

Amkor's Ultra CSP™ package was licensed from FlipChip International as it's standard wafer level package offering. The Ultra CSP™ has been widely adopted as the industry standard for cost effective, high performance wafer level CSP applications. This package incorporates a thin film

redistribution process to route the pad to JEDEC/EIAJ standard pitches. Conventional CSP solder bumps are formed on the re-routed pads. It is designed to utilize industry-standard surface mount assembly and re-flow techniques. Lead-free is also available with Sn/Ag/Cu composition.

Ultra CSP™—Ultra Chip Scale Package™

Part Number	I/O Count	Pitch	Body Size	Quantity Per Tray
A-UCSP98-.5mm-7.2x6.7mm	98	.5mm	7.2 x 6.7mm	25
A-UCSP192-.4mm-7mm	192	.4mm	7mm	25

Notes

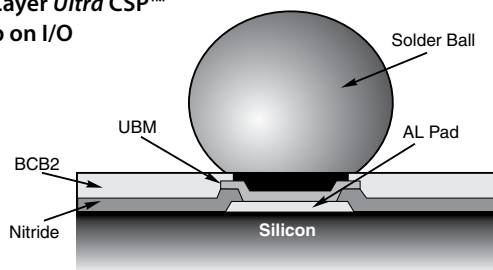
- Compatible with conventional SMT assembly and test techniques
- No need for underfill in many applications
- Moisture sensitivity is JEDEC level 1 @ 240°C
- Sphere ball diameter is 300µm (min.) for 0.5mm pitch and 250µm (min.) for 0.4mm pitch
- Bond pad pitch 90µm (minimum)
- Solder ball material is Eutectic 63/37 SnPb
- Lead-free is available with 95.5 Sn/4.0 Ag/0.5 Cu or 96.5 Sn/3.0 Ag/0.5 Cu alloys.
- Die thickness is 0.36—0.73mm
- Dielectric material is Benzocyclobutene (BCB)
- 0.4mm and 0.5mm ball pitches
- Both parts are daisy-chained
- Parts are packaged in waffle pack trays



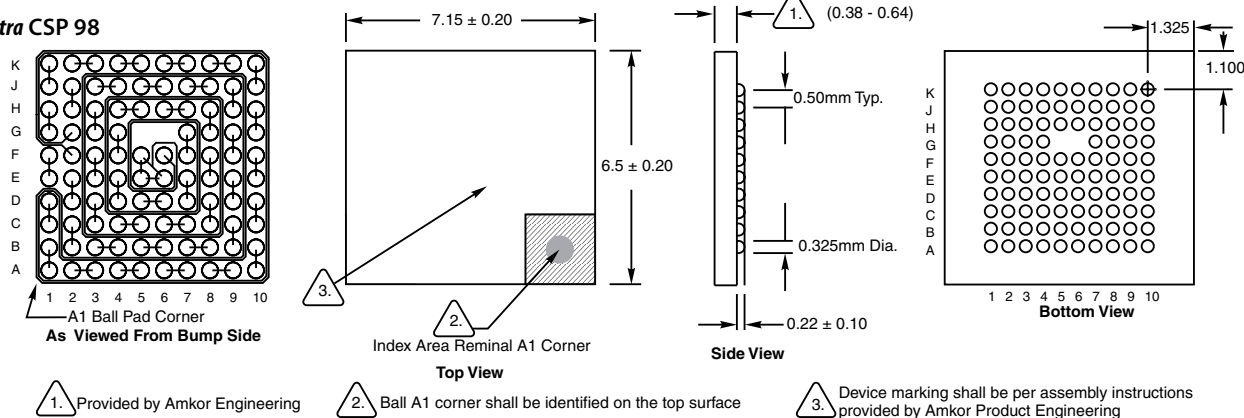
Part Number System

Amkor — A-UCSP98-.5mm-7.2x6.7mm — Body Size
 Ultra Chip Scale Package Pitch I/O Count

One Layer Ultra CSP™ Bump on I/O



Ultra CSP 98



Ultra CSP 192

