

[Apple CryptoKit](#) / [SHA2_512](#)

Type Alias

SHA2_512

An implementation of Secure Hashing Algorithm 2 (SHA-2) hashing with a 512-bit digest.

iOS 26.0+ | iPadOS 26.0+ | Mac Catalyst 26.0+ | macOS 26.0+ | tvOS 26.0+ | visionOS 2.0+ | watchOS 26.0+

```
typealias SHA2_512 = SHA512
```

Discussion

The [SHA2_512](#) hash implements the [HashFunction](#) protocol for the specific case of SHA-2 hashing with a 512-bit digest ([SHA512Digest](#)). Larger digests take more space but are more secure.

You can compute the digest by calling the static `hash(data:)` method once. Alternatively, if the data that you want to hash is too large to fit in memory, you can compute the digest iteratively by creating a new hash instance, calling the `update(data:)` method repeatedly with blocks of data, and then calling the `finalize()` method to get the result.