

SuperBGA® (SBGA) package is a very low profile, high-power BGA. The IC is directly attached to an integrated copper heatsink. Since the IC and the I/O are on the same side, signal vias are eliminated.

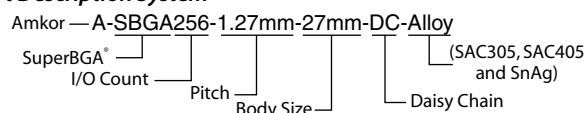
SBGA SuperBGA® 1.27mm Pitch

Part Description	I/O Count	Pitch	Body Size	Ball Matrix	Ball Alignment	Quantity Per Tray
A-SBGA256-1.27mm-27mm	256	1.27mm	27mm	20 x 20	Perimeter	40
A-SBGA304-1.27mm-31mm	304	1.27mm	31mm	23 x 23	Perimeter	27
A-SBGA352-1.27mm-35mm	352	1.27mm	35mm	26 x 26	Perimeter	24
A-SBGA432-1.27mm-40mm	432	1.27mm	40mm	31 x 31	Perimeter	21
A-SBGA520-1.27mm-40mm	520	1.27mm	40mm	31 x 31	Perimeter	21
A-SBGA560-1.27mm-42.5mm	560	1.27mm	42.5mm	33 x 33	Perimeter	12
A-SBGA600-1.27mm-45mm	600	1.27mm	45mm	35 x 35	Perimeter	12

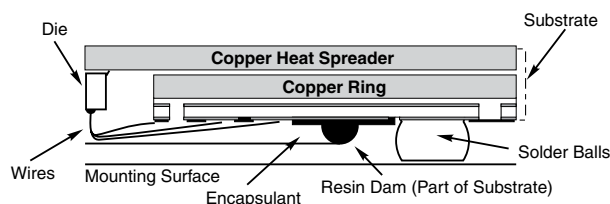
Notes

- Superior thermal performance.
- Light weight
- Low profile (1.4mm mounted)
- Moisture resistant (JEDEC level 3)
- JEDEC MO-192 standard outlines
- Enhanced electrical performance > 1 GHz
- Parts are packaged in JEDEC trays.
- Call for tape and reel quantity and availability.
- Solder ball material is eutectic 63/37 SnPb.
- BGA packages should be baked at 125°C for 24 hours prior to assembly to prevent delamination during assembly process.
- Parts can be baked and dry-packed.
- All components are daisy-chained except for 520 I/O.
- Lead-free parts are available with (SAC405) 95.5% Sn/ 4.0% Ag/ 0.5% Cu alloy or 96.5%Sn/3.0%Ag/0.5%Cu alloy (SAC305). Sn3.5Ag is also available (call for availability).
- SBGAs are not available without solder balls.

Part Description System



- Add "TR" to end of part number for Tape and Reel.
- Add "SAC405" or "SAC305" or "Sn3.5Ag" to end of part number for Lead-Free.



Note: Drawing not to scale.

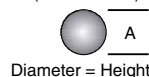


Looking for Lead-Free?

This symbol indicates that lead-free parts are available!

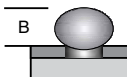
Practical Components is the exclusive distributor of Amkor Technology Mechanical Components.

Solder Ball Diameter/Height
(As Received)

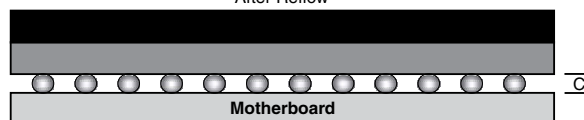


Diameter = Height

Solder Ball Height
After Ball Attach



After Reflow



Package	Pitch	A	B	C
SBGA	1.27	.76	.62	.52

All units in mm.

Assumptions: 5 mils solder paste. Solder mask defined pad. Typical motherboard no solder mask defined pad:

- 0.50 Pitch – 0.28
- 0.80 Pitch – 0.30
- 1.00 Pitch – 0.38