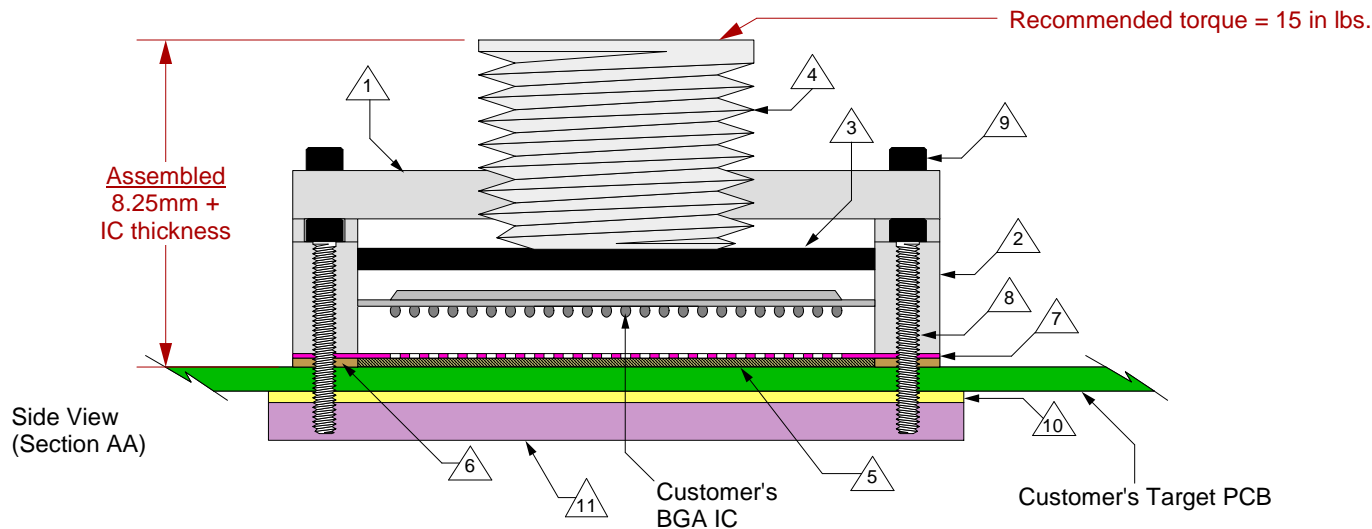
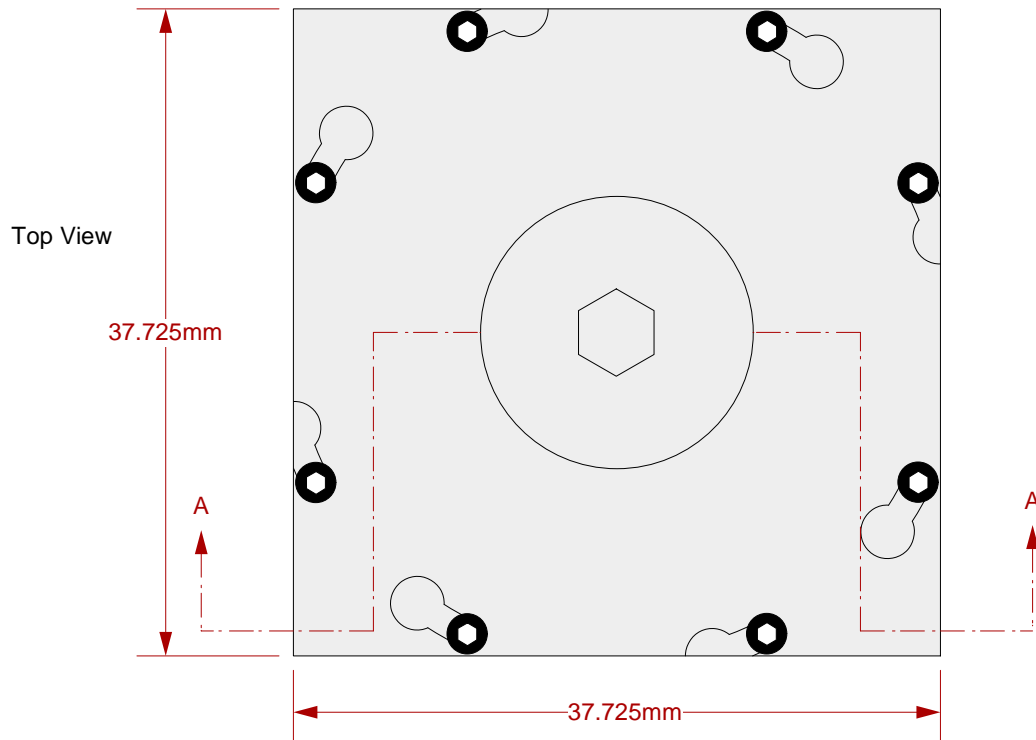


# GHz BGA Socket - Direct mount, solderless

## Features

- Directly mounts to target PCB (needs tooling holes) with hardware.
- High speed, reliable Elastomer connection
- Minimum real estate required
- Compression plate distributes forces evenly
- Ball guide prevents over compression of elastomer
- Easily removable swivel socket lid



- |    |  |
|----|--|
| 1  | Socket Lid: Black anodized Aluminum.<br>Thickness = 2.5mm.   |
| 2  | Socket base: Black anodized Aluminum.<br>Thickness = 5mm.  |
| 3  | Compression Plate: Black anodized Aluminum.<br>Thickness = 2.5mm.  |
| 4  | Compression screw: Clear anodized Aluminum.<br>Thickness = 5mm, Hex socket = 5mm.  |
| 5  | Elastomer: 40 micron dia gold plated brass filaments arranged symmetrically in a silicone rubber (63.5 degree angle).<br>Thickness = 0.75mm. |
| 6  | Elastomer Guide: Cirlex or equivalent<br>Thickness = 0.725mm.  |
| 7  | Ball Guide: Kapton polyimide.  |
| 8  | Socket base screw: Socket head cap, Alloy steel with black oxide finish, 0-80 fine thread, 12.7mm long.                                      |
| 9  | Socket lid screw: Shoulder screw, 18-8 SS, 0-80 fine thread.   |
| 10 | Insulation Plate: FR4/G10, Thickness = 1.59mm.   |
| 11 | Backing Plate: Black anodized Aluminum.<br>Thickness = 6.35mm.   |

### SG-BGA-6012 Drawing

Status: Released

Scale: -

Rev: G



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Tele: (952) 229-8200  
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Drawing: Meghann Fedde

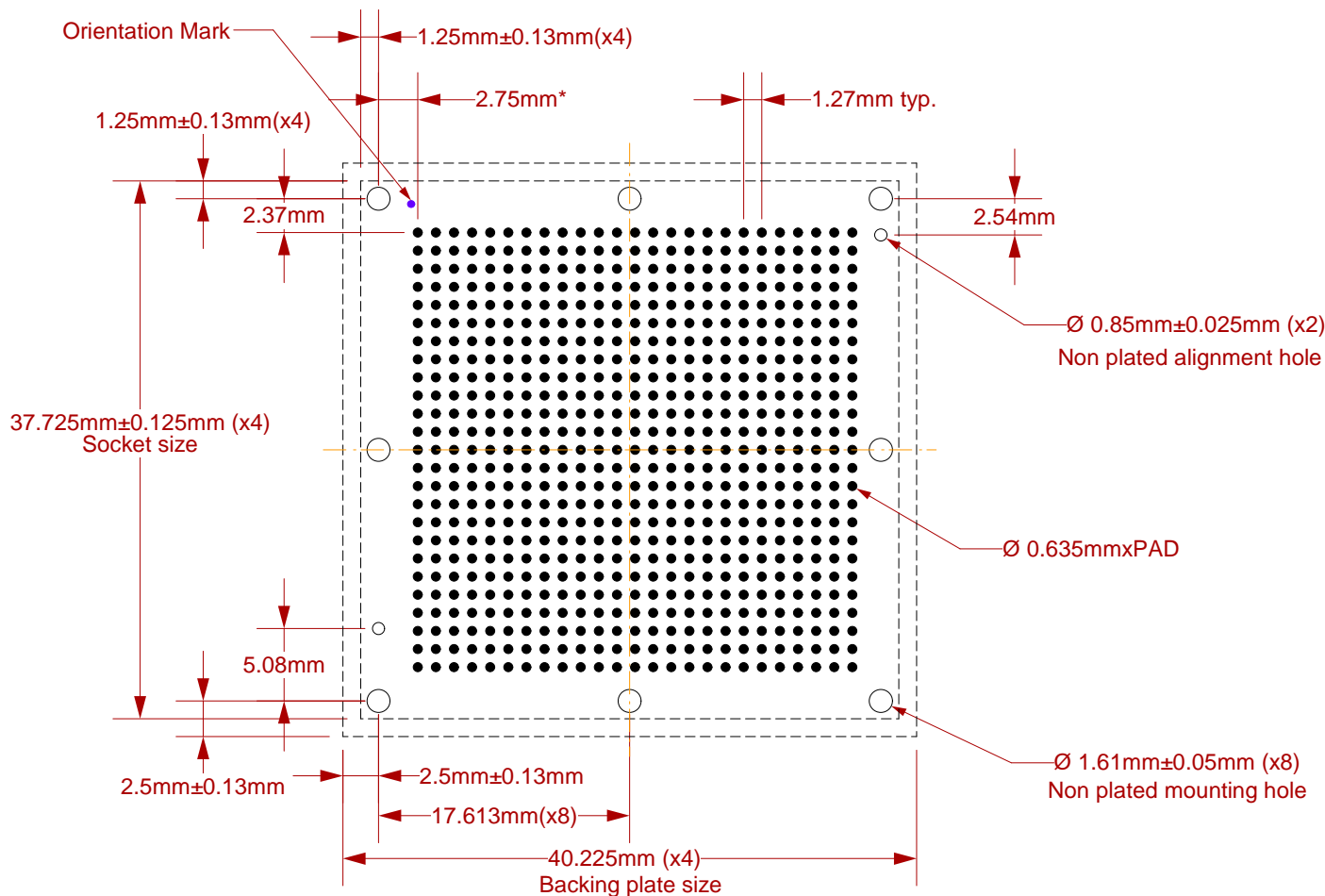
Date: 8/20/01

File: SG-BGA-6012 Dwg

Modified: 7/16/09, AE

All tolerances:  $\pm 0.125$ mm (unless stated otherwise). Materials and specifications are subject to change without notice.

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




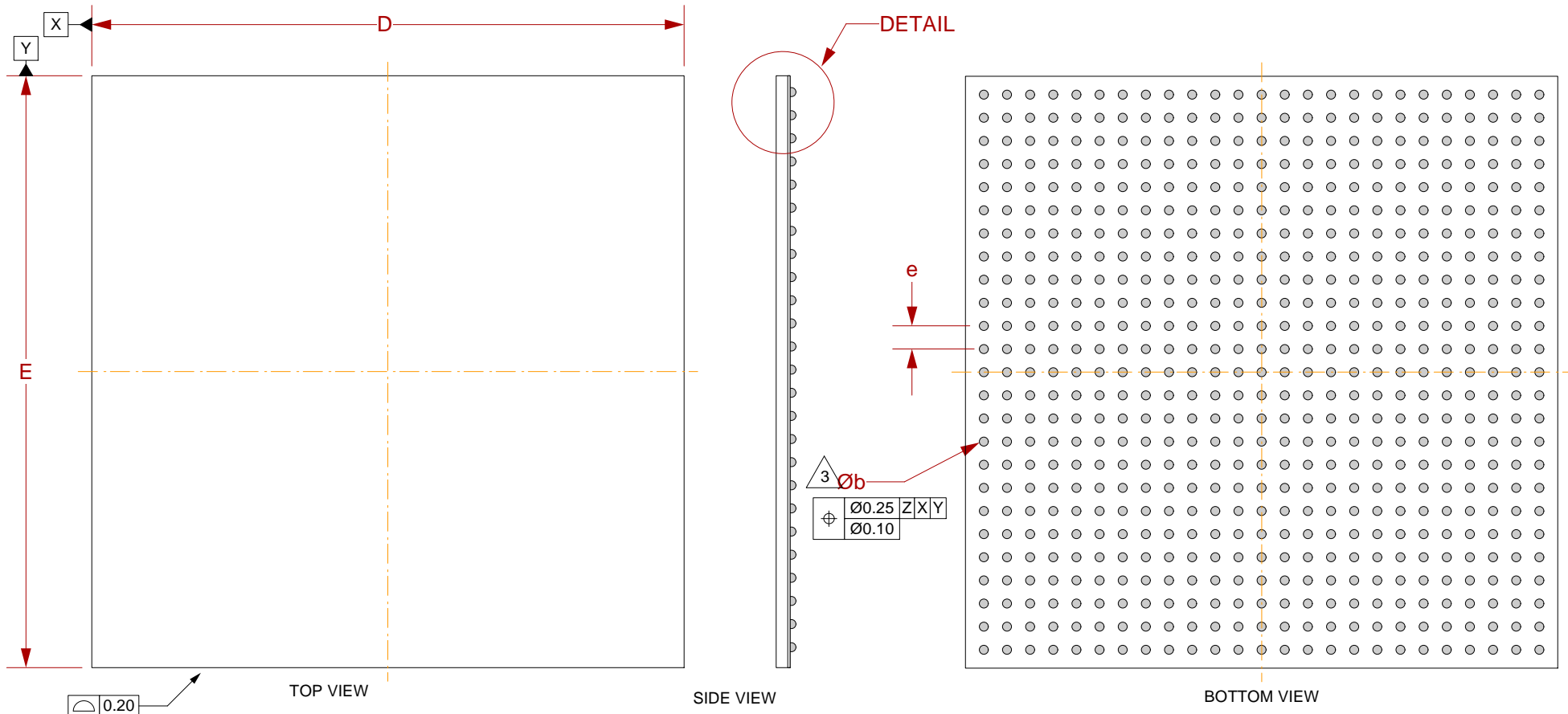
Target PCB Recommendations

Total thickness: 2.4mm min.  
Plating: Gold or Solder finish  
PCB Pad height: Same or higher than solder mask

NOTE: Steel backing plate may be required based on end user's application

Recommended PCB Layout Tolerances:  $\pm 0.025\text{mm} [\pm 0.001"]$  unless stated otherwise.

 <p>© 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com</p>	<p><b>SG-BGA-6012 Drawing</b></p>		Status: Released	Scale: 2:1	Rev: G
	<p>Drawing: Meghann Fedde</p>		<p>Date: 8/20/01</p>		
	<p>File: SG-BGA-6012 Dwg</p>		<p>Modified: 7/16/09, AE</p>		

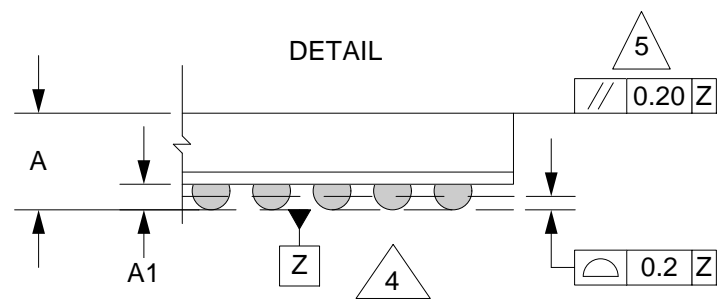


0.20

TOP VIEW

SIDE VIEW

BOTTOM VIEW




DETAIL

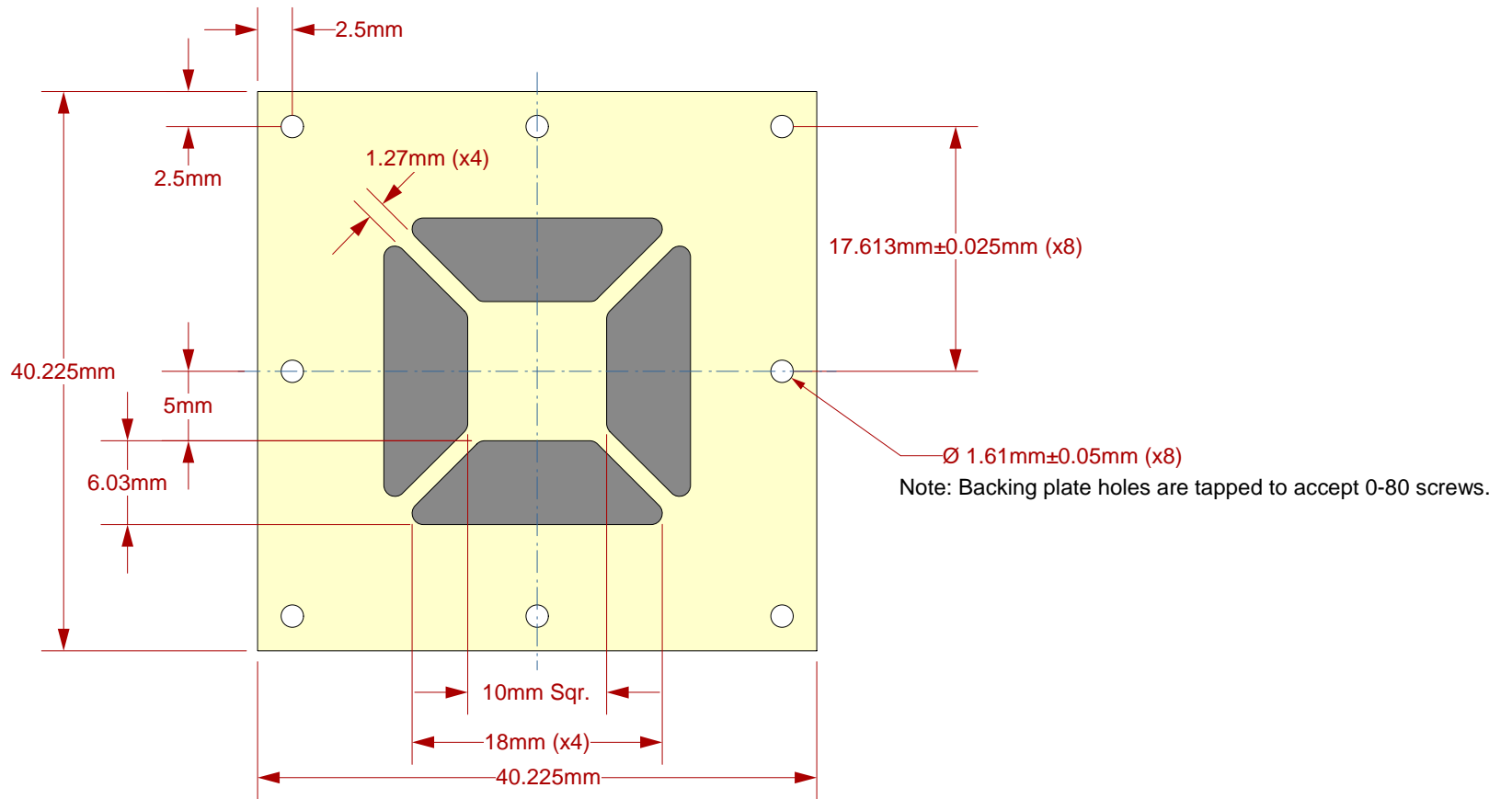
- 1 Dimensions are in millimeters.
- 2 Interpret dimensions and tolerances per ASME Y14.5M-1994.
- 3 Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
- 4 Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
- 5 Parallelism measurement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

DIM	MIN	MAX
A		2.5
A1	0.5	0.7
b		0.90
D	32.50 BSC	
E	32.50 BSC	
e	1.27 BSC	

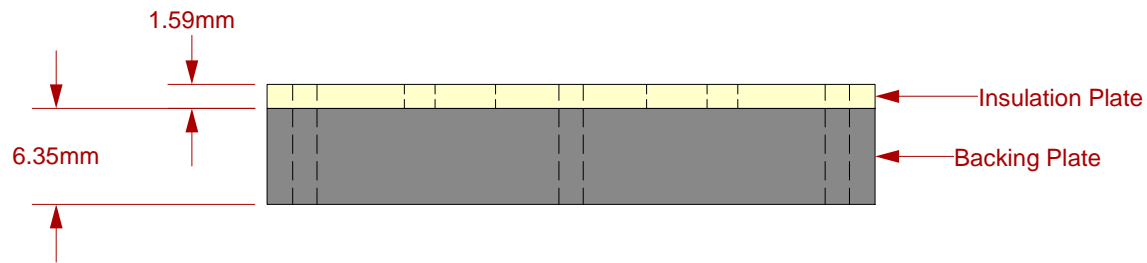
Array 25x25

 <p><b>SG-BGA-6012 Drawing</b></p> <p>© 2009 IRONWOOD ELECTRONICS, INC. 11351 Rupp Drive, Suite 400, Burnsville, MN 55337 Tele: (952) 229-8200 www.ironwoodelectronics.com</p>	Status: Released	Scale: -	Rev: G
	Drawing: Meghann Fedde		Date: 8/20/01
	File: SG-BGA-6012 Dwg	Modified: 7/16/09, AE	


Top View



Side View



Description: Insulation Plate and Backing Plate

<b>SG-BGA-6012 Drawing</b>		Status: Released	Scale: -	Rev: G
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	File: SG-BGA-6012 Dwg		Modified: 7/16/09, AE	

All dimensions are in mm.  
All tolerances are +/- 0.125mm.  
(Unless stated otherwise)