Xilinx® Spartan®-6 FPGA LX9 MicroBoard
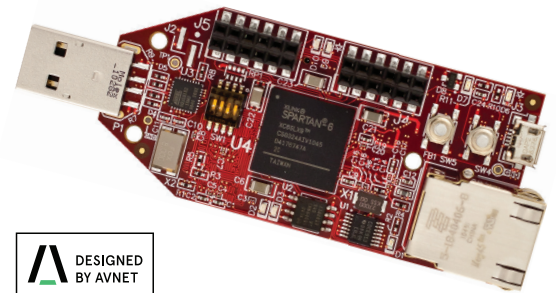
AVNET®

Reach Further™

The low-cost Spartan-6 FPGA LX9 MicroBoard is the perfect solution for designers interested in exploring the MicroBlaze™ soft processor or Spartan-6 FPGAs in general. The kit comes with several pre-built MicroBlaze "systems" allowing users to start software development just like any standard off-the-shelf microprocessor. The included Software Development Kit (SDK) provides a familiar Eclipse-based environment for writing and debugging code. Experienced FPGA users will find the MicroBoard 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 a system running an RTOS to a Linux-based web server, the Spartan-6 FPGA LX9 MicroBoard can help you validate your next design idea.

DESIGNED BY AVNET

FEATURES

- Spartan-6 XC6SLX9-2CSG324C FPGA
- 64 MB LPDDR SDRAM
- 128 Mb Multi-I/O SPI Flash
- 10/100 Ethernet PHY
- USB-to-UART port
- On-board USB JTAG circuitry
- Two 2x6 PMOD expansion ports
- Single-chip, 3-rail power with Power Good indicator
- Programmable clock chip
- Over-voltage and ESD protection on USB
- Four LEDs
- 4-bit DIP switch
- Reset and PROG push-buttons

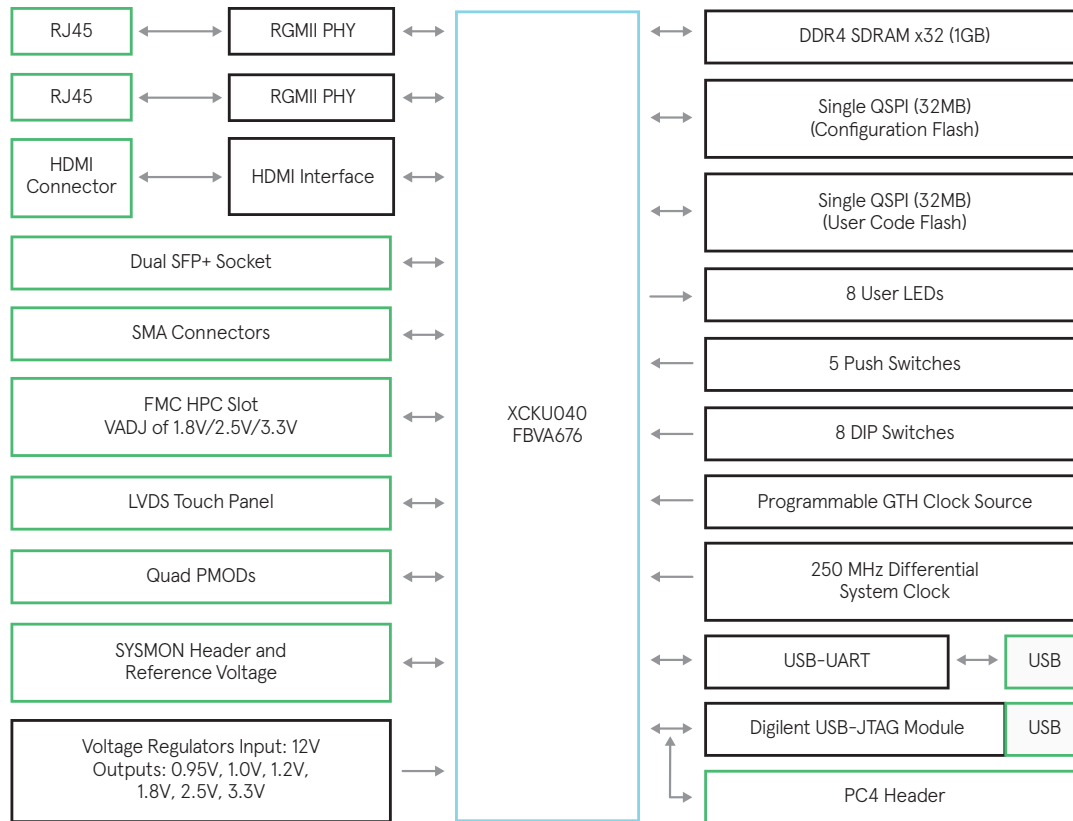To purchase this kit, visit avnet.com/us/s6microboard

KIT INCLUDES

- Spartan-6 FPGA LX9 MicroBoard
- ISE® WebPACK® software with device locked SDK and ChipScope licenses
- Micro-USB and USB Extension cables
- Printed documentation and Getting Started Demo
- Downloadable documentation and reference designs

TARGET APPLICATIONS

- Embedded microcontrollers
- General purpose FPGA prototyping
- Web server
- Test and measurement

BLOCK DIAGRAM

Left Side		Center	Right Side
RJ45	RGMII PHY		DDR4 SDRAM x32 (1GB)
RJ45	RGMII PHY		Single QSPI (32MB) (Configuration Flash)
HDMI Connector	HDMI Interface		Single QSPI (32MB) (User Code Flash)
Dual SFP+ Socket		XCKU040 FBVA676	8 User LEDs
SMA Connectors			5 Push Switches
FMC HPC Slot VADJ of 1.8V/2.5V/3.3V			8 DIP Switches
LVDS Touch Panel			Programmable GTH Clock Source
Quad PMODs			250 MHz Differential System Clock
SYSMON Header and Reference Voltage			USB-UART — USB
Voltage Regulators Input: 12V Outputs: 0.95V, 1.0V, 1.2V, 1.8V, 2.5V, 3.3V			Digilent USB-JTAG Module — USB
			PC4 Header

FEATURED MANUFACTURERS

XILINX ALL PROGRAMMABLE.   **TEXAS INSTRUMENTS**   **Micron**   **Atmel**   **TE** connectivity AUTHORIZED DISTRIBUTOR

PARTS

Part Number	Description	Resale
AES-S6MB-LX9-G	Xilinx Spartan-6 FPGA LX9 MicroBoard	$89 USD