FPGA Packages

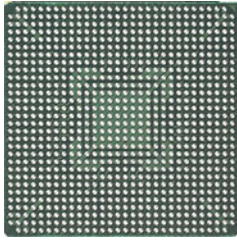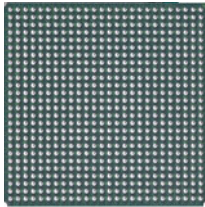**Key:** **f** – family   **bs** – package body size excluding leads   **p s** – overall package dimensions including package leads   **h** – package thickness   **p** – pin pitch / ball pitch
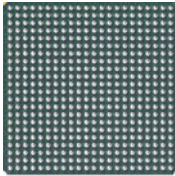
FG896
f IGLOOe[1]
  ProASIC3E[1]
  ProASIC3L[1]
pS 31x31 mm
h 2.23 mm
p 1.00 mm

FG676
f ProASIC3E[1]
  Fusion[1]
pS 27x27 mm
h 2.23 mm
p 1.00 mm

FG484
f IGLOO[1]
  IGLOOe[1]
  ProASIC3[1,2]
  ProASIC3E[1,2]
  ProASIC3L[1]
  SmartFusion
  Fusion[1,3]
pS 23x23 mm
h 2.23 mm
p 1.00 mm

FG324
f ProASIC3E[1]
  ProASIC3L[1]
pS 19x19 mm
h 1.63 mm
p 1.00 mm
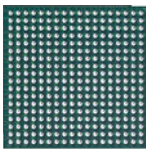
FG256
f IGLOO[1]
  IGLOOe
  ProASIC3[1,2]
  ProASIC3E[2]
  ProASIC3L[1]
  SmartFusion
  Fusion[1,3,4]
pS 17x17 mm
h 1.60 mm
p 1.00 mm
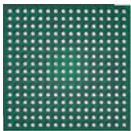
FG144
f IGLOO[1]
  ProASIC3[1]
  ProASIC3L[1]
pS 13x13 mm
h 1.45 mm
p 1.00 mm
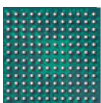
PQ208
f ProASIC3[1]
  ProASIC3E[1]
  ProASIC3L[1]
  Fusion[1]
bs 28x28 mm
ps 30.6x30.6 mm
h 3.40 mm
p 0.50 mm
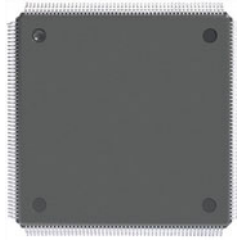
TQ144
f ProASIC3
bs 20x20 mm
pS 22x22 mm
h 1.40 mm
p 0.50 mm

VQ176
f IGLOO PLUS
bs 20x20 mm
pS 22x22 mm
h 1.00 mm
p 0.40 mm

VQ128
f IGLOO PLUS
bs 14x14 mm
pS 16x16 mm
h 1.00 mm
p 0.40 mm

VQ100
f IGLOO[1]
  IGLOO nano
  ProASIC3[1]
  ProASIC3 nano
  ProASIC3L
bs 14x14 mm
pS 16x16 mm
h 1.00 mm
p 0.50 mm

CS289
f IGLOO PLUS
pS 14x14 mm
h 1.20 mm
p 0.80 mm
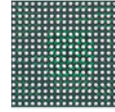
CS288
f SmartFusion
pS 11x11 mm
h 1.05 mm
p 0.50 mm

CS281
f IGLOO[1]
  IGLOO PLUS
pS 10x10 mm
h 1.05 mm
p 0.50 mm

CS201
f IGLOO PLUS
pS 8x8 mm
h 0.89 mm
p 0.50 mm

CS196
f IGLOO
pS 8x8 mm
h 1.11 mm
p 0.50 mm

CS121
f IGLOO
  ProASIC3
pS 6x6 mm
h 0.90 mm
p 0.50 mm

CS81
f IGLOO
  IGLOO nano
pS 5x5 mm
h 0.80 mm
p 0.50 mm

UC81
f IGLOO
  IGLOO nano
pS 4x4 mm
h 0.80 mm
p 0.40 mm

UC36
f IGLOO nano
pS 3x3 mm
h 0.80 mm
p 0.40 mm

QN180
f Fusion
pS 10x10 mm
h 0.75 mm
p 0.50 mm

QN132
f IGLOO
  ProASIC3
pS 8x8 mm
h 0.75 mm
p 0.50 mm

QN108
f Fusion
pS 8x8 mm
h 0.75 mm
p 0.50 mm

QN68
f IGLOO
  IGLOO nano
  ProASIC3
  ProASIC3 nano
pS 8x8 mm
h 0.90 mm
p 0.40 mm

QN48
f IGLOO
  IGLOO nano
  ProASIC3
  ProASIC3 nano
pS 6x6 mm
h 0.90 mm
p 0.40 mm

The **bs** dimension is the package body dimension *exclusive* of leads. The **ps** dimension is the overall package dimension *inclusive* of leads. Refer to the Package Mechanical Drawings document located at www.actel.com/documents/PckgMechDrwngs.pdf for more information concerning package dimensions.

[1] Includes Cortex-M1 devices.   [2] FG256 and FG484 are footprint-compatible for ProASIC3 and ProASIC3E.   [3] Pigeon Point devices are only offered in FG484 and FG256.   [4] MicroBlade devices are only offered in FG256.

FPGA Packages