

This product is undergoing discontinuance. Please refer to [XCN07022](#), *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

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

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>

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 ⁽¹⁾	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/SO20
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.
11/27/98	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	- Updated document template. - Added discontinuance notice to page 1.

Notice of Disclaimer

THE XILINX HARDWARE FPGA AND CPLD DEVICES REFERRED TO HEREIN ("PRODUCTS") ARE SUBJECT TO THE TERMS AND CONDITIONS OF THE XILINX LIMITED WARRANTY WHICH CAN BE VIEWED AT <http://www.xilinx.com/warranty.htm>. THIS LIMITED WARRANTY DOES NOT EXTEND TO ANY USE OF PRODUCTS IN AN APPLICATION OR ENVIRONMENT THAT IS NOT WITHIN THE SPECIFICATIONS STATED IN THE XILINX DATA SHEET. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. PRODUCTS ARE NOT DESIGNED OR INTENDED TO BE FAIL-SAFE OR FOR USE IN ANY APPLICATION REQUIRING FAIL-SAFE PERFORMANCE, SUCH AS LIFE-SUPPORT OR SAFETY DEVICES OR SYSTEMS, OR ANY OTHER APPLICATION THAT INVOKES THE POTENTIAL RISKS OF DEATH, PERSONAL INJURY, OR PROPERTY OR ENVIRONMENTAL DAMAGE ("CRITICAL APPLICATIONS"). USE OF PRODUCTS IN CRITICAL APPLICATIONS IS AT THE SOLE RISK OF CUSTOMER, SUBJECT TO APPLICABLE LAWS AND REGULATIONS.