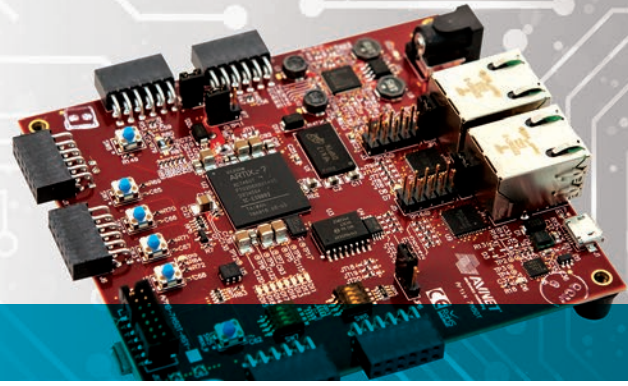


# Avnet Product Brief

## Artix<sup>®</sup>-7 50T FPGA Evaluation Kit



Electronics Marketing



Technology

The Avnet Artix-7<sup>®</sup> 50T FPGA Evaluation Kit is a completely customizable development kit perfect for embedded designers looking for a flexible, low-power platform. The Artix-7 50T 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 50T 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 evaluating Industrial Ethernet protocols to integrating multiple sensors to running a Linux-based web server, the Artix-7 50T FPGA evaluation board can help you validate your next design idea.



### Features

- Xilinx XC7A50T-1FTG256C
- 256 MB DDR3 SDRAM
- 32 MB of QSPI Flash
- 32 KB of I<sup>2</sup>C EEPROM
- Dual 10/100 Ethernet interfaces
  - Support IEEE1588
- 6 Digilent compatible Pmod™ interfaces enabling 48 user I/O pins
  - Routed as differential pairs
  - Paired to fit dual-wide Pmods
- USB-UART interface
- 512b EEPROM with SHA-256 authentication engine
- 16 AMS inputs
  - 12 connected to Pmods
  - 4 for power monitor circuit
- 10 user LEDs
- 8 user DIP switches
- 5 user push-button switches
- 200 MHz LVCMOS oscillator (system clock)
- JTAG programming/configuration port
  - Xilinx PC4 and Digilent SMT2

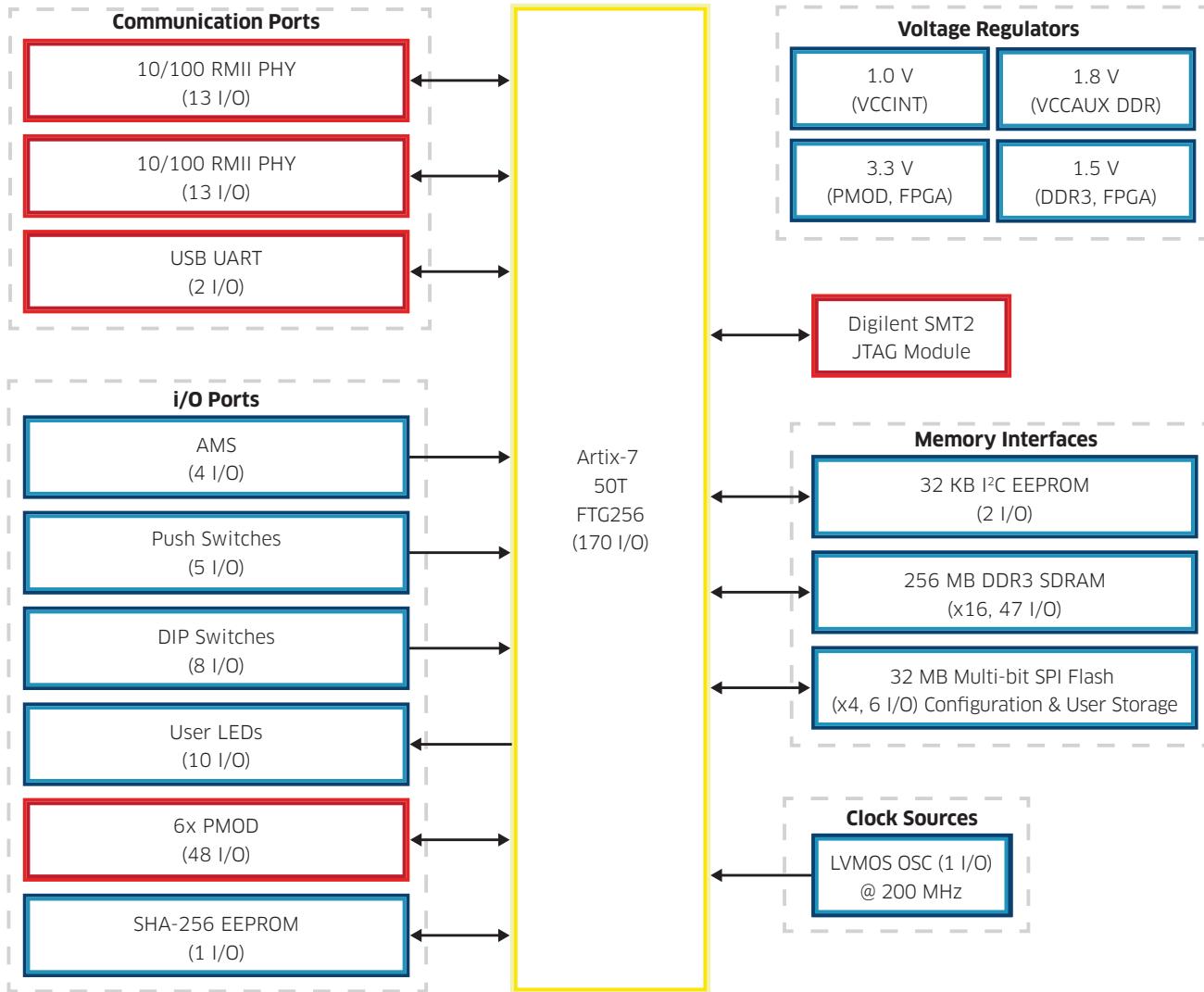
### Target Applications

- Embedded controllers
- General-purpose prototyping
- Networking and communications
- I/O expansion
- Sensor fusion
- Industrial ethernet applications

### Kit Includes

- Avnet Artix-7 50T evaluation board
- USB A-to-micro-B cables (2)
- Ethernet cable
- Xilinx Vivado<sup>®</sup> Design Edition license voucher (device locked to XC7A50T)

## Block Diagram



## Featured Manufacturers



## Ordering

Part Number	Hardware Description	Resale
AES-A7EV-7A50T-G	Artix-7 50T FPGA Evaluation Kit	\$239 USD

To purchase this kit, visit [www.em.avnet.com/artix7evl](http://www.em.avnet.com/artix7evl)

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