Artix®-7 35T FPGA Arty Evaluation Kit
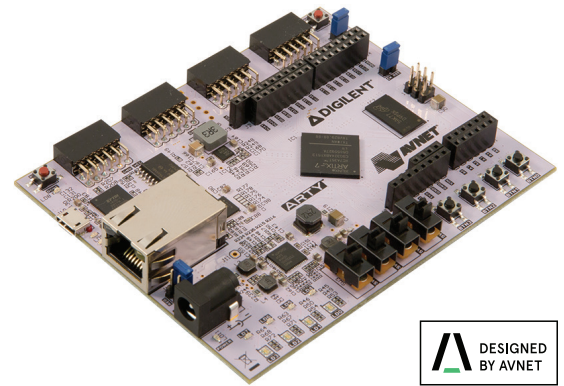
/\VNET ®

Reach Further™

The Artix®-7 35T FPGA Arty Evaluation Kit, designed by Avnet and Digilent, is a completely customizable development kit perfect for embedded designers looking for a flexible, low-power FPGA platform. The Artix-7 35T FPGA evaluation board is a complete system, packaging all the necessary functions and interfaces needed for an embedded processor system onto a small footprint. This board is the perfect solution for designers interested in exploring the MicroBlaze soft processor or Artix-7 FPGAs in general. Experienced FPGA users will find the Artix-7 35T FPGA evaluation board a valuable tool for general purpose prototyping and testing. The included peripherals and expansion interfaces make the kit ideal for a wide variety of applications. From experimenting with Arduino shields that integrate multiple sensors to running a Linux-based web server, the Artix-7 35T FPGA evaluation board can help you validate your next design idea.

DESIGNED BY AVNET

FEATURES

Xilinx XC7A35T-1LCSG324I

- 256 MB DDR3 SDRAM
- Arduino and ChipKit format expansion headers
- 16 MB of QSPI Flash
- 10/100 Ethernet interface
- 4 Digilent compatible Pmod™ interfaces enabling 32 user I/O pins
    - 2 Pmods routed as differential pairs
    - Paired to fit dual-wide Pmods
- USB-UART Interface
- 14 AMS inputs
    - 6 single ended
    - 4 differential
    - 4 for power monitor circuit
- 4 user RGB LEDs
- 4 user LEDs
- 4 user slide switches
- 4 user push button switches
- 100 MHz LVCMOS Oscillator (system clock)
- JTAG Programming/Configuration Port

To purchase this kit, visit avnet.com/us/arty

KIT INCLUDES
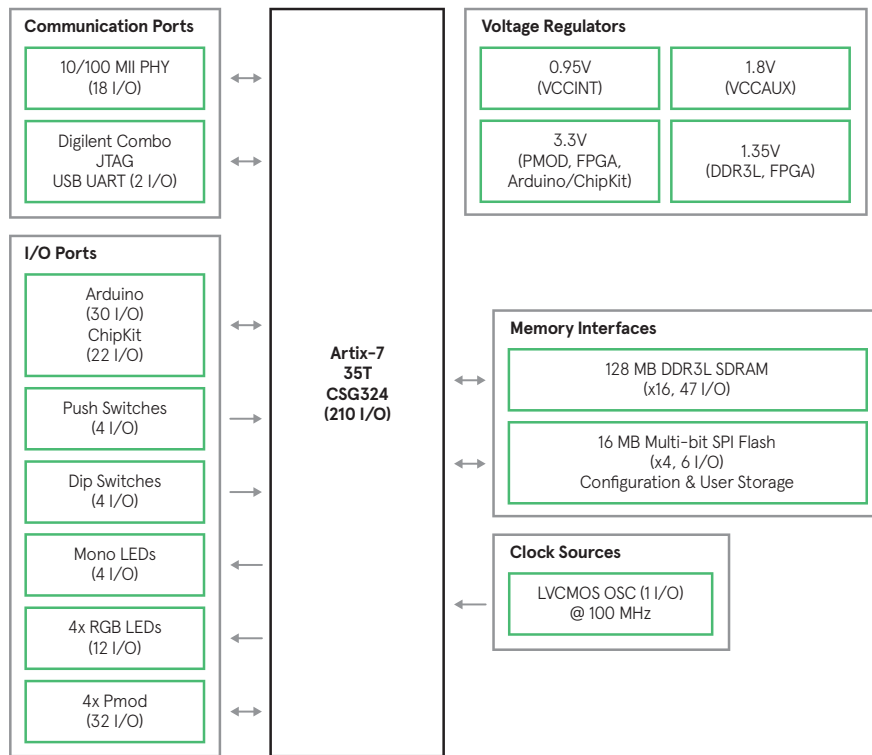
Hardware
- Avnet Artix-7 35T Evaluation Board

Software
- Xilinx Vivado: Design Edition
- Device locked to XC7A35T

TARGET APPLICATIONS

- Embedded controllers
- General-purpose prototyping
- Networking and communications
- I/O expansion
- Sensor fusion
- Arduino expansion

BLOCK DIAGRAM

Communication Ports

| 10/100 MII PHY (18 I/O) |
| Digilent Combo JTAG USB UART (2 I/O) |

I/O Ports

| Arduino (30 I/O) ChipKit (22 I/O) |
| Push Switches (4 I/O) |
| Dip Switches (4 I/O) |
| Mono LEDs (4 I/O) |
| 4x RGB LEDs (12 I/O) |
| 4x Pmod (32 I/O) |

Artix-7 35T CSG324 (210 I/O)

Voltage Regulators

| 0.95V (VCCINT) | 1.8V (VCCAUX) |
| 3.3V (PMOD, FPGA, Arduino/ChipKit) | 1.35V (DDR3L, FPGA) |

Memory Interfaces

| 128 MB DDR3L SDRAM (x16, 47 I/O) |
| 16 MB Multi-bit SPI Flash (x4, 6 I/O) Configuration & User Storage |

Clock Sources

| LVCMOS OSC (1 I/O) @ 100 MHz |

FEATURED MANUFACTURERS

XILINX ALL PROGRAMMABLE

Micron

PARTS

Part Number	Description	Resale
AES-A7MB-7A35T-G	Artix-7 35T FPGA Evaluation Kit	

Countries Available for Purchase: Americas, EMEA, Asia, Japan