ARC ESP ®
ENGINEERING SUPPORT PLATFORM

High Speed Power

The Engineering Support Platform is powered by DSX Core, ARC's core element for the development and deployment of digital and mixed signal systems. With its built in dual FPGA design, ESP can be configured to generate, analyze, process and/or output complex signals at a wide range of voltages, frequencies and serial protocols.

Increased Visibility and Satisfaction

Using ESP, ARC engineers have found a way to bring the Agile design philosophy into the hardware development process. The software team can use ESP to emulate the hardware structure while the hardware or electrical team is still designing. Because of this, our customers can see the ultimate design and give input or make changes far earlier in the project development cycle. .

Cost Efficient Development

Since the software team designs the hardware structure into any ARC ESP design, the product lends itself by nature to Test-driven development, and any project always has built in self test functionality without any additional development time. Additionally, FPGA IP can be ported in the future to reduce efforts to decrease obsolescence.

Adaptability with 100% Security

At each power-up or project change, the appropriate firmware is loaded into the device. Using our unique dual FPGA firmware structure, we are able to use the same hardware for any number of applications. Because of this, when the device is powered off, all data is deleted from the ARC ESP in its entirety. Any IP is completely secure when loaded onto the ESP device. .

WHAT IS ARC ESP?

ESP is a low cost, powerful, versatile and extendable platform for the development, deployment and support of FPGA Applications. It comes in both desktop and rack-mounted options. The product allows for the software and firmware development to begin early in the project cycle, which allows for critical customer feedback to be addressed early and often throughout the development cycle.

WHY ARC ESP?

- Little ramp-up time
- Work anywhere in a completely secure environment
- Work in parallel without waiting for another group to deliver a complete design before moving on.
- Emulate the hardware of system and start developing firmware and software solutions before the ink is even dry on the hardware team's designs.
- No schedule compression: critical customer feedback can be addressed early in the project.
- FPGA IP can be ported to reduce effort needed for future obsolescence
- Built-In Self Test Additionally
- ESP uses Xilinx Kintex-7 technology, AMD-Xilinx recently announced that these popular devices will be supported at least until 2035.
- Precise Timing
- Supports many output formats including Serial, I2C, FSK and SPI
- Supports Video Processing and Display

Specs

- Powered by Dual ARC DSX Modules
- 19" rack-mount, 3U, 16" depth
- 5V Power
- 2x Kintex-7 FPGA from Xilinx
- 3x FTDI USB 2.0 High-Speed Device - 5th Gen with JTAG
- 12x Samtec Connectors
- 5V Digital I/O
- Ask for ARC ESP and DSX Data Sheets for more detailed information

Analog Box Upgrade

- Add a wide range of Analog functionality to your solutions
- 120 Additional Inputs and 5 addtional 50 pin Samtec Connectors
- Can support up to 7 independent clock signals, from 1/2 Hz up to 50 MHz
- Supports a wide range of Voltage outputs

ARC TECHNOLOGY SOLUTIONS

ARC Technology Solutions LLC is a leading supplier of Innovative technical solutions, which increase our customers' manufacturing Productivity. ARC provides unique Manufacturing Productivity Solutions leveraging our core-competencies in software, electrical and mechanical engineering design and manufacturing.

For More Information go to **www.arcserv.com/products/esp**