Cryptographic Protocols

ECDSA

ECDH

Digital Signatures Key Agreement

Module Operations

$$R = s \cdot P$$

$$R = s \cdot P + t \cdot Q$$

Scalar Multiplication Twin Multiplication

Curve Operations over points

$$R = P + Q$$
 $R = P - Q$ $R = 2 \cdot P$

$$R = P - O$$

$$R = 2 \cdot P$$

Addition Subtraction

Doubling

Finite Field Arithmetic

Multiplication

Squaring

Division

Addition

Doubling