

Product Type Security Co-Processor

Freescale Part # MPC180LM

Name Titan

Package 100 LQFP

Max Key Size (bits)

Algorithms DES (ECB, CBC) 56

3DES (ECB, CBC) 168 (3-keys)

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)

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

DSLAMs, Broadband Gateways, mid-range routers, wireless access points, telecom equipment

Export Control Info:

Harmonized Tariff (US): 8542.31.0000

ENC Status: Restricted. US EAR part 740.17(b)(2)

ECCN: 5A002 CCAT: G018833

Overview:

The MPC180 is a memory-mapped device designed to interface to the Motorola PowerQUICC families of integrated Communications processors (MPC860/8260). The MPC180 behaves only as a bus slave. As a bus slave, an application being executed on a PowerQUICC can accelerate cryptographic functions by writing instructions, keys, and data to the MPC180, and reading the result. The MPC180 is expected to achieve 25 public key exchanges per second, and ~80Mbps 3DES throughput.