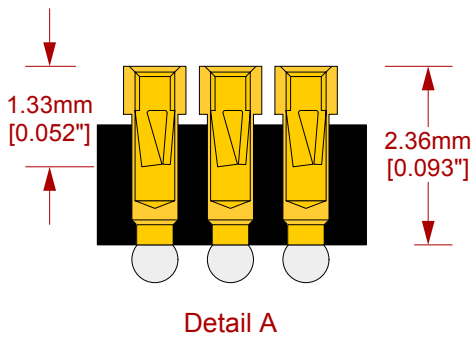
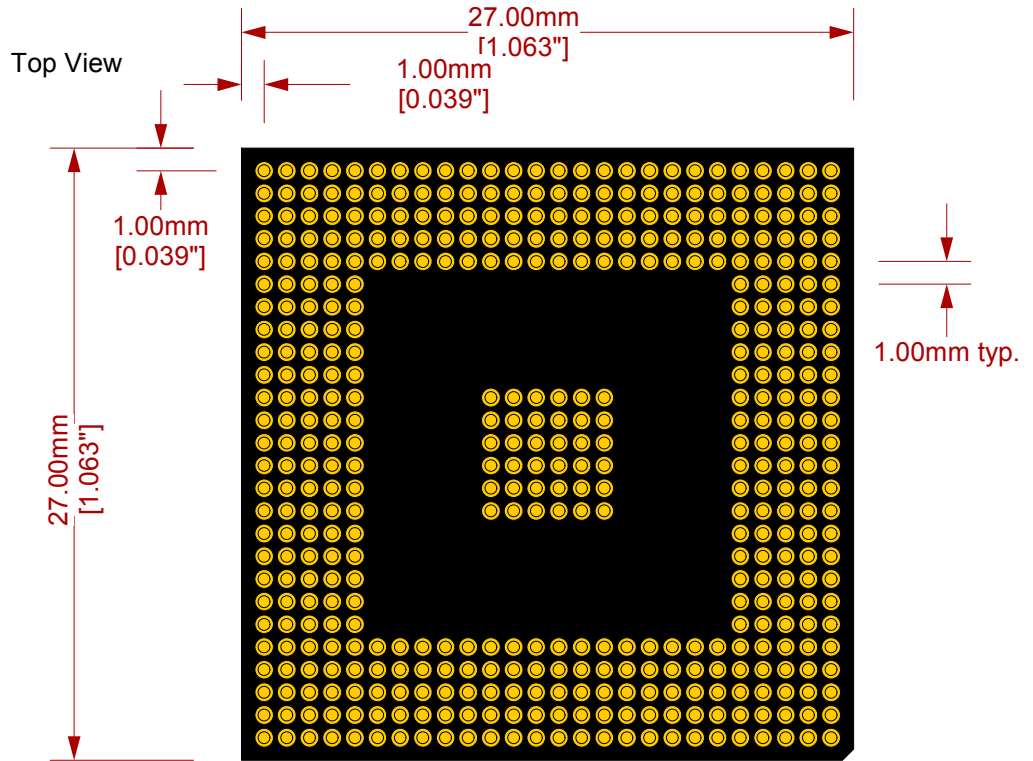


# Patent Pending

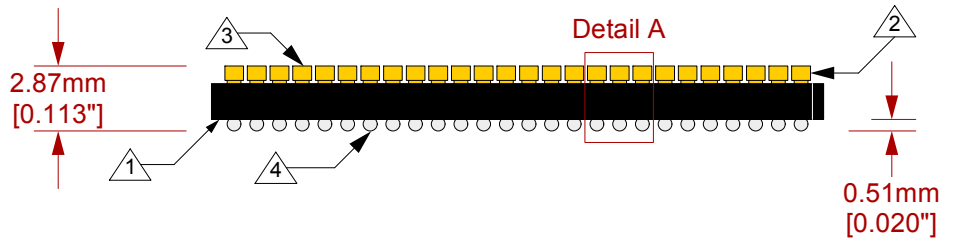
## Ordering Information:

Solder Ball Alloy	Part Number Suffix
Sn63Pb37	-42
Sn96.5Ag3.0Cu0.5	-42F*

\*RoHS Compliant



Side View



### CONTACT DATA

Accepts 0.20mm - 0.33mm Diameter pins  
3-finger


37/25 gram, Initial insertion force (with 0.254mm/0.203mm dia. pin)  
30/22 gram, normal force (with 0.254mm/0.203mm dia. pin)  
20/17 gram, extraction force (with 0.254mm/0.203mm dia. pin)

- ① Substrate: 1.59mm  $\pm$ 0.18mm [0.0625"  $\pm$ 0.007"] FR4/G10 or equivalent high temp material. (RoHS)
- ② Pins: material- Brass Alloy 360 1/2 hard; finish- 0.25 $\mu$ m [10 $\mu$ ] Au over 1.27 $\mu$ m [50 $\mu$ ] Ni (min.).
- ③ Contacts: Beryllium Copper Alloy172, HT; Finish- 0.25 $\mu$ m [10 $\mu$ ] Au over 1.27 $\mu$ m [50 $\mu$ ] Ni (min.).
- ④ Solder Balls (See table above)

### Description: Giga-snaP BGA SMT Foot

456 position (1.0mm pitch) gold plated female receptacle pins to SMT solder balls (BGA type). Pin assignment 1:1.

Tolerances: diameters  $\pm$ 0.03mm [ $\pm$ 0.001"], PCB perimeters  $\pm$ 0.18mm [ $\pm$ 0.007"], PCB thicknesses  $\pm$ 0.18mm [ $\pm$ 0.007"], pitches (from true position)  $\pm$ 0.08mm [ $\pm$ 0.003"], all other tolerances  $\pm$ 0.13mm [ $\pm$ 0.005"] unless stated otherwise. Materials and specifications are subject to change without notice.

SF-BGA456D-B-42(F) Drawing		Status: Released	Scale: 4:1	Rev: B
 <p>© 2005 IRONWOOD ELECTRONICS, INC. PO BOX 21151 ST. PAUL, MN 55121 Tele: (651) 452-8100 www.ironwoodelectronics.com</p>	Drawing: S Natarajan		Date: 6/28/05	
	File: SF-BGA456D-B-42 Dwg		Modified: 1/9/06	