

# SuperPro IS03

## Advanced ISP Gang Programmer with 16 Channels



#### PROGRAMMER FEATURES

- Supports almost all serial chips which include, but not limited, SPI, I2C, JTAG, BDM, UART, MON, SCI, SWD, SBW, C2D, ICC, SWIM, SDQ, DBG, ICE, CSL, LIN
- Programs up to 16 serial chips or 4 parallel NAND, NOR, eMMC chips simultaneously
- Support ISP serial programming to multiple chips of different models or types in one unit
- General control ports supply signal isolation, relay isolation, power supply control, click detection, LED expansion display and other control signals
- Chip safety security mechanism
- Over-current, over-voltage and ESD protection
- Customized special functions and algorithm software available
- Three modes
  - 1) Online mode: connected to local PC by USB 2.0 (high speed)
  - Off-line mode: using the stand-alone keyboard, LCD display, and mobile memory (standard SD cards)
  - 3) Network mode: connected to local network, control locally or remotely
- Log document and production statistics function facilitates quality-tracking
- User operation interface is shown by PCBA
- 2 year warranty



### Overview

Superpro ISO3 is a universal ISP Gang programmer which supports devices with almost all serial protocols. Programs up to 16 serial devices simultaneously. Up to 4 parallel devices like eMMC, NAND, NOR FLASH can be programmed in system simultaneously. USB2.0 or network remote and stand-alone operation modes. DLL/API/Command-Line Commands available under license for integration with ICT, FCT, ATE and testing fixture.

# Advantages

- **Ultra-Fast Programming Speed** Our semiconductor manufacturer approved algorithms, precision and clean signals guarantee high programming yield. Algorithms are performed with state machine architecture constructed with FPGA to achieve a ultrahigh programming speed.
- Up to 16 PCB Gang Programming SuperPro ISO3 supports almost all serial devices including MCUs, serial FLASH/EEPROMs and most parallel memory devices such as eMMC and NAND/NOR FLASH. It is a 96-pin driver programmer with 16 channels (6 I/O x 16 channels). SuperPro ISO3 supports most ISP devices to program 16 channels simultaneously. Four parallel high pin count chips, such as NAND/eMMC, can be programmed at the same time.
- Expansion Up to 12 programmers can be connected to a single PC for programming multiple PCBs or all the programmers can be used in stand-alone mode.
- Mass Production Mode Once the programmer detects that the target board is ready and receives an ISP signal, it immediately starts the functional operation defined by AUTO without keyboard operation. TPIN and TPOUT in the ISP port are provided for this purpose. TPOUT supplies high level, and TPIN is the level detection input line.
- Longer Cable Length SuperProISO1 is a serial programmer with an ISP cable that can program a target board up to 3 feet (1M) in distance. VDD (0-5.5V /0.5A) and Vpp (0-15V / 0.2A) lines provided to power the target board and the target devices.
- **Technical Support** Xeltek is proud to offer same day support for technical inquiries.

#### SuperPro ISO3 comes with

- 4 ISP Cables
- USB Cable
- Software CD
- SD Card for stand-alone operation
- AC Adapter

## Specifications

ISP Protocol Supported	I2C, SPI, UART, BDM, MW, JTAG, CAN, RS232 (Contact Xeltek for more details)	
Keypad and Display	6-key keyboard, LCD display with 40 digits x 4 lines	
PC Interface	USB 2.0 (high speed), LAN (100M)	
PC Compatibility	Windows XP/Vista/7/8/10	
Power Supply	DC 12V/1.5A. Power adapter	
Dimensions	Main unit: 184 x 160 x 78 (mm)	Package: 310 x 250 x 145 (mm)
Weight	Main unit: Weight 0.8Kg	Package: Weight 1.65Kg



## **Advanced Software Features**

SuperPro ISO3 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 ISO3 software is supported on Windows Vista. 7, 8, and 10.



**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 setting and batch commands. Project files may be password protected to increase security and reliability when operated by untrained operators.



**Project Group: Operate Multiple Project Files in Batch Mode** Multiple chips could be programmed simultaneously using the Project Group feature on the SuperPro ISO3 software. Project Group organizes batch running of multiple projects and is available on all SuperPro ISO3 models.



**Super Scale Project Group** Complicated PCBA or multiple combined PCBAs may need multiple programmers to work properly. The Super Scale Project Group is responsible for the workflow across multiple programmers.



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



**Factory Mode** This mode is designed for factory volume production. To prevent operation errors from destroying the chips and wrong data written to the chip, SuperPro ISO3 will operate in the Auto function mode. The administrator can set a password to prevent unauthorized access to the system.



**XPlayer** SuperPro ISO3 supports JAM, SVF and Staple files from ACTEL, Xilinx and ALTERA. SuperPro ISO3 also supports Direct C files from ACTEL. STP or JAM files can be generated using design tools such as ISE and Quartus II.



**Auto Increment of Serial Numbers** Auto-generation of electronic serial numbers is available on SuperPro ISO3. This feature is implemented by setting <u>Auto Increment in Operation Option</u>. 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.



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



Copyright Protection with SD encryption, project file encryption and access control, volume control and remote control.