Programmable System Level Integration (PSLi) University Program

Atmel has recently introduced FPSLIC™, Field Programmable System Level Integration Circuits, which bring the benefits of Programmability to System-on-Chip design. The first family consists of embedded 10K-40K gates of AT40K FPGA, 8-bit AVR RISC microcontroller, 36K bytes program & data RAM and several dedicated peripherals, include UARTs, hardware multiplier, 2-wire interface, and others. Additional custom peripherals can be created in the FPGA and memory mapped directly in the address space of the microcontroller. The entire device is SRAM-based, allowing both the instruction set for the microcontroller and the hardware code for the FPGA to be reconfigured in real time, any number of times. Device performance is rated at 20MIPS running at 25MHz.
**FPSLiC Design Tools**

The tool set is completely integrated and includes everything necessary to implement designs -- including complete FPGA and AVR microcontroller tools, along with Exemplar Synthesis, Model Tech Simulator and Mentor’s Seamless Co-verification tools. The Co-verification tools are the first offered for programmable design -- significantly reducing design time, cost and risk by enabling hardware & software co-design and verification in the beginning of the design process.
ATSTK94 FPSLIC Starter Kit for Professional Design Engineers and Engineering Students

Atmel has created a Starter Kit that is intended for professional engineers and engineering curriculums. The ATSTK94 Starter Kit allows the professor to create derivative teaching material and information that is optimized for their teaching environment. Atmel can provide copyrighted materials and the ATSTK94 Starter Kit for the professor's use in developing course curriculum using Atmel's FPSLIC devices.

ATSTK94 FPSLIC Starter Kit

The ATSTK94 is a system-chip design tool that includes the following:
- User Guide provides step by step instructions for the design process
- FPSLIC System Designer tool w/4 month license
- Synthesis/VHDL Simulator/Co-verification
- AVR studio debugger
- FPGA Place and Route version 7
- IAR and Imagecraft C compiler (one month trial period)
- Comprehensive development board
- Design examples
- AT94K40 FPSLIC device
- AT17LV010 Configurator
- 2 Serial Ports
- Programmable switches & LEDs
- ISP cables for programming Configurator
The professor can use the ATSTK94 to create derivative teaching materials to distribute, under license, to the student for SOC design.

Atmel suggests the following curriculum for engineering schools:
1) Introduction to Microcontrollers and FPGAs
2) Embedded Systems Design
3) System-On-Chip (SOC) design using Co-verification

The introduction to microcontrollers and FPGAs becomes more valuable and efficient when it features and is coordinated with the microcontroller and FPGA used in embedded systems and the IP that is later reused in system chips.

The ATSTK94 Starter Kit is an excellent way for professors to teach and students to learn SOC design. The advantage of using Atmel's FPSLIC is the ease of creating new design projects and applications using System Designer software and the infinite reprogrammability of Atmel's AT94K series FPSLIC devices.

Additional information can be found by visiting Atmel's web site at www.atmel.com.

University Program Pricing

The starter kit was developed with the intent that University students would purchase the starter kits just like they purchase textbooks --- Or the University can purchase them for their labs.

Atmel offers the FPSLIC Starter Kit boards (ATDH94STKB) and download cables (ATDH2225) stand-alone, as well as board schematics if the University or Students want to build their own boards.

University Price List:

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>University Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATSTK94U</td>
<td>FPSLIC Starter Kit including ATDS94KSWU 12 month license</td>
<td>$295.</td>
</tr>
<tr>
<td>ATDS94KSWU</td>
<td>AT94K Series Design System Annual Subscription Fee</td>
<td>$195.</td>
</tr>
<tr>
<td>ATDH94STKB</td>
<td>FPSLIC Starter Kit development board only</td>
<td>$125.</td>
</tr>
<tr>
<td>ATDH2225</td>
<td>FPSLIC Download Cable only</td>
<td>$75.</td>
</tr>
</tbody>
</table>

* Minimum order quantity is 10 units. Smaller quantities require Factory Approval.

FPSLIC™ and FreeRAM™ are trademarks of Atmel Corporation.