

# Digital Currencies

## → **NON-CRYPTO (private ledger):**

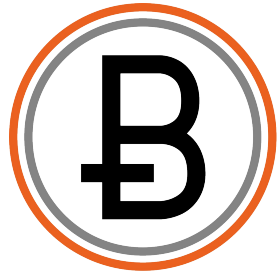
- Ripple
- Ven
- Liberty Reserve (down as of today – busted for money laundering)

## → **CRYPTO (major only):**

- Bitcoin (BTC)
- Litecoin (LTC)
- PP Coin (PPC)
- Namecoin (NMC)
- ...more... (most based on BTC)

## Crypto Currency Facts!

- ★ Most are P2P/decentralised
- ★ Most are based on BTC
- ★ No intrinsic value/scarcity
- ★ Pseudonymous/Anonymous
- ★ Low transaction fees
- ★ All BTC are identical, so all maintain an equal value.
- ★ Environmentally friendly!
- ★ Wallets must be protected by the owner. No buyer protection by central authorities.



# BITCOIN

- Written by 'obscure' hacker(s) “Satoshi Nakamoto”
- Max coins: 21M (hard-coded)
- Transactions are verified by BTC miners. Mining is paid to successful transaction verifiers. Payout started at 50 BTC per block, but is now 25 (~£2,100). Difficulty grows and payouts decrease as time goes on.
- It has become incredibly hard to mine without ASIC (Application-specific Integrated Circuit) hardware.
- Highly used
- Fluctuating market value (between 30 and 250 USD in the last 6 months)
- Stabilising over time
- Support growing by the day
- Had a number of tech flaws in its time
- Built-in deflation (0.00000001BTC minimum value).
- Wallet security is not entirely trivial – also when BTC is lost, it's gone for good
- Much misunderstanding about how BTC (and other crypto-currencies) stay out of international jurisdiction.
- Over 1000 services which accept BTC at the moment.
- Many of the services which accept BTC are found only on the Deep Web.
- Only time will tell if BTC is capable of replacing “real” currencies.

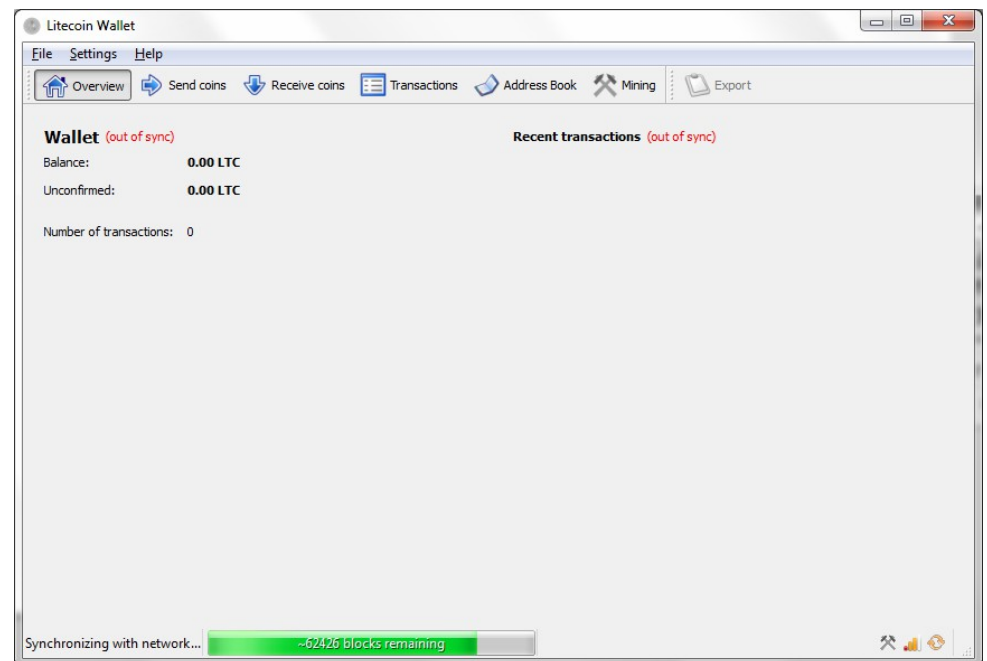
# Getting a wallet!

- Download BTC wallet software like Bitcoin-qt.
- Synchronise your wallet (download the BTC blockchain – the public ledger of all BTC transactions)
- Secure and back up your wallet.
- Use a service to transfer some real money into your BTC wallet.
- You now own some BTC! Sit and watch them grow, or use them to purchase goods and services!

**(legitimate) places to spend your BTC!**

- <https://en.bitcoin.it/wiki/Trade> (hundreds of online vendors)
- Cars, energy, superstores, markets – increasing by the day!

Synchronising...





- Based on BTC Litecoin = Bitcoin Lite
- Max coins: 84M
- Far less usage and far less mining has been done than on BTC.
- Designed for mining on consumer grade hardware (CPU/GPU), unlike BTC.
- Can trade BTC for LTC or many other digital currencies on exchanges like Vircorex (careful, they got hacked!) or Bitfinex...
- Can buy all sorts of goods and services, but far less than with BTC.
- 50 LTC reward for mining a successful block.
- About £2.30/LTC currently.
- Value has been steadily climbing for its entire existence.
- Solo and pooled mining is possible.

# LTC Mining...

- Download Litecoin-qt
- Synchronise Blockchain
- Encrypt wallet
- Back up wallet
- Press Mining
- Press Start Mining!
- ???
- Profit.

