

[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.