FPGA  field programmable gate array

Are you tired of
1. Spending a lot of time building circuit?
2. Throw away circuits built incorrectly?
3. Cannot copy and paste circuits?
4. Worry the circuit will smoke when you turn it on?
5. Waste material when the circuit is no longer useful?

FPGA comes to your rescue.

Other stuffs:  CLK, Power supply, USB, SD card, 40pins
Expansion slots, Flash/RAM
0/1 switch, LED display, ADC/DAC, 7 segment display
Configurable Logic block [CLB]

4~6 inputs

LUT  
FA  
FF  

output

Look-up Full adder table addition

How do you build a look-up table LUT?

Input:

A
B
C
D

Output:

6 possible connections

Switch block:

This is called routing.