



PEACE OF MIND IN A DANGEROUS WORLD



Product code	Functionality	FPGA resources (ECP5)	Performance
XIP1101B	Advanced Encryption Standard (128-bit key) Counter Mode	3152 LUT4	1.29 Gbps
XIP1101H	Advanced Encryption Standard (128-bit key) Counter Mode, high-speed version	20872 LUT4	15.63 Gbps
XIP1103H	Advanced Encryption Standard (256-bit key) Counter Mode, high-speed version	24565 LUT4	114.08 Gbps
XIP1111B	Advanced Encryption Standard (128-bit key) Galois Counter Mode	5929 LUT4	1.81 Gbps
XIP1111H	Advanced Encryption Standard (128-bit key) Galois Counter Mode, high-speed version	38145 LUT4	15.25 Gbps
XIP1113B	Advanced Encryption Standard (256-bit key) Galois Counter Mode	6134 LUT4	1.08 Gbps
XIP1113H	Advanced Encryption Standard (256-bit key) Galois Counter Mode, high-speed version	49516 LUT4	15.92 Gbps
XIP1211B	MACsec AES128-GCM	23620 LUT4, 34 EBR	1.24 Gbps
XIP1213B	MACsec AES256-GCM	23867 LUT4, 42 EBR	0.91 Gbps
XIP3022B	SHA256 and SHA224 Secure Hash Algorithm	1808 LUT4	560 Mbps
XIP3026B	SHA512, SHA384, SHA512/256 and SHA512/224	4255 LUT4	600 Mbps
XIP3032H	SHA3-256	7160 LUT4	3.22 Gbps
XIP3034H	SHA3-512	7021 LUT4	1.47 Gbps
XIP3322B	HKDF/HMAC/SHA-256	2042 LUT4, 2 EBR	662.3 Mbps
XIP3327C	HKDF/HMAC/SHA-256/SHA-512	1642 LUT4, 6 EBR	15.0 Mbps
XIP4001C	Curve25519 Key Exchange (X25519)	1003 LUT4	100+ ops/s
XIP4003C	Curve25519 Key Exchange and Digital Signature (X25519 AND Ed25519)	2804 LUT4, 1 EBR, 1 MULT18	100+ ops/s
XIP5012C	RSA Signature Verification	419 LUT4, 4 EBR	10 ops/s
XIP8001B	True Random Number Generator (TRNG)	2737 LUT4, 3 EBR	4.79 Mbps

C = Compact, optimised to minimise FPGA logic usage
 B = Balanced compromise between FPGA logic usage and performance
 H = High-speed, optimised maximise performance