



Product Type Integrated Communication Processor
Freescale Part # MPC8311E, MPC8313E
Name PowerQUICC 2 Pro
Package 516 PBGA
Crypto Hardware SEC 2.2

Max Key Size (bits)

Algorithms	DES (ECB, CBC)	56
	3DES (ECB, CBC)	168 (3-keys)
	AES (ECB, CBC, CTR, CCM)	256
	ARC-4	128
	MD-5+ HMAC	(up to 512 bit keys)
	SHA-1+ HMAC	(up to 512 bit keys)
	SHA-256+ HMAC	(up to 512 bit keys)

Target Applications:
DSL routers, SOHO routers, wireless access points

Export Control Info:
Harmonized Tariff (US): 8542.31.0000
ENC Status: Restricted. US EAR part 740.17(b)(2)
ECCN: 5A002
CCAT: G026024

Overview:
The MPC8311E and MPC8313E are members of the PowerQUICC 2 Pro family of integrated communications processor from Freescale Semiconductor. The PowerQUICC 2 Pro is considered one of the most highly integrated and widely adopted communications processor in the world, and is capable of supporting most LAN and WAN networking standards. The MPC8311E and MPC8313E include an on-chip encryption acceleration unit which is derived from the MPC185, a Freescale Security Co-Processor already granted ENC status (CCAT: G026024). This on-chip encryption accelerator (also known as the SEC 2.2) is expected to achieve 200+ public key exchanges per second, and ~800 Mbps 3DES throughput.