

- » COTS-Based “Security System on a Chip”
- » FIPS 140-2 Level 2 Low SWaP Embeddable Cryptosystem
- » Truly Programmable and Software Upgradeable



SPECIFICATIONS

CRYPTOGRAPHIC FEATURES

- » Complete cryptographic system module
- » Fully programmable
 - » **Encrypt/Decrypt** AES-256 CTR
 - » **Message types** data, voice, and video
 - » **Throughput** 20 Mbps
 - » **Trusted Bypass** cryptographic, In-band header, control/status
- » Plaintext override
- » PIN-based authentication (supports tactical keypads)
- » Key load
- » Key storage
- » Hardware randomizer
- » Anti-Tamper
- » TRANSEC
- » Data at Rest

PERFORMANCE

Throughput	20 Mbps
Simultaneous Active Circuits	253
Simultaneous Active Keys	253
Key Storage Capacity	1,000

INTERFACES

Serial Peripheral Interface (SPI)	Plaintext, Ciphertext
All IO	1.8 V LVCMOS
Power Input	3.3 V

PHYSICAL

Size (W x H x D)	1.5 x 1.9 x 0.35 in.
Weight	20 g

- Power**
- » 295 mW typical/400 mW max (ES-1200LP)
 - » 800 mW typical (ES-1200)

ENVIRONMENTAL

Board encapsulated in hard epoxy and conformal coat

- Temperature**
- » **Operational** -40° to 85° C
 - » **Storage** -55° to 125° C
- Altitude**
- » **Operational** 50,000 ft
 - » **Storage** 70,000 ft
- EMI/EMC** FCC Class B
- Shock/Vibration** MIL-STD-810G

SOFTWARE UPGRADEABLE FEATURES

- » Variety of Suite B algorithms and modes
- » Dynamically loadable guard policies
- » Over-the-air rekey
- » Interface to multiple key fill device types
- » Token-based access
- » Extended data rates up to 100 Mbps
- » Programmable external interfaces and IO; replace SPI with RMII
- » RS-485 key fill
- » KMI capable
- » Remote zeroization

EMBEDMENT APPLICATIONS

- » Government/Military
- » Homeland Security/Border Patrol
- » Law Enforcement
- » Industrial
- » And More

CERTIFICATION

FIPS 140-2 Level 2

ORDERING INFORMATION

PART NUMBERS

ES-1200 (standard)	1141702
ES-1200LP (low power)	1197465
Evaluation Kit	1150313



CONTACT

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