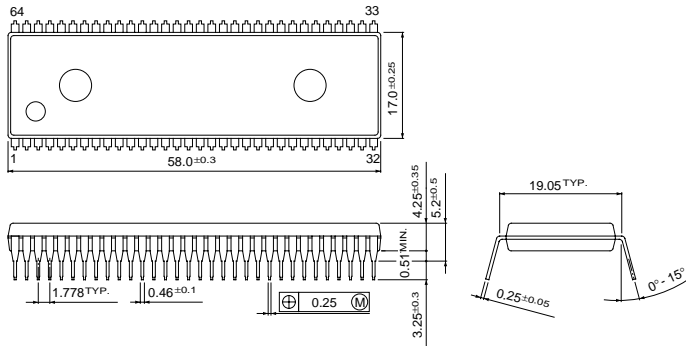


Package Outline

(Unit : mm)

64 SDIP (SDIP064-P-0750)



SDIP : Shrink DIP*

SOP : Small Outline Package

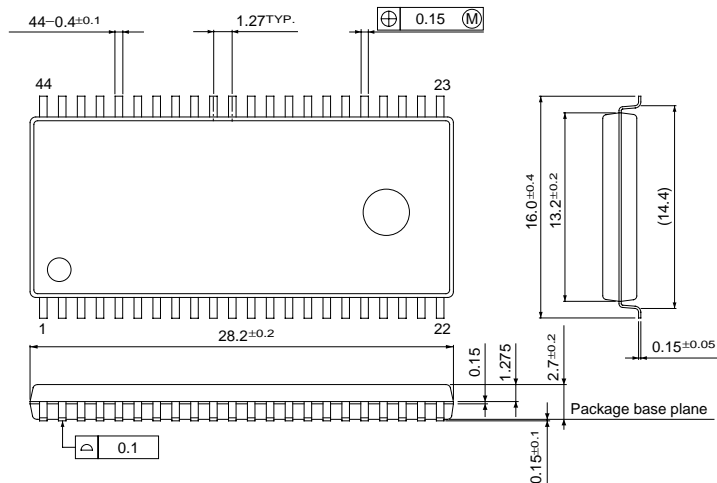
SSOP: Shrink SOP

TSOP: Thin SOP

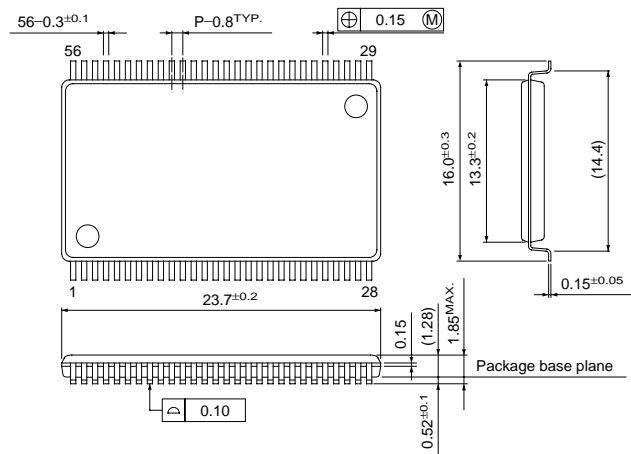
CSP : Chip Size Package (FBGA)

*DIP : Dual In-line Package

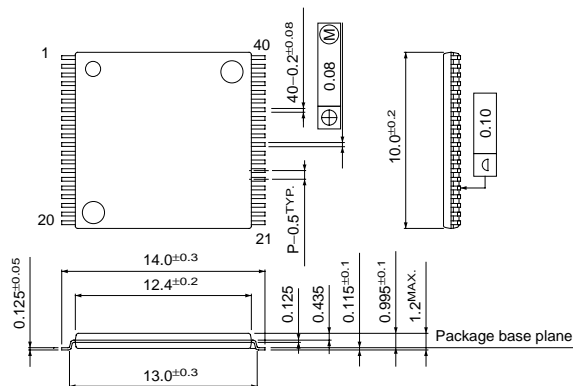
44 SOP (SOP044-P-0600)

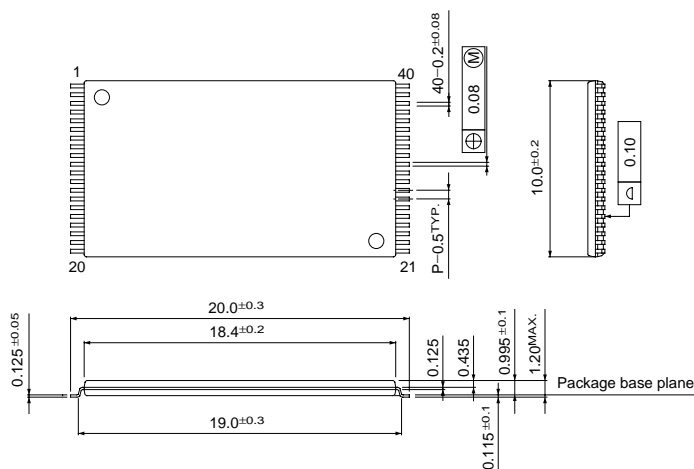
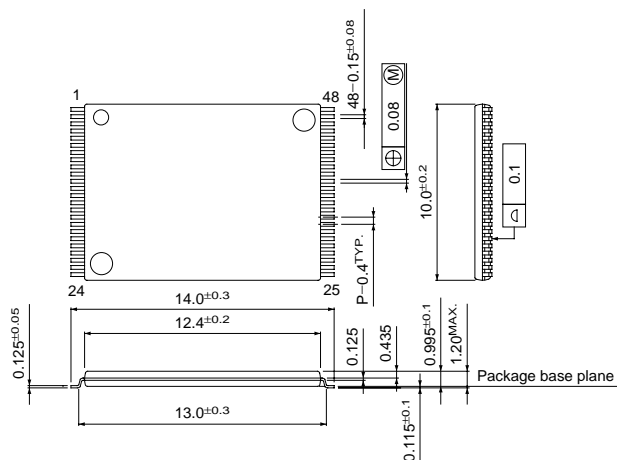


56 SSOP (SSOP056-P-0600)



40 TSOP (TSOP040-P-1014)

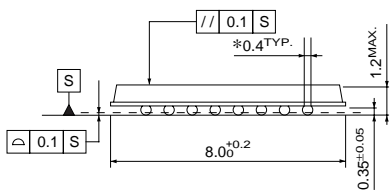
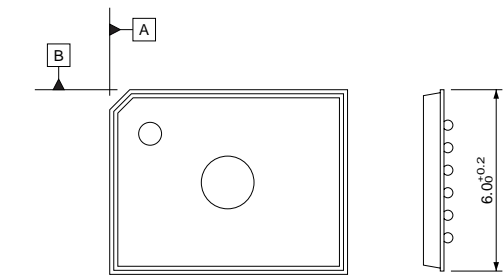


40 TSOP (TSOP040-P-1020)**48 TSOP (TSOP048-P-1014)**

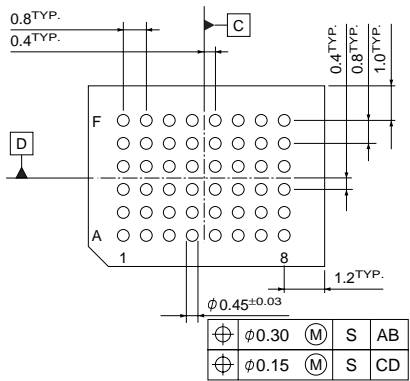
The drawing consists of three views of a package base plate:

- Top View:** A rectangular plate with overall dimensions of 24 by 48. A circular feature is located near the top-left corner. The bottom edge has a series of small rectangular protrusions. Dimensions include 0.10 for a feature on the left, 0.5 TYP. for the spacing of the bottom protrusions, and 0.2 ± 0.08 for the width of the bottom protrusions.
- Side View:** Shows the profile of the plate with a total height of 12.0 ± 0.2. A small rectangular feature on the right side has a height of 0.1.
- Detail View:** A cross-sectional view of the base plate showing a central cavity. Dimensions include 0.125 ± 0.05 for the top thickness, 20.0 ± 0.3 for the total width, 18.4 ± 0.2 for the inner width, 19.0 ± 0.1 for the base width, 0.125 for the base thickness, 1.0 ± 0.1 for the cavity depth, and 1.2 MAX. for the total depth. The bottom surface is labeled "Package base plane".

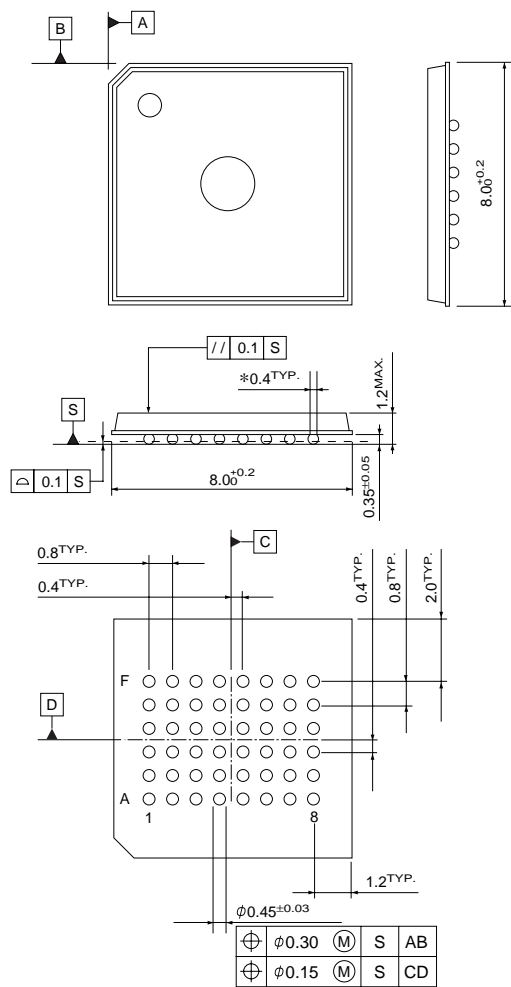
48 CSP (FBGA048-P-0608)



*Land hole diameter
for ball mounting

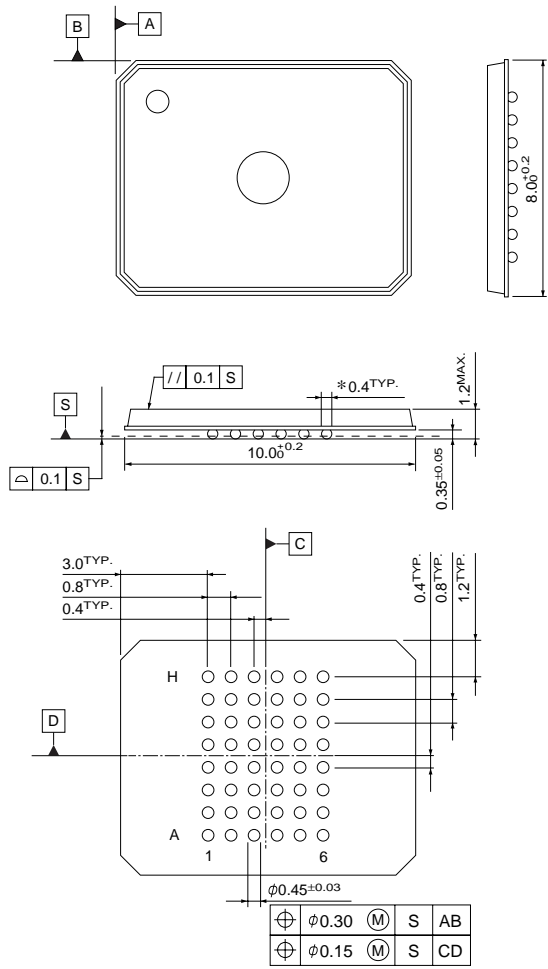


48 CSP (FBGA048-P-0808)



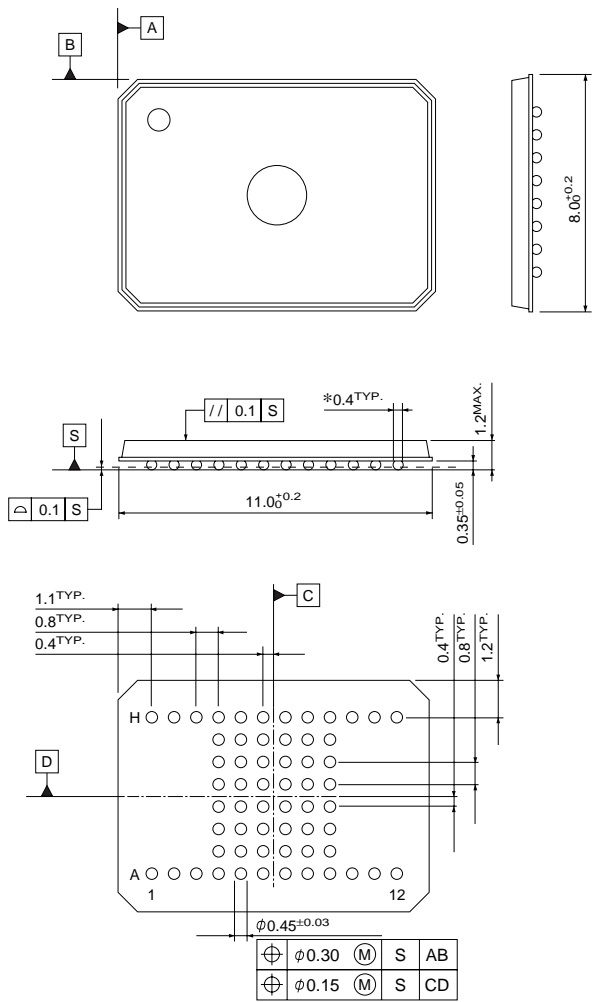
*Land hole diameter for ball mounting

48 CSP (FBGA048-P-0810)



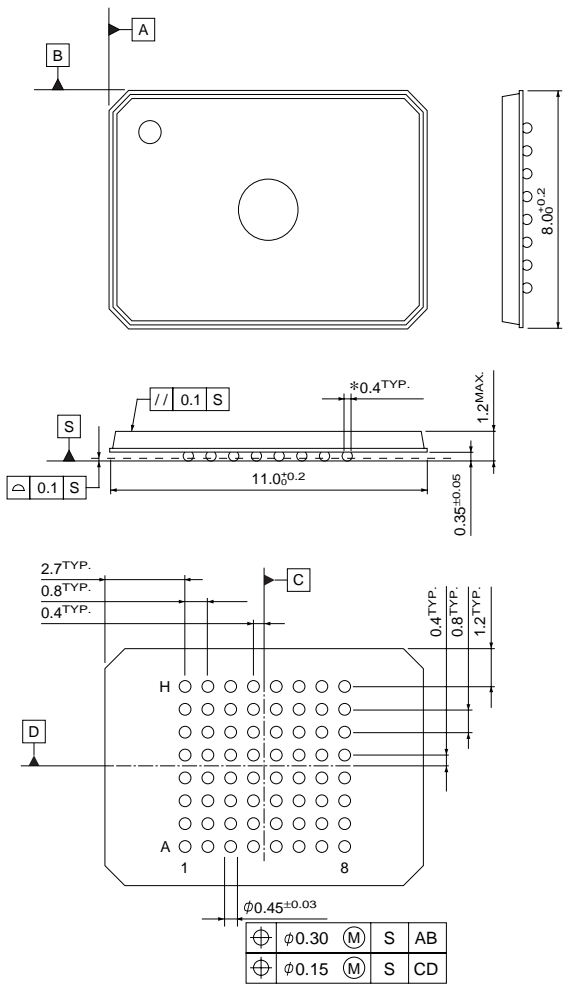
*Land hole diameter
for ball mounting

60 CSP (FBGA060/048-P-0811)



*Land hole diameter
for ball mounting

64 CSP (FBGA064-P-0811)



*Land hole diameter for ball mounting

80 CSP (FBGA080/064-P-0818)

