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### HW-130 Programmer

DS019 (v1.9) February 8, 2008

**Product Specification** 

This product is undergoing discontinuance. Please refer to <u>XCN07022</u>, *Product Discontinuation Notice*, for more information on last-time purchases and replacement products.

### **Device and Package Support**

- XC1700/XC17S00/XL Serial PROMs
- XC17V00/XC17S00A Serial PROMs
- XC18V00 ISP PROMs
- XC9500/XL/XV CPLDs
- XCR3000XL CPLDs
- Supports all Xilinx package types

### **Programmer Accessories**

- Universal power supply
- Power cord options for US, Asia, UK, European and Japanese standards
- Serial download cable and adapters
- User's manual
- Programmer interface software
- Vacuum handling tool

# Interface Software and System Requirements

The programmer software operates on a Windows 32-bit platform. Table 1 indicates the minimum system requirements for each. In all cases, a CD-ROM drive and an RS-232 serial port are required. A mouse is recommended.

#### Table 1: Interface Software and System Requirements

Requirements	Windows Version			
	95	98	NT	2000/XP
Memory	8 MB	16 MB	16 MB	16 MB
Hard Disk Space	15 MB	15 MB	15 MB	15 MB
HW-130 Host Software	4.00 or greater	4.10 or greater	3.1 or greater	5.06 or greater

### **Programmer Functional Specifications**

- Device programming, erasing, and verification
- CPLD security control
- Serial PROM reset polarity control
- Checksum calculation and comparison
- Blank check and signature ID tests
- Master device upload
- File transfer and comparison
- Self check and auto calibration
- Intended for development not recommended for production programming

### **Programming Socket Adapters**

- Supports all package styles: PLCC, PQFP, TQFP, VQFP, HQFP, BGA, FBGA, SOIC, VOIC, CSP and DIP
- Purchase as needed for specific package support

## **Electrical Requirements and Physical Specifications**

- Operating voltage: 100-250 VAC, 50-60 Hz
- Power consumption: 0.5 Amp
- Dimensions: programmer 6 x 8 x 2 inches; power supply 3 x 5 x 1.75 inches
- Weight: programmer 1.2 lb.; power supply 1.3 lb.
- Safety standards: approved by UL, CSA, TUV, CE

### New Programming Algorithm Support

The new programming algorithms are available via the Xilinx FTP site. Download the latest programming software from:

ftp://ftp.xilinx.com/pub/swhelp/programmer/hw130w32.exe

### **Ordering Information**

Part	Part Number
HW-130 Programmer for USA/Asia	HW-130-US
HW-130 Programmer for Europe	HW-130-EC
HW-130 Programmer for United Kingdom	HW-130-UK
HW-130 Programmer for Japan	HW-130-J

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### **Adapter Selection**

Product Family	Package Types	Adapter P/N	
XC9500/XL/XV	PLCC 44	HW-133-PC44	
XC9500/XL/XV	VQFP 44	HW-133-VQ44	
XC9500/XL/XV	CSP 48	HW-133-CS48	
XC9500XL/XV	VQFP 64	HW-133-VQ64	
XC9500	PLCC 84	HW-133-PC84	
XC9500	PQFP 100	HW-133-PQ100	
XC9500/XL/XV	TQFP 100	HW-133-TQ100	
XC9500XL/XV	CSP 144	HW-133-CS144	
XC9500XL/XV	TQFP 144	HW-133-TQ144	
XC9500 <sup>(1)</sup>	PQFP 160	HW-133-PQ160	
XC9500/XL/XV	PQFP/HQFP 208	HW-133-HQ208	
XC9500XL/XV	BGA 256	HW-133-BG256	
XC9500XL/XV	FBGA 256	HW-133-FG256	
XC9500XL/XV	CSP 280	HW-133-CS280	
XC9500	BGA 352	HW-133-BG352	
XCR3000XL	PLCC 44	HW-136-PC44	
XCR3000XL	VQFP 44	HW-136-VQ44	
XCR3000XL	CSP 48	HW-136-CS48	
XCR3000XL	CSP 56	HW-136-CP56	
XCR3000XL	VQFP 100	HW-136-VQ100	
XCR3000XL	CSP 144	HW-136-CS144	
XCR3000XL	TQFP 144	HW-136-TQ144	
XCR3000XL	PQFP 208	HW-136-PQ208	
XCR3000XL	CS 280	HW-136-CS280	
XCR3000XL	FBGA 256	HW-136-FT256	
XCR3000XL	FBGA 324	HW-136-FG324	
XC1700 & XC17S00/XL	DIP 8	HW-137-DIP8	
XC1700 & XC17S00/XL	PLCC 20/SOIC 20	HW-137-PC20/SO20	
XC1700 & XC17S00/XL	VOIC 8	HW-137-PC20/SO8	
XC1700 & XC17S00/XL	SOIC 20	HW-137-SO20	
XC1700	PLCC 44/VQFP 44	HW-137-PC44/VQ44	
XC17S00/A	DIP 8	HW-137-DIP8	
XC17V00 & XC17S00A	PLCC 20/SOIC 8/VOIC 8	HW-137-PC20/SO8	
XC17V00	PLCC 20/SOIC 20	HW-137-PC20/SO20	
XC17S00A	SOIC 20	HW-137-SO20	
XC17V00 & XC17S00A	PLCC 44/VQFP 44	HW-137-PC44/VQ44	
XC18V00	PLCC 44/VQFP 44	HW-137-PC44/VQ44	
XC18V00	PLCC 20/SOIC 20	HW-137-PC20/S020	
Calibration Adapter –		HW-130-CAL	

#### Notes:

1. Xilinx has manufactured two versions of the HW-133-PQ160 adapter. The current and correct adapter for programming XC9500 devices has "CPLD" written on the front label, at the top left side, under the Xilinx logo.

### **Revision History**

The following table shows the revision history for this document.

Date	Version	Revision
6/13/98	1.3	Added Windows 98 system requirements, added HW-137-LCC44/VQ44 to Adapter Selection table.
11/2798	1.4	Removed DOS and Windows 3.1 support. Revised the physical specifications to include the power supply dimensions and weight. Removed the obsolete XC7200/7300 product families. Added package adapters for the XC9500/XL series in CSP 48, VQFP 64, CSP and TQFP 144 packages.
01//13/00	1.5	Added DS number, and XC1800 Serial PROM adapters. Added version column to revision control table.
04/08/03	1.6	Changed XC1800 Serial PROM to XC18V00 ISP PROM. Updated the template. Added "Ordering Information".
12/12/06	1.7	Added package adapters for the XC9500XV, XCR3000XL, XC17S00/XL, XC17V00, and XC17S00A product families, and HW-133-BG256 and HW-133-FG256 to "Adapter Selection," page 2.
05/25/07	1.8	Added Windows 2000/XP (Table 1, page 1).
02/08/08	1.9	<ul><li>Updated document template.</li><li>Added discontinuance notice to page 1.</li></ul>

### **Notice of Disclaimer**

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