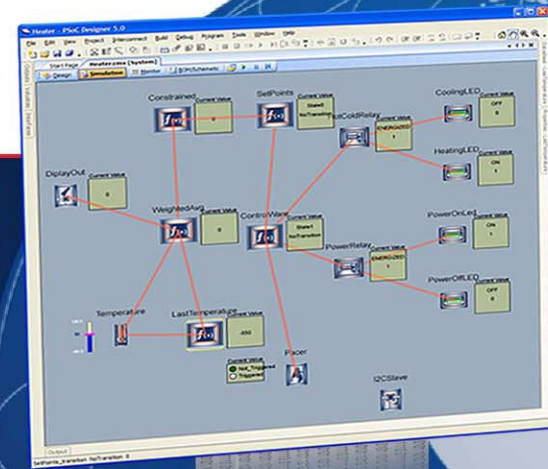


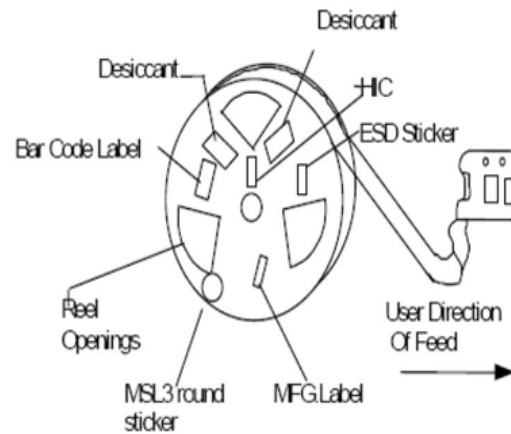
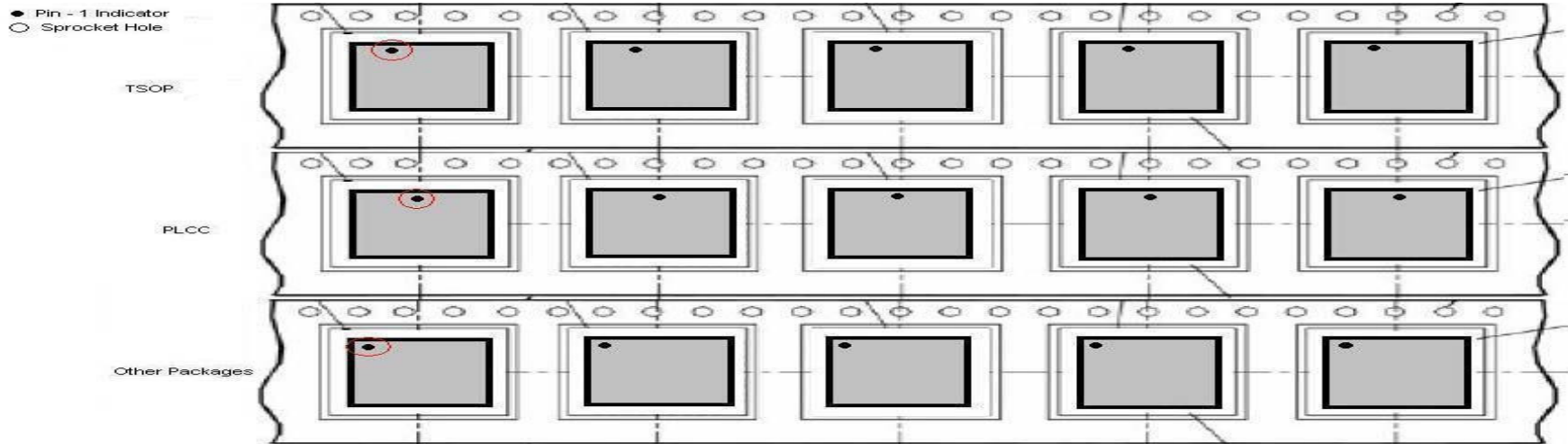
Unit Orientation in Carrier



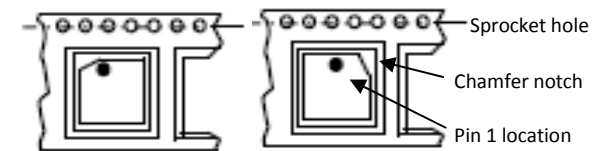
Note:

The diagrams are provided for illustrative purposes only. Please note that the actual unit orientation in carrier may vary depending on package size, type and pin count. Cypress is in compliance with EIA Standard 481. Should you have any other concerns and questions, feel free to contact your local CY sales representative.

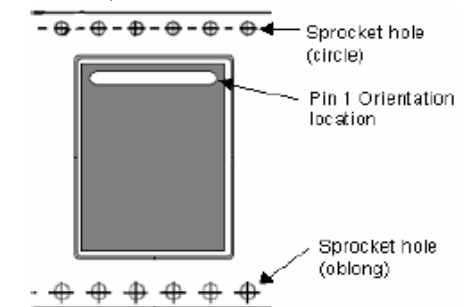
Unit Orientation in Tape and Reel



1 sided sprocket hole illustration



2 sided sprocket hole illustration



Note:

Circle sprocket hole is used as the pin 1 orientation reference.

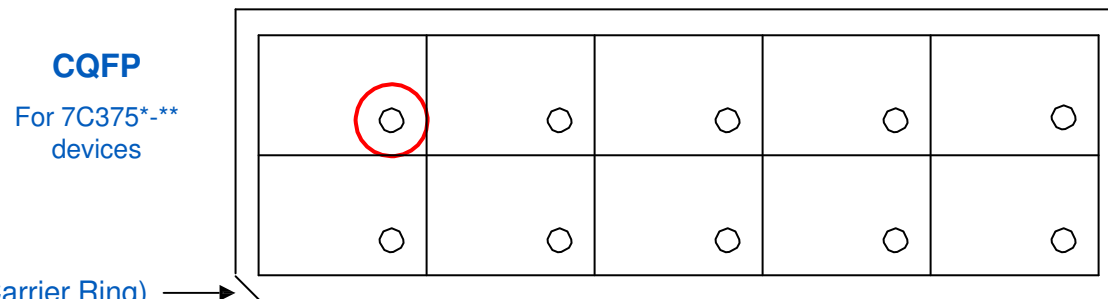
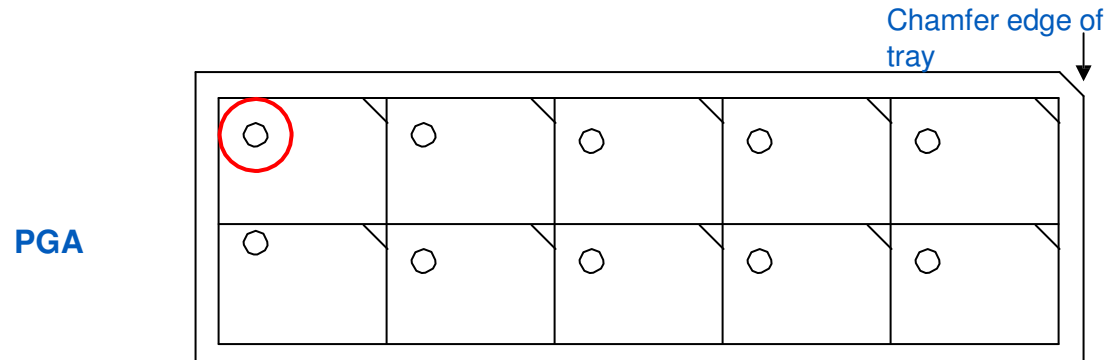
Carrier Taped used:

- 12 mm – 1 sided sprocket hole (with sprocket holes)
- 16 mm – 1 sided sprocket hole (with sprocket holes)
- 24 mm – 1 sided sprocket hole (with sprocket holes)
- 32 mm – 2 sided sprocket hole (with sprocket holes and oblong holes at the other side)
- 44 mm – 2 sided sprocket hole (with sprocket holes and oblong holes at the other side)

Unit Orientation in Tray



○ Pin 1

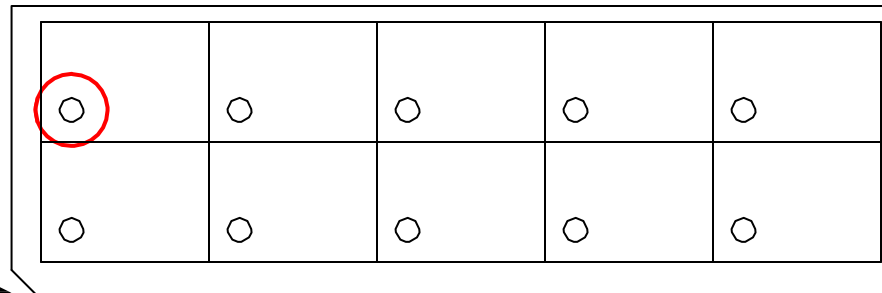


Unit Orientation in Tray



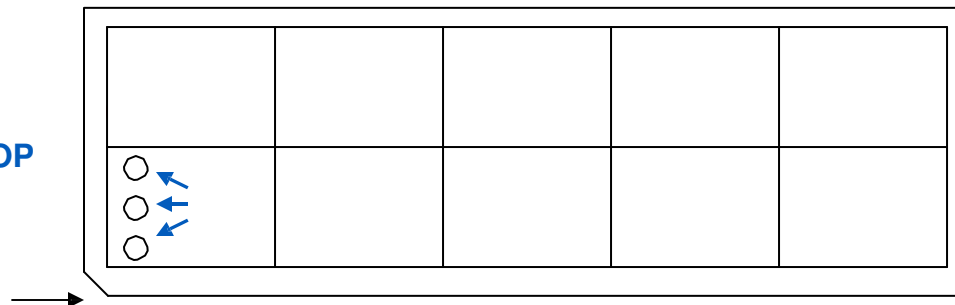
Other CQFP

Chamfer edge of tray



TQFP/PQFP/TSOP

Corner flat on package same corner flat on tray



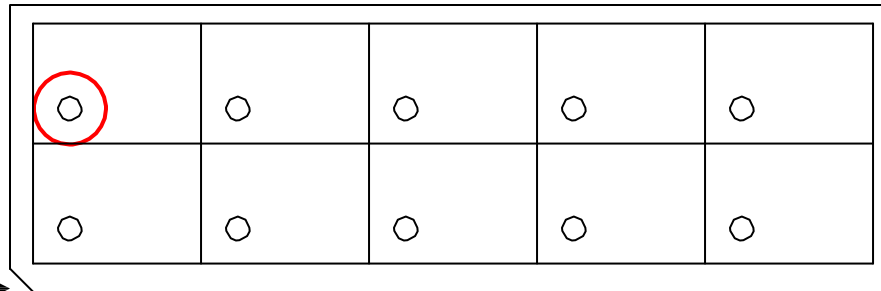
Pin-1 location depends on pin count . TSOP's pin 1 package varies according to its pin count. TSOP 44 is on bottom, TSOP 28 / 32 is on middle, and TSOP 48 is the top most part.

Unit Orientation in Tray



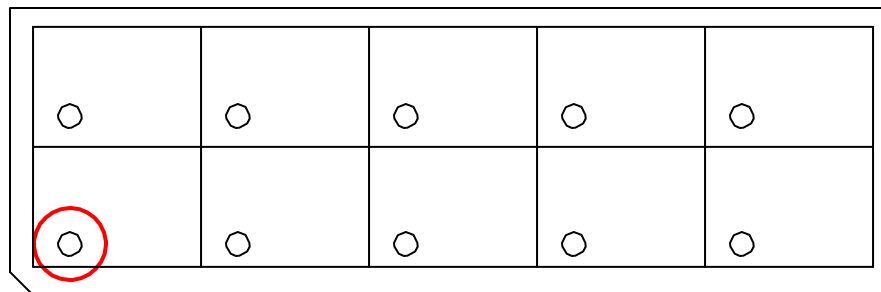
**MBGA / FBGA /
TFBGA / LBGA /
L2BGA / HSBGA /
LFBGA / QFN /
LQFP**

Chamfer edge of tray →



**BGA
(13x15, 15x17)**

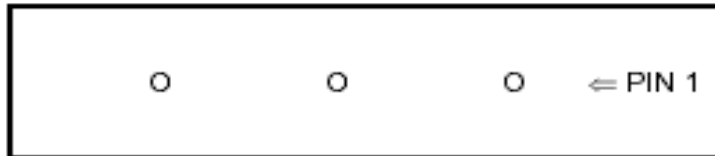
Chamfer edge of
tray →



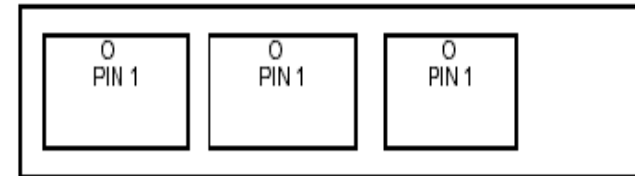
Unit Orientation in Tube



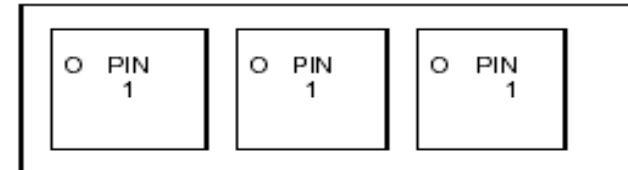
C-DIP/SIDE BRAZE/P-DIP
SOIC/SOJ/SSOP/TSSOP
LCC
PGA



CERQUADS/PLCC



For 32 pin rectangular the orientation is:



Note:

Pin one must be oriented in one direction within a tube regardless of tube mark direction.

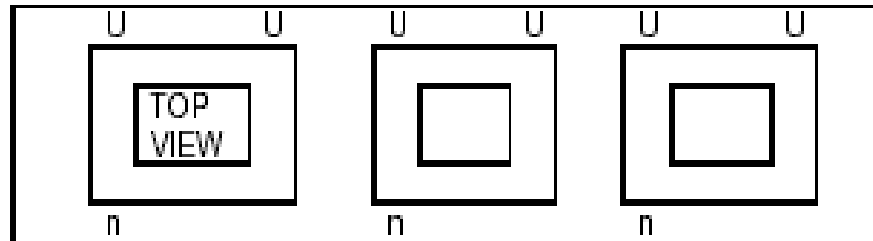
Unit Orientation in Tube



CERPACKS/FLATPACKS/CQFP

TWO NOTCH
SIDE

ONE NOTCH
SIDE



Note:

Single notch side of carrier must be oriented in one direction within a tube regardless of tube mark direction.