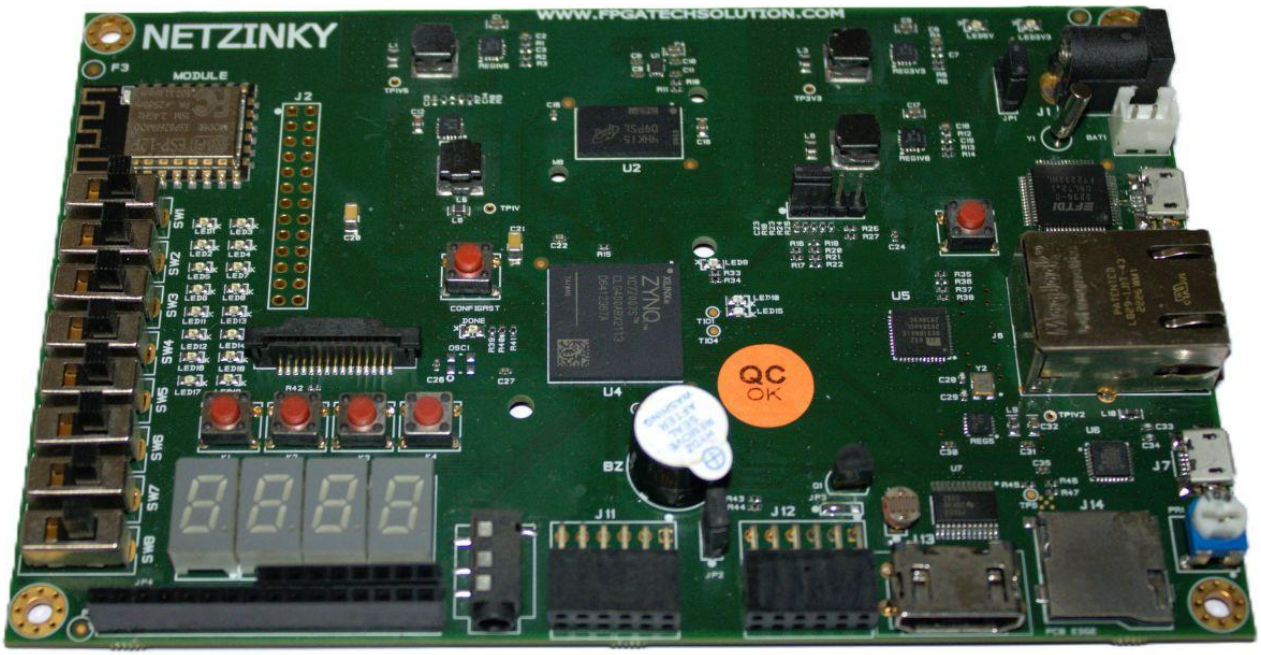
FPGA TECH SOLUTION

SOLUTION AHEAD



The NETZINKY board is a complete, ready-to-use digital circuit development platform based on the latest Zynq SoC. With its high-capacity FPGA (PL) & dual core ARM low overall cost, and collection of USB, VGA, HDMI and other ports, the NETZINKY can host designs ranging from introductory combinational circuits to complex sequential circuits like embedded processors and controllers.

It includes enough switches, LEDs and other I/O devices to allow a large number designs to be completed without the need for any additional hardware, and enough uncommitted PL I/O pins to allow designs to be expanded using Pmods or other custom

boards and circuits. NETZINKY board is fully compatible with Vivado design suite. AMD offers **free** WebPACK™ versions of Vivado design suite, so designs can be implemented at no additional cost.

The NETZINKY board has on board USB JTAG which support Vivado & vitis. NETZINKY SoC kit is ready to use Laboratory kit for ECE Curriculum. It can be useful for developing basic to advanced level digital circuits.

Features

- **ZYNQ Processor**
  - 667MHz single-core (*dual-core) Cortex-A9 processor support **Embedded Linux**
  - FPGA Programmable logic equivalent to Artix-7 FPGA
    - 3,600 Programmable logic slices (*4,400)
    - 60 DSP slices (*80)
    - 225 KB of block RAM (*270 KB)
  - DDR3 memory controller with 8 DMA channels and 4 High Performance AXI3 Slave ports
  - High-bandwidth peripheral controllers: 1G Ethernet, USB 2.0, SDIO
  - Low-bandwidth peripheral controllers: SPI, UART, CAN, I2C
  - Dual-channel, 1 MSPS internal analog-digital converter
  - Programmable from JTAG and microSD card
- **Memory**
  - 2Gbit DDR3 with 16-bit bus @ 525 MHz (1050 MT/s)
  - microSD slot
- **Power**
  - Powered from USB or any 4.5V-5.5V external power source
- **USB and Ethernet**
  - Gigabit Ethernet PHY with 48-bit globally unique EUI-48/64™ compatible identifier available on sticker
  - USB-JTAG programming circuitry
  - USB-UART bridge
  - USB OTG PHY (supports host only)
- **Push-buttons and LEDs**
  - Four Push-buttons
  - Four seven segments
  - Eight slide switch
  - Buzzer
  - Audio 3.5mm Jack
  - 16BY2LCD or TFT LCD
  - 16 LED
  - HDMI TX
  - RTC
  - LM35 temperature sensor connected to XADC pin
  - LDR connected to XADC pin
  - POT connected to XADC pin
  - ESP8266 WIFI
  - MiPi camera
- **Expansion Connectors**
  - Two Pmod connectors
    - 16 Total FPGA I/O (3.3V)

24 PL GPIO

Applications

- Product Prototype Development
- Development and testing of custom embedded processors
- Signal Processing
- Communication devices development
- Educational tool for Schools and Universities

Package includes

- NETZINKYFPGA board
- Micro usb cable
- 16BY2 LCD

NETZINKY SoC board can be available with following part number

XC7Z020-2CLG400I

XC7Z007-1CLG400I

XC7Z010-2CLG400I

Special support: Free customization with your name on board

contact us: info@fpgatechsolution.com