Product Type	Digital Signal Processor
Freescale Part #	MSC8144E
Package	783 pin 29x29 1mm pitch FC PBGA

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 128 bit keys)
SHA-256 + HMAC	(up to 512 bit keys)
Kasumi (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
True Random Number Generator	On chip 32-bit

Target Applications :
Wireless base stations, telecom equipment

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

Overview:
The MSC8144E is members of the StarCore™ multi-core digital signal processors family from Freescale Semiconductor. The MSC8144E processor is a four-core device based on SC3400 StarCore DSP core technology and designed to dramatically advance the capabilities of wireless broadband base station equipment. The MSC8144E 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 ~1000 Mbps AES-128 throughput.