AUTOMATED IC PROGRAMMING
XELTEK'S SUPERBOT SERIES TECHNICAL PRESENTATION
Xeltek Inc. is a global, high-tech company and leader in delivering a wide range of professional systems dedicated to online/offline IC programming. Having been the world's first leading provider of manual and automated device programming systems for Flash, Microcontroller, and Logic devices since 1992, Xeltek's scope remains focused on quality, support, and performance to help customers reach excellence in manufacturing and product integrity.

Xeltek continues to invest in innovative and modern solutions while connecting with more and more countries from around the world. Xeltek's vision is to become a reference point in the serial programming field by providing customers with sophisticated products and service at an affordable price. Advanced automated programming solutions will help customers meet the highest production standards while reducing errors and shortening time-to-market.

With over 117,000 devices supported and more than 460 relationships to IC manufacturers, Xeltek maximizes their location in the heart of Silicon Valley, USA to build a sturdy infrastructure of support, expertise, and partnerships. Also equipped with a dedicated team of engineers, technical support is largely accessible and swift so customers can have peace of mind alongside their investment.
SUPERBROT KEY FEATURES AND BENEFITS

- Embedded hardware with Xeltek's SuperPro® high-speed universal device programmers, SuperPro® 7500N or X108

- High precision servo drive system, downward CCD camera for sockets and accurate pick and place positioning

- Various I/O peripherals supported: manual tray (standard equipped), auto tray device, tape-out device, electric tape-in feeder, tube-in, tube-out, laser marker, tape/tray ink marker

- Largest device library with over 117,000 devices supported and growing daily as well as strong ties to over 460 IC manufacturers making updates easy

- Short change over time: socket positioning performed automatically, projects can be loaded with barcode scanning, change I/O devices and socket adapters effortlessly

- Powerful and intelligent software with graphical interface. Setup data saved for next operation. Software includes resourceful log table, quality tacking, authorization, and more

- Remove control via LAN operation: remote project loading, quality monitoring, volume control, and file security.

- Free tech support through various communication channels such as email, phone, video chat, or direct messaging. Expert engineers ready to assist from both China and USA
SUPERBOT 2
UP TO 1,200 UNITS PER HOUR | 4-16 SOCKETS

- Xeltek's longest-standing automated programmer with enduring reliability
- Built-in hardware: 4 high-speed universal programmers, SuperPro® 7500Ns
- ARM 11 32bit MCU combined with an internal Linux operating systems for optimal performance
- Supported devices: NAND flash, Microcontrollers, eMMC, E/EPROM and more
- Supported Packages: WLCSP, BGA, WSON, SOIC, TQFP, PLCC, and more
- Tape, tube, tray I/O and laser and ink dot marking all supported
- PC interface: USB 2.0, LAN
- Built-in industrial PC with OS Windows, 19" LCD display, keyboard, and mouse
- Chip size: 2mm - 25mm
SUPERBOT 4
UP TO 600 UNITS PER HOUR | 4-16 SOCKETS

- Popular for its compact, tabletop design that can fit into any working space
- Built-in hardware: 4 high-speed universal programmers, SuperPro® 7500Ns
- ARM 11 32bit MCU combined with an internal Linux operating systems for optimal performance
- Supported devices: NAND flash, Microcontrollers, eMMC, E/EPROM and more
- Supported Packages: WLCSP, BGA, WSON, SOIC, TQFP, PLCC, and more
- Tray I/O supported with built-in low noise vacuum generator
- Chip size: 2mm - 25mm
SUPERBOT 5A | 5E
2,100-2,500 UNITS PER HOUR | 16-32 SOCKETS | DUAL AND QUADRUPLE PICK & PLACE NOZZLES

- Recognized for its remarkable speed, performance, and maximum throughput
- Built-in hardware: 4-8 high-speed universal programmers, SuperPro® 7500Ns
- ARM 11 32bit MCU combined with an internal Linux operating system for optimal performance
- Supported devices: NAND flash, Microcontrollers, eMMC, E/EPROM and more
- Supported Packages: WLCSP, BGA, WSON, SOIC, TQFP, PLCC, and more
- Tape, tube, tray I/O and laser and ink dot marking all supported
- PC interface: USB 2.0, LAN
- Built-in industrial PC with OS Windows, 19" LCD display, keyboard, and mouse
- Chip size: 2mm - 25mm
SUPERBOT 5X | 5XE
2,000-2,500 UNITS PER HOUR | 32-48 SOCKETS | DUAL AND QUAD PICK & PLACE NOZZLES

- Designed to take on the toughest jobs and recommended for high-density chips such as eMMC, NAND/NOR Flash, and SPI Flash
- Built-in hardware: 4-8 high-speed universal programmers, SuperPro® X108s
- Supported devices: NAND flash, Microcontrollers, eMMC, E/EPROM and more
- Supported Packages: WLCSP, BGA, WSON, SOIC, TQFP, PLCC, and more
- Tape, tube, tray I/O and laser and ink dot marking all supported
- PC interface: USB 3.0, LAN
- Built-in industrial PC with OS Windows, 19" LCD display, keyboard, and mouse
- Chip size: 2mm - 25mm
SUPERBOTS
UP TO 1,600 UNITS PER HOUR | 4-16 SOCKETS | DUAL PICK & PLACE NOZZLES

- Prepared to take on any tape and reel production job with built-in adjustable automatic tape in/out handler (tape width 8-32mm)
- Compact size and smaller footprint compare to SB5 series models
- Built-in hardware: 4 high-speed universal programmers, SuperPro® 7500Ns
- ARM 11 32bit MCU combined with an internal Linux operating systems for optimal performance
- Supported devices: NAND flash, Microcontrollers, eMMC, E/EPROM and more
- Supported Packages: WLCSP, BGA, WSON, SOIC, TQFP, PLCC, and more
- Tape, tube, tray I/O and laser and ink dot marking all supported
- PC interface: USB 2.0, LAN
- Built-in industrial PC with OS Windows, 19" LCD display, keyboard, and mouse
- Chip size: 2mm - 25mm
SUPERBOT ACCESSORIES

MANUAL TRAY
TAPE-OUT DEVICE
TAPE-IN DEVICE
TUBE-IN DEVICE
TUBE-OUT DEVICE
TAPE INK-MARKER
AUTO TRAY INK-MARKER
LASER MARKER
AUTO TRAY DEVICE

(standard equipped): One tray each time, change tray manually
Heat sealing and pressure sealing modes, tape width adjustable between 8mm-32mm
Electric tape feeder, tape width between 8mm-32mm applicable
Moves chips in the machine, chip guider for different chip width optional
Moves chips out of the machine, chip guider for different chip width optional
An attachment to the tape-out device, place an ink dot to mark the chip
An attachment to the auto tray device, scan and mark chips with dots on the passed chips
An optional attachment to the tape-out or auto tray device, marks up to 4 characters on passed chips
Moves blank tray in and passes tray out of the machine automatically, marking the tray (optional).
Stack up to 20 JEDEC trays
Z-AXIS Inc., an electronics design and manufacturing firm based in New York, USA, started with Xeltek's first generation SuperBOT 1, progressed to SuperBOT 3 now discontinued, and just recently upgraded to SuperBOT 5e.

The company trajectory of Z-AXIS Inc. is a testament to their resiliency as a business in adapting to meet consumer trends. Founded in 1989 as a manufacturer of industrial CRT-based displays for military and medical instruments, Z-AXIS Inc. faced a crossroad with the advent of LCDs and aptly pivoted to high-tech electronics manufacturing and contract design and production.

Over the years, the company has seen growth in both profitability and workforce, advancing from manual programming to automated programming to reach a larger clientele, and landing most recently with the advanced SuperBOT 5e with satisfaction and success.

Z-AXIS has upgraded its robotic IC programmer to increase processing speed and reliably program the latest fine-pitch processor and flash memory packages.
May 14, 2021 - Z-AXIS Inc. (www.zaxis.net) has added a Xeltek SuperBOT 5e robotic IC (integrated circuit) programmer at its electronics design and contract manufacturing center near Rochester, NY. The $80,000 robotic system replaces an earlier model, processing ICs three times faster and reliably handling the latest fine-pitch IC packages.

"As a contract manufacturer, staying current with the technology is essential in order to maintain the high throughput, low labor costs, and high quality that our customers expect," said Michael Allen, president of Z-AXIS. "That means continuous investment in the latest tools and automation equipment for high-mix electronics manufacturing."

Many printed circuit board assemblies (PCBAs) feature embedded software or firmware, stored in microcontrollers flash memory chips on the board. By programming these ICs in-house for its customers, Z-AXIS eliminates the three-to-four week lead time of buying pre-programmed ICs from distributors. It can offer same-day turn-around of software updates for PCBAs in production.

With the robotic system, in-house programmed ICs also cost about 30% less than buying from distributors in the production volumes that Z-AXIS' contract manufacturing customers typically need.

For prototype and very low-volume work, ICs are typically programmed manually -- either in-circuit or by a hand-loaded IC programmer. For production volumes, the SuperBOT 5e IC programmer is used to process up to 2,100 ICs per hour, twenty times faster than manual IC programming, and eliminate nearly all the labor costs.
Xeltek Inc. is an established manufacturer in providing full range support of IC programmers including manual programmers, gang programmers, in-circuit programmers, and automated programmers since 1992.

- Full and free 5-year warranty and technical support
- All replacement parts supplied free of charge with the exception of socket adapters and customer pays import duty + shipping
- Free device updates and monthly software updates
- High pin count supported with built-in universal 144 pin driver
- Lowest overall cost of ownership for equipment and 5-year operation
- Zero contracts
Delivering quality service is an equally valuable mission Xeltek aims to impart to every customer. That is why Xeltek provides high-touch support before, during, and after a sale from not one, but two dedicated teams of technical engineers and support staff located in Nanjing, China and Silicon Valley, USA.

Xeltek's distinguished service is worldwide and first-class and is proud to carry 5-star reviews so customers can shop with confidence.

**XELTEK'S 5-STAR REVIEWS**

★★★★★ 5 days ago  NEW
AAron and his team supported my company for the installation and training of our new SBOT IC programming machine. They were professional, quick and answered to all of our questions and doubt. Now the programmer is working good and helped us to improve our quality and manufacturing capability. Thanks to the all team!  
Raffaele Benocci SECO Group (Italy)

★★★★★ 4 months ago
We purchased Superbot 5e and are very happy with the product. Aaron, and the complete technical team were very helpful, the issues that we faced while setting up the machine was resolved with great care and patience. The shipment, lead-times etc..were smooth as well.

★★★★  a year ago
We got SuperPro 5000 for many years because of its excellent component coverage. We recently upgrade to SuperPro 7500 to enhance our ability on dual-core MCU and eMMC. We got free support from the Xeltek team to add the new MCU in the software. The request to support the new MCU is very easy and fast: send the Xeltek team some samples, and couple weeks later, we get what we need free of charge for the development fee (under warranty). Xeltek has a great team, especially Aaron, work with him always get a good result.

View Xeltek's Google Reviews  CLICK HERE
THANK YOU

QUESTIONS? CONTACT SALES@XELTEK.COM
WWW.XELTEK.COM