018 Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: Finish: Weight:	STATUS: Released	SHEET: 6 OF 6	REV. B
		ENG: E. Smolentseva	DRAWN BY: M. Raske	SCALE: 1.5:1
		FILE: CBT-QFE-3013 Dwg	DATE: 01/02/2018	