



Product Type	Integrated Communication Processor
Freescale Part #	MPC8533E, MPC8544E
Name	PowerQUICC 38
Package	783 FC BGA
Crypto Hardware	SEC 2.1

Algorithms		Max Key Size (bits)
	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-224+ HMAC	(up to 512 bit keys)
	SHA-256+ HMAC	(up to 512 bit keys)
	Kasumi (A5/3, GEA-3, f8, f9)	128
	RSA Digital Signature	2048-bit operands
	RSA Digital Verify	2048-bit operands
	ECC Digital Signature	512-bit field or modulus size
	ECC Digital Verify	512-bit field or modulus size
	RNG	On chip 32-bit

Target Applications:

Access routers, wireless access points, wireless base stations, telecom equipment, storage controllers

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 MPC8533 family devices are members of the PowerQUICC 3 family of integrated communications processor from Freescale Semiconductor. The PowerQUICC 3 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. MPC8533 family includes an on-chip encryption acceleration unit which is derived from the MPC185, a Freescale Encryption Co-Processor already granted ENC status (CCAT: G026024). This on-chip encryption accelerator (also known as the SEC 2.1) is expected to achieve 400+ public key exchanges per second, and ~1600 Mbps 3DES throughput.