

# SuperPro 7504N High Speed Production Programmer



# PROGRAMMER FEATURES

- Equipped with four asynchronous highspeed programmer modules, the SuperPro 7504N supports simultaneous programming of up to 16 chips. Ideal for manufacturers demanding high productivity, versatility, and quality.
- Wide Device Support: Capable of programming virtually any device, including Microcontrollers, NAND Flash, eMMC, Nor Flash, E/EPROM and more
- Supports device voltages as low as 1.2V and an extensive range of packages, such as WLCSP, PLCC, TQFP, BGA, DIP, and more
- Enhanced Speed: Faster programming for eMMC, NAND FLASH, SPI FLASH, and other devices.
- Supports various popular NAND FLASH platforms and offers customization.
- The tenth generation of pin drive technology guarantees cleaner signals, supports a wider voltage range, and offers higher signal bandwidth.
- Our algorithm software strictly adheres to chip manufacturer specifications, ensuring precise timing implementation that achieves exceptionally high programming yields.
- The Xeltek SuperPro 7504N is the pinnacle of high-speed, versatile, and reliable IC programming, designed to meet the stringent demands of modern manufacturing.







### **Overview**

Featuring four built-in SuperPro 7500N programmer modules, the SuperPro 7504N reaches the pinnacle of industry performance, enabling simultaneous programming of up to 16 chips. It supports an extensive range of devices with exceptional speed, including eMMC, NAND Flash, SPI Flash, NOR Flash, MCU, CPLD, and more.

For industry leaders, the SuperPro 7504N delivers high throughput, superior programming yield and quality, extensive device compatibility, and the ability to quickly upgrade for future device support.

Trust in the SuperPro 7504N for unmatched efficiency and reliability.

#### **Advantages**

- **Ultra-Fast Programming Speed**: Our semiconductor manufacturerapproved algorithms, combined with precision and clean signals, ensure high programming yield.
- **Customized 4-Gang Adapters**: The SuperPro 7504N can program up to 4 chips simultaneously, maximizing efficiency.
- **Built-In 144 Pin Driver:** Equipped with a universal 144-pin driver, it accommodates large pin count devices. A single universal adapter supports all devices with the same package type.
- **Device Library**: Currently supports over 137,000 devices, with ongoing updates to accommodate new chips as they enter the market.
- **Technical Support**: Xeltek offers same-day support for all technical inquiries, ensuring you receive prompt and efficient assistance.
- **Technical Support**: Enjoy complimentary assistance and device requests. Xeltek Programmers must be purchased exclusively through Xeltek or authorized distributors.

## SuperPro 7504N comes with

- SuperPro 7504N
- AC Adapter
- USB 2.0 Cable

# **Specifications**

Devices Supported	EPROM, Paged EPROM, Parallel and Serial EEPROM, FPGA Configuration PROM, FLASH memory (NOR), BPROM, NVRAM, SPLD, CPLD, EPLD, Firmware HUB, Microcontroller, MCU	
Package Types Supported	DIP, SDIP, PLCC, JLCC, PGA, LGA, SOIC, SOJ, SOT, QFP, TQFP, PQFP, VQFP, MQFP, LQFP, TSOP, SOP, TSOPII, PSOP, SSOP, TSSOP, SON, EBGA, FBGA, FTBGA, VFBGA, $\mu$ BGA, CSP, SCSP, QFN, HVQFN etc.	
PC Interface PC	USB 2.0	
Compatibility Stand-	Windows 11 (32/64 bit)	
Power Supply	AC Adapter: Input AC 100V- 240V; Output: 12V/1.5A	
Dimensions	Main unit: 540 x 216 x 75 mm	Package: 600 x 250 x 105 mm
Weight	Main unit: Weight 6.8 kg	Package: Weight 9.2 kg



#### **Advanced Software Features**

SuperPro 7504N comes with a powerful and easy-to-use programming software. The biggest advantage is its simplicity so that any operator can operate the programmer with little or no training. SuperPro 7504N software is supported on Windows 11.



**Project Files** The project file stores preparations before programming. Users could also restore and save work environment. The project file includes device type, buffer data, operation option settings, configuration bit settings and batch commands. Project files may be password protected to increase security and reliability when operated by untrained operators.



**Auto Function** The Auto function organizes different functions into a sequential group (erase, blank check, program, verify and protect). Functions are executed in sequential order similar to a batch command.



**Production Mode** Once a chip is inserted correctly, the programmer automatically starts batch command of erase, blank check, program and verify. Auto chip detection saves time and increases efficiency.



**Production Statistics** A log file could be used to save operation information before exiting the program. Log files can also be used to facilitate quality tracking.



**Auto Recognition of File Types** We support almost all kinds of known file formats including file formats with automatic recognition functions: Binary, Intel (linear & segmented) Hex, Motorola S, Tektronix (linear & segmented), JEDEC, POF, etc.



**Factory Mode** This mode is designed for factory volume production. To prevent operation errors from destroying chips and wrong data written to the chip, SuperPro will operate in Auto function mode. The administrator can set a password to prevent unauthorized access to the system



**Auto Increment of Serial Numbers** Auto-generation of electronic serial numbers is available on Superpro 7504N. This feature is implemented by setting Auto Increment in Operation Option. Auto Increment allows users to add unique serial number into the device. After each successful programming, the software automatically changes the value by the specified increment mode.



Intellectual Property Protection Password settings available in both PC and stand-alone mode.

**Ultra Fast Programming Speed** SuperPro 7504N is designed with high programming speed in mind. Our semiconductor manufacturer approved algorithms, precision and clean signals guarantee high programming yield. Special design was made to eliminate overshoot and ground bounce. Algorithms are performed with state machine architecture constructed with FPGA to achieve a ultra-high programming speed.

**Largest Device Support** Located in Silicon Valley, we keep good relationships with many major IC companies that are important for us to continuously support new devices. SuperPro 7504N currently supports more than 99,800 devices, which is the largest device library in the programming industry. Requested device algorithms can be added within a week - average lead time from other manufacturers is over two months.