Transactions

Transactions is a library with utilities to encode, decode and sign Ethereum transactions.

Functions

encodeRLP

Encode a EIP-155 transaction in RLP.

Input:

- txStruct
- ([EIP155](#)
-): Is the transaction structure.

Output:

- output
- (bytes
-): The encoded RLP bytes.

encodeRLP

Encode a EIP-1559 request transaction in RLP.

Input:

- txStruct
- ([EIP155Request](#)
-): Is the transaction structure.

Output:

- output
- (bytes
-): The encoded RLP bytes.

encodeRLP

Encode a EIP-1559 transaction in RLP.

Input:

- txStruct
- ([EIP1559](#)
-): Is the transaction structure.

Output:

- output
- (bytes
-): The encoded RLP bytes.

encodeRLP

Encode a EIP-1559 request transaction in RLP.

Input:

- txStruct

- ([EIP1559Request](#)
-): Is the transaction structure.

Output:

- output
- (bytes
-): The encoded RLP bytes.

decodeRLP_EIP155

Decode a EIP-155 transaction from RLP.

Input:

- rlp
- (bytes
-): Is the encoded RLP bytes.

Output:

- txStruct
- ([EIP155](#)
-): The transaction structure.

decodeRLP_EIP155Request

Decode a EIP-155 request transaction from RLP.

Input:

- rlp
- (bytes
-): Is the encoded RLP bytes.

Output:

- txStruct
- ([EIP155Request](#)
-): The transaction structure.

decodeRLP_EIP1559

Decode a EIP-1559 transaction from RLP.

Input:

- rlp
- (bytes
-): Is the encoded RLP bytes.

Output:

- txStruct
- ([EIP1559](#)
-): The transaction structure.

decodeRLP_EIP1559Request

Decode a EIP-1559 request transaction from RLP.

Input:

- rlp
- (bytes
-): Is the encoded RLP bytes.

Output:

- txStruct
- ([EIP1559Request](#)
-): The transaction structure.

signTxn

Sign a EIP-155 transaction request.

Input:

- request
- ([EIP1559Request](#)
-): Is the transaction request.
- signingKey
- (string
-): Is the private key to sign the transaction.

Output:

- response
- ([EIP1559](#)
-): The signed transaction.

signTxn

Sign a EIP-155 transaction request.

Input:

- request
- ([EIP155Request](#)
-): Is the transaction request.
- signingKey
- (string
-): Is the private key to sign the transaction.

Output:

- response
- ([EIP155](#)
-): The signed transaction.

Structs

EIP155

EIP-155 transaction structure.

- to
- (address
-): Is the target address.
- gas
- (uint256
-): Is the gas limit.
- gasPrice
- (uint256
-): Is the gas price.
- value

- (uint256
-): Is the transfer value in gwei.
- nonce
- (uint256
-): Is the latest nonce of the sender.
- data
- (bytes
-): Is the transaction data.
- chainId
- (uint256
-): Is the id of the chain where the transaction will be executed.
- r
- (bytes32
-): Is the 'r' signature value.
- s
- (bytes32
-): Is the 's' signature value.
- v
- (uint256
-): Is the 'v' signature value.

EIP155Request

EIP-155 transaction request structure.

- to
- (address
-): Is the target address.
- gas
- (uint256
-): Is the gas limit.
- gasPrice
- (uint256
-): Is the gas price.
- value
- (uint256
-): Is the transfer value in gwei.
- nonce
- (uint256
-): Is the latest nonce of the sender.
- data
- (bytes
-): Is the transaction data.
- chainId
- (uint256
-): Is the id of the chain where the transaction will be executed.

EIP1559

EIP-1559 transaction structure.

- to
- (address
-): Is the target address.
- gas
- (uint256
-): Is the gas limit.
- maxFeePerGas
- (uint256
-): Is the maximum fee per gas.
- maxPriorityFeePerGas
- (uint256
-): Is the maximum priority fee per gas.
- value
- (uint256

-): Is the transfer value in gwei.
- nonce
- (uint256
-): Is the latest nonce of the sender.
- data
- (bytes
-): Is the transaction data.
- chainId
- (uint256
-): Is the id of the chain where the transaction will be executed.
- accessList
- (bytes
-): Is the access list.
- r
- (bytes32
-): Is the 'r' signature value.
- s
- (bytes32
-): Is the 's' signature value.
- v
- (uint256
-): Is the 'v' signature value.

EIP1559Request

EIP-1559 transaction request structure.

- to
- (address
-): Is the target address.
- gas
- (uint256
-): Is the gas limit.
- maxFeePerGas
- (uint256
-): Is the maximum fee per gas.
- maxPriorityFeePerGas
- (uint256
-): Is the maximum priority fee per gas.
- value
- (uint256
-): Is the transfer value in gwei.
- nonce
- (uint256
-): Is the latest nonce of the sender.
- data
- (bytes
-): Is the transaction data.
- chainId
- (uint256
-): Is the id of the chain where the transaction will be executed.
- accessList
- (bytes
-): Is the access list.