isp™ Engineering Kit Model 100

Features

- **SUPPORTS ALL ispLSI® 1000, 2000, 3000 AND 6000 FAMILY MEMBERS**
- **STAND-ALONE DEVICE PROGRAMMER**
- **DOWNLOAD DIRECTLY TO AN ISP™ DEVICE ON A SYSTEM BOARD**
  - **Only 5 Control/Data Pins Needed**
- **QUICK DEVICE PROGRAMMING**
- **INEXPENSIVE, SMALL AND COMPACT**
  - **Eliminates Need For Expensive, Remote Programmer**
- **EXCELLENT FOR PROTOTYPING NEW DESIGNS**
  - **Not Intended For Production Programming**
- **EASY TO USE**
- **CONNECTS DIRECTLY TO PARALLEL PRINTER PORT OF HOST PC**

Description

The isp Engineering Kit Model 100 provides designers a quick and inexpensive means of evaluating and prototyping new designs using Lattice Semiconductor Corporation (LSC) in-system programmable Large Scale Integration (ispLSI) devices. This Kit is designed for engineering purposes only and is not intended for production use. The Kit programs devices from the parallel printer port of a host PC using the Lattice Semiconductor's pLSI/ispLSI Development System (pDS®) or pLSI/ispLSI Development System Plus (pDS+™) design tools. By connecting a system cable (included) from a host PC to isp Engineering Kit, or connecting from the host PC to the target device on the system board, a JEDEC file can be easily downloaded into the ispLSI device(s).

Components

The isp Engineering Kit Model 100 consists of two primary components, each sold separately:

— Universal Programming Module (UPM)

— Socket Adapters

The adapters plug into the UPM base. The adapter provides the appropriate PLCC, PQFP, TQFP, or QFP socket for a particular ispLSI device package.

isp Engineering Kit - Model 100

UPM Description

The Model 100 Universal Programming Module is designed to support all package types available from LSC. It consists of the following components:

— Universal Programming Module Base Unit

— Power Supply Converter (110VAC/9VDC @ 200mA)

- Included for North America and Asia Only

— 25-Pin Parallel Port Adapter

— 6' Universal Programming Module Download Cable with Modular Phone connectors (RJ45) on both ends

— 6' System Download Cable with a Modular Phone connector on one end and a AMP 1-87499-3 connector on other end

The connection between the host PC and the UPM base unit is shown in figure 1.

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Electrical Characteristics

Power Supply

AC Input Voltage:	110 VAC
DC Output Voltage:	9 VDC @ 200mA

UPM Physical Characteristics

Length:	3.75 inches
Width:	2.625 inches
Depth:	1.375 inchs

Download Cables

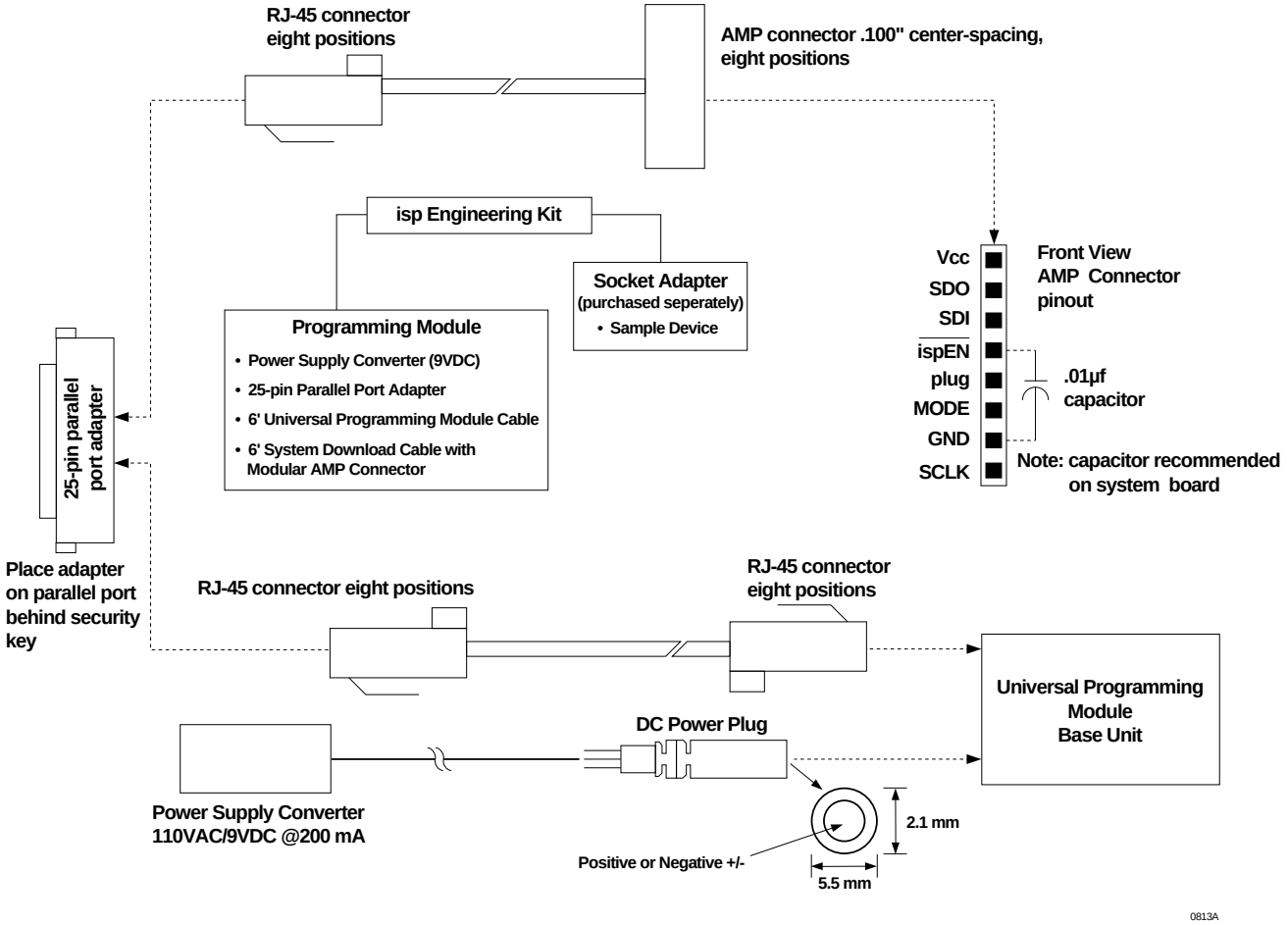
Download Cable with RJ-45 Phone Connectors on Both Ends

Length:	6.0 feet (192.8 cm)
Connectors:	RJ-45 with eight positions

System Download Cable with RJ-45 Phone and AMP 1-87499-3 Connectors

Length:	6.0 feet (192.8 cm)
Connectors:	RJ-45 with eight positions AMP single in-line 0.100 “ center spacing 8 positions

Figure 1. Universal Programming Module Description



Product Ordering Information

Product Code	Description
pDS4102-PM	isp Engineering Kit Model 100 for the PC: UPM programming module, (2) 8 wire Download cables, AC/DC Power Supply Converter, 25-Pin Parallel Port Adapter
pDS4102E-PM	ISP Engineering Kit Model 100 for the PC (European Model)
pDS4102-J44	44-pin PLCC socket adapter, (1) ispLSI 1016 Engineering Sample
pDS4102-T44	44-pin TQFP socket adapter, (1) ispLSI 1016 Engineering Sample
pDS4102-J68	68-pin PLCC socket adapter, (1) ispLSI 1024 Engineering Sample
pDS4102-J84	84-pin PLCC socket adapter, (1) ispLSI 1032 Engineering Sample
pDS4102-T100	100-pin TQFP socket adapter, (1) ispLSI 1032 Engineering Sample
pDS4102-Q120	120-pin PQFP socket adapter, (1) ispLSI 1048 Engineering Sample
pDS4102-Q128	128-pin PQFP socket adapter, (1) ispLSI 1048E Engineering Sample
pDS4102-M160	160-pin MQFP socket adapter, (1) ispLSI 3256 Engineering Sample

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