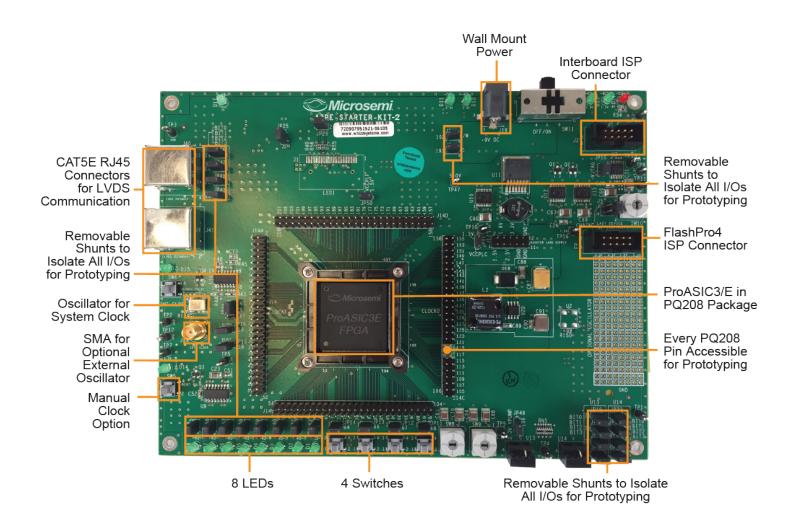


# ProASIC3/E Starter Kit Quickstart Card

#### **Kit Contents**

Quantity	Description
1	ProASIC®3 Starter Kit board with a socketed A3PE1500-PQ208
1	FlashPro4 programmer
1	9 V power supply with international adapters
1	Quickstart card





#### Overview

The ProASIC3 Starter Kit provides complete evaluation solutions that enable quick evaluation and design prototyping of Microsemi ProASIC3 FPGAs. The board supports on-board voltage regulation, advanced FlashROM capabilities, and four high-speed LVDS channels with a ProASIC3/E device or two LVDS channels with a ProASIC3 device.

#### Hardware Features

- Wall mount power supply connector, with switch and LED indicator
- Switches to select from among 1.5 V, 1.8 V, 2.5 V, and 3.3 V—I/O voltages on banks 4 and 5
- Two CAT5E RJ45 connectors for high-speed LVDS communications
- Eight I/O banks for ProASIC3/E (six for ProASIC3)
- Two programming headers: Support in-system programming (ISP) of single and JTAG-chained boards using FlashPro4
- 40 MHz oscillator and two independent manual clock options for global reset and pulse

## Running the Test Design

To test the board, you can download and program the demo design. See the Documentation Resources section for more information.

Action	Results
Press SW1	Asynchronous clear for the whole design.
Press SW2	Up-down control for the 8-bit counter. Press and hold SW2 for down count when Count mode is selected using SW6.
Press SW3	Synchronous load for the 8-bit counter. Press SW3 for loading from the Hex switches.
Press SW4	Switching between manual clock (SW5) and 40 MHz oscillator clock.
Press SW5	Manual clock (very useful for simulation).
Press SW6	Select for DATA_BLOCK. It allows switching LED output between the counter and flashing data.
Change Hex Switch Setting (U13 and U14)	Changes the loaded data for the 8-bit counter.

The following table lists the actions and results for running the demo.



## Software and Licensing

Libero<sup>®</sup> SoC Design Suite offers high productivity with its comprehensive, easy-to-learn, easy-to-adopt development tools for designing with Microsemi's low power Flash FPGAs and SoC. The suite integrates industry standard Synopsys Synplify Pro<sup>®</sup> synthesis and Mentor Graphics ModelSim<sup>®</sup> simulation with best-in-class constraints management and debug capabilities.

Download the latest Libero SoC release www.microsemi.com/products/fpga-soc/design-resources/design-software/libero-soc#downloads

Generate a Libero Silver license for your kit www.microsemi.com/products/fpga-soc/design-resources/licensing

#### **Documentation Resources**

For more information about the ProASIC3/E Starter Kit, including user's guides, tutorials, and design examples, see the documentation at http://www.microsemi.com/products/fpga-soc/design-resources/ dev-kits/proasic3/proasic3-starter-kit#documents.

# Support

Technical support is available online at www.microsemi.com/soc/support and by email at soc\_tech@microsemi.com

Microsemi sales offices, including representatives and distributors, are located worldwide. To find your local representative, go to http://www.microsemi.com/salescontacts





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