

Sockets for Actel FPGAs

The typical sockets below can be used for Actel FPGAs. These sockets have been engineered and manufactured by the respective vendors as noted below. Actel does not guarantee the accuracy of the data. Please contact the vendors for the most current information.

Table 1 • Socket Information

Actel P/N	Package Type	Vendor	Vendor P/N
BGA Sockets			
SE-BGG272-A	272-pin BGA, top	E-tec	BPW272-1270-20AC55
SM-BG272-A	272-pin BGA, top	Mill-Max	S587-10-272-10-005437
SM-BG272-B	272-pin BGA, bottom	Mill-Max	S582-11-272-10-005414
SE-BGG329-A	329-pin BGA, top	E-tec	BPW329-1270-23AB55
SM-BG329-A	329-pin BGA, top	Mill-Max	S587-10-329-12-005437
SM-BG329-B	329-pin BGA, bottom	Mill-Max	S582-11-329-12-005414
SC-BG313	313-pin BGA	CTI	8635-313-0-00
SE-BGG456-A	456-pin BGA, top	E-tec	BPW456-1270-26AB55
SM-BG456-B	456-pin BGA, bottom	Mill-Max	S582-11-456-13-005414
SE-BGG729	729-pin BGA	E-tec	BPW729-1230-27AB95L
SE-CGG624-H	624-pin CCGA, raised height	E-tec	CCW624-1229-25AB95
SE-FGG144-H	144-pin FBGA, raised height	E-tec	BPW144-1028-12AA95
SE-FGG256-HU	256-pin FBGA, raised height	E-tec	BUW256-1028-16AA95
SE-FGG324-H	324-pin FBGA, raised height	E-tec	BPW324-1028-18AB95L
SE-FGG484	484-pin FBGA	E-tec	BPW484-1030-22AB95
SE-FGG484-H	484-pin FBGA, raised height	E-tec	BPW484-1028-26AB95
SE-FGG484-S-H	484-pin FBGA, raised height (23X23 pkg)	E-tec	BPW484-1028-22AB95L
SE-FGG676	676-pin FBGA	E-tec	BPW676-1030-26AB95L
SE-FGG676-H	676-pin FBGA, raised height	E-tec	BPW676-1028-26AB95L
SE-FGG896-S-H	896-pin FBGA	E-tec	BPW896-1030-30AB95L
SE-FGG1152	1152-pin FBGA	E-tec	BPW1152-1030-34AB95L
CCGA Sockets			
SE-CGG624-LGA	624-pin CG-LGA	E-tec	LCW624-1230-25AB95L

Table 1 • Socket Information (continued)

Actel P/N	Package Type	Vendor	Vendor P/N
CQFP Sockets			
SY-CQ132	132-pin CQFP	Yamaichi	IC51-1964-1952
SY-CQ172	172-pin CQFP	Yamaichi	IC51-1964-1952
SY-CQ196	196-pin CQFP	Yamaichi	IC51-1964-1952
CSP Sockets			
SE-CSG49	49-pin Chip Scale	E-tec	BPW049-0830-07CB95
SE-CSG49-H	49-pin Chip Scale, raised height	E-tec	BPW049-0828-07CB95
SE-CSG128	128-pin Chip Scale	E-tec	BPW128-0830-12CB95
SE-CSG128-H	128-pin Chip Scale, raised height	E-tec	BPW128-0828-12CB95
SE-CSG180	180-pin Chip Scale	E-tec	BPW180-0830-14CB95
SE-CSG180-H	180-pin Chip Scale, raised height	E-tec	BPW180-0828-14CB95
PQFP Sockets			
SY-PQG100	100-pin PQFP	Yamaichi	IC149-100-114-B5
SY-PQG144	144-pin PQFP	Yamaichi	IC149-144K-11453-1S
SY-PQG160	160-pin PQFP	Yamaichi	IC149-160-123-B5
TQFP / VQFP Sockets			
SY-PQG240	240-pin PQFP, RQFP	Yamaichi	IC149-240-167-B5
SY-VQG80	80-pin VQFP	Yamaichi	IC149-080-151-B5
SY-VQG100	100-pin VQFP / TQFP	Yamaichi	IC149-100-125-B5
SY-TQG64	64-pin TQFP	Yamaichi	IC149-064-175-B5
SY-TQG144	144-pin TQFP	Yamaichi	IC149-144-145-B5
SY-TQG176	176-pin TQFP	Yamaichi	IC149-176-166-B5
Accessories			
TORQUE-SCREW-DRIVE-KIT	Torque limiting screwdriver and bit	Mountz	Screwdriver: 020074 Bit: 120005

Table 2 • Manufacturing Vendors

Manufacturer	URL	Phone Number
Yamaichi, USA	www.yamaichi.com	+1 408 456 0797
Yamaichi, Japan		+81 3 3778 6111
Yamaichi, Hong Kong		+852 2 687 1968
Yamaichi, Germany		+49 89 451021 0
Yamaichi, Italy		+39 39 688 1278
Yamaichi, Korea		+822 2 548 5040
Yamaichi, Singapore		+65 366 6522
Yamaichi, Taiwan		+886 2 546 0507
Yamaichi, China		+86 755 871 1784
CTI, USA		www.wellscti.com
Mill-Max, USA	www.mill-max.com	+1 516 922 6000
E-tec, Switzerland	www.e-tec.ch/v3/	+41 21 781 0810
Mountz, USA	www.etorque.com	+1 408 292 2214

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Actel is the leader in low-power FPGAs and mixed-signal FPGAs and offers the most comprehensive portfolio of system and power management solutions. Power Matters. Learn more at www.actel.com.

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