

# LatticeECP3 Versa Development Kit

Industry's Lowest Cost Design Platform for FPGAs with Configurable SERDES

The LatticeECP3™ Versa™ Development Kit is a versatile platform for building leading edge systems in a variety of industries. It brings high-end innovations such as configurable SERDES, cascadable DSP slices, and high-speed DDR3 memory within the reach of mainstream designers in an easy to use environment. Customers outgrowing the capabilities of traditional microcontrollers and DSPs will be able to use the Versa kit to develop efficient FPGA solutions to address their emerging high-speed design challenges in applications as varied as Video Transmission and Repeaters, Video Image Signal Processing, Camera Controllers, Network Traffic Management, Resilient Network Construction, and Data Acquisition and Conrol.



Versa Kit Component	Description		
LatticeECP3 Versa Evaluation Board	Industry's Lowest Cost Platform for PCI Express and Gigabit Network Design     Platform to Showcase LatticeECP3 SERDES		
	Interfaces	<ul> <li>PCI Express 1.1 x1 Edge Connector Interface</li> <li>Two Gigabit Ethernet Ports (RJ45)</li> <li>USB Mini for FPGA Programming</li> </ul>	
	Components	<ul> <li>LatticeECP3 FPGA: LFE3-35EA-8FN484C</li> <li>64 Mbit Serial Flash memory</li> <li>1 Gbit DDR3 Memory</li> <li>Switches, LED, and Displays</li> </ul>	
	Connectors	<ul><li>4 SMA Connectors for SERDES Access</li><li>Two 2x20 Expansion Connectors</li></ul>	
Diamond License	Free one-year evaluation license valid only for use with Versa Kit		
Demo Systems	<ul> <li>SERDES Eye Demo</li> <li>4 PCI Express Demos</li> <li>Gigabit Ethernet MAC Demo using Mico32</li> <li>DDR3 Memory Controller Demo</li> </ul>		
Reference Designs	• 16 Free Reference Designs		
Documentation	<ul><li>LatticeECP3 Product Brief</li><li>User's Guides for Versa Board and 7 Demos</li></ul>		

# **Diverse Applications**

The feature-rich Versa Kit and agile LatticeECP3 FPGAs can be used to solve a range of tough design problems in diverse industries – transition to serial interfaces, implementation of innovative protocols, precision controllers, and real-time data processing. The table below lists sample applications of LatticeECP3 FPGAs in various markets.

Diversified Markets	Applications	
Industrial Networking	Efficient but Proprietary Protocols with Less Overhead	
	Transmission Range Extension	
	Fault-tolerant Network Construction	
Consumer, Medical, and Industrial Electronics	Transition of 7:1 LVDS To Serial Interfaces	
	Medical Imaging Camera Controller	
muddifur Eloutioniou	Digital Signage	
Defense, Scientific, and Test & Measurement	Sensor Data Collection and Analysis	
	DDR3 memory Test Systems	
Tool & Induduronion	High-speed ADCs and DACs	
	LED Lighting Controllers	
Green Industries	Solar Inverter Controllers	
	Smart Grid Controllers	
	Small Form-factor Pluggable Transceivers	
Communication	Traffic Management with Packet Manipulation	
	Digital Pre-distortion to Increase Dynamic Range	

# **Attractive Promotion and Availability**

Lattice is offering a limited quantity promotion on the all-inclusive LatticeECP3 Versa Development Kit to encourage new, qualified customers to build their next generation systems with LatticeECP3 FPGAs. The regularly priced \$299 Versa Kit is available for only \$99 while the promotional quantities last. The kit is available for immediate ordering via the Lattice online store at www.latticesemi.com/store and through the authorized Lattice distributors listed at www.latticesemi.com/sales.

#### Learn More

For more information about how LatticeECP3 Versa Development Kit can bring value to your system design projects, please contact your local sales representative.

# **Quick Links**

#### **VERSA EVALUATION KIT**

www.latticesemi.com/ecp3versa

#### **LatticeECP3 FPGA FAMILY**

www.latticesemi.com/ecp3

#### **IP SUITES**

www.latticesemi.com/IPSuites

### **LATTICE DIAMOND SOFTWARE**

www.latticesemi.com/latticediamond

#### **SALES**

www.latticesemi.com/sales

#### **ONLINE STORE**

www.latticesemi.com/store

#### **APPLICATIONS SUPPORT**

www.latticesemi.com/techsupport

## **CORPORATE HEADQUARTERS**

Lattice Semiconductor Corporation 5555 Northeast Moore Court Hillsboro, Oregon 97124 USA Tel: +1-503-268-8000 www.latticesemi.com

# **Ordering Information**

Product	Contents	Ordering Number	
LatticeECP3 Versa Development Kit	LatticeECP3 Versa Evaluation Board		
	USB A to USB B (Mini) Cable for FPGA Programming		
	Lattice Diamond™ Design Software (Evaluation License)	LFE3-35EA-VERSA-EVN	
	12V AC Power Adapter & International Plug Adapters	-	
	QuickSTART Guide		