

[Apple CryptoKit](#) / P521

Enumeration

P521

An elliptic curve that enables NIST P-521 signatures and key agreement.

iOS 13.0+ | iPadOS 13.0+ | Mac Catalyst 13.0+ | macOS 10.15+ | tvOS 13.0+ | visionOS 1.0+ | watchOS 6.0+

`enum` P521

Topics

Performing operations

`enum` KeyAgreement

A mechanism used to create a shared secret between two users by performing NIST P-521 elliptic curve Diffie Hellman (ECDH) key exchange.

`enum` Signing

A mechanism used to create or verify a cryptographic signature using the NIST P-521 elliptic curve digital signature algorithm (ECDSA).

Relationships

Conforms To

Sendable, SendableMetatype

See Also

Public key cryptography

`enum Curve25519`

An elliptic curve that enables X25519 key agreement and Ed25519 signatures.

`enum P384`

An elliptic curve that enables NIST P-384 signatures and key agreement.

`enum P256`

An elliptic curve that enables NIST P-256 signatures and key agreement.

`struct SharedSecret`

A key agreement result from which you can derive a symmetric cryptographic key.

`enum SecureEnclave`

A representation of a device's hardware-based key manager.

`enum HPKE`

A container for hybrid public key encryption (HPKE) operations.