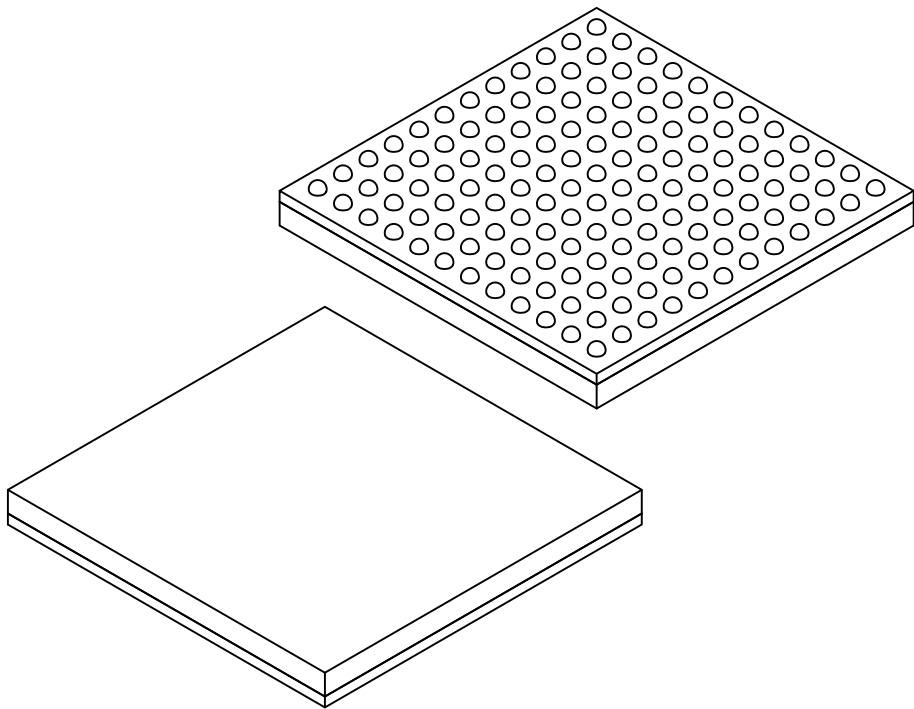


144-Lead Thin Fine-Pitch Ball Grid Array Package (B4B) - 10x10x1.2 mm Body [TFBGA]  
Atmel Legacy GPC: CGQ

**Note:** For the most current package drawings, please see the Microchip Packaging Specification located at <http://www.microchip.com/packaging>



Units		MILLIMETERS		
Dimension Limits		MIN	NOM	MAX
Number of Terminals	N	144		
Pitch	e	0.80 BSC		
Overall Height	A	-	-	1.20
Ball Height	A1	0.25	-	-
Mold Thickness	A2	0.55	-	-
Overall Length	D	10.0 BSC		
Ball Array Length	D2	8.80 BSC		
Overall Width	E	10.0 BSC		
Ball Array Width	E2	8.80 BSC		
Ball Diameter	b	-	0.40	-

Notes:

- 1. Pin 1 visual index feature may vary, but must be located within the hatched area.
- 2. Dimensioning and tolerancing per ASME Y14.5M
  - BSC: Basic Dimension. Theoretically exact value shown without tolerances.
  - REF: Reference Dimension, usually without tolerance, for information purposes only.