


Cryptographic Co Processor With Secure Hardware Based Key Storage

Manufacturer:	Microchip Technology, Inc
Package/Case:	SOP8
Product Type:	Embedded Processors & Controllers
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active

ATECC608B-SSHDA-B Image

Images are for reference only

[Inquiry](#)

General Description

Key Features

Cryptographic co-processor with secure hardware-based key storage

Protected storage for up to 16 Keys, certificates or data

ECDH: FIPS SP800-56A Elliptic Curve Diffie-Hellman (ECDH)

NIST standard P256 elliptic curve support (ECC)

Hardware support for symmetric algorithms

SHA-256 & HMAC hash including off-chip context save/restore

AES-128: encrypt/decrypt, galois field multiply for GCM

Networking key management support

Turnkey PRF/HKDF calculation for TLS 1.2 & 1.3

Ephemeral key generation and key agreement in SRAM – Small message encryption with keys entirely protected

Secure boot support

Full ECDSA code signature validation, optional stored digest/signature – optional communication key disablement prior to secure boot

Encryption/Authentication for messages to prevent on-board attacks

Internal high-quality FIPS 800-90 A/B/C Random Number Generator (RNG)

Two high-endurance monotonic counters

Guaranteed unique 72-bit serial number

Two interface options available

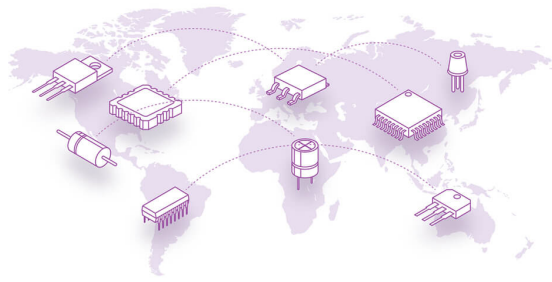
High-speed single pin interface with One GPIO pin

8-pad UDFN, 8-lead SOIC, and 3-lead CONTACT packages

Operating temperature up to 100C

1.8V to 5.5V IO levels, 2.0V to 5.5V supply voltage

1MHz Standard I2C interface



Recommended For You

ATECC508A-MAHDA-S

Microchip Technology, Inc
UDFN8

ATSHA204A-SSHDA-B

Microchip Technology, Inc
SOP8

ATECC508A-SSHDA-B

Microchip Technology, Inc
SOP8

ATECC608A-MAHDA-S

Microchip Technology, Inc
UDFN8

ATECC608A-SSHDA-B

Microchip Technology, Inc
SOP8

ATECC608A-SSHDA-T

Microchip Technology, Inc
SOP-8

ATECC608A-MAHDA-T

Microchip Technology, Inc
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ATSHA204-SH-DA-T

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