| Brands | Xeltek | Xeltek | Hi-Lo Sys |
|---|---|---|---|
| **Model** | **SuperPro7000** | **SuperPro5000** | **All-100A** |
| **Number of Devices Supported (*1)** | 14,100+ | 86,900+ | 239+ |
| **Number of Manufacturers Supported** | 142 | 307 | 32 |
| **Number of Pins Available (*2)** | 144-Pin x 15 or more units. | 144-Pin x 15 or more units. | 48 |
| **Operational Mode (*3)** | PC (USB2.0) | PC (USB2.0) | PC only (USB1.1/2.0) |
| | Stand-Alone | Stand-Alone | No |
| | Local Area Network (LAN) Mode | See SuperPro7000 | No |
| **Programming Speed (*4)** | 10 times faster eMMC programming speed than SuperPro5000. | See SuperPro7000 | 480 Mb /sec max |
| **Support NAND Flash / eMMC** | Up to 256 GB | Up to 2 GB | |
| **Socket Adapter Family** | EX Adapters | CX Adapters | HD Adapters |
| **In-circuit Prog. Capability (*5)** | Optional | Optional | No |
| **Custom 4Gang Adapter (*7)** | Optional | See Stand-Alone Cluster Setup (*3) | No |
| **Built-in Processor (*8)** | ARM11 RISC MCU | ARM7 RISC MCU | FPGA & CPLD |
| **Windows Support** | Win XP/Vista/7/8 (32/64 bit) | Win XP/Vista/7/8 (32/64 bit) | Only older Win O/S up to Vista |
| **RoHS & CE Compliance** | Both | Both | CE Only |
| **Warranty** | 2 Years | 2 Years | 1 Year |
| **Product Link** | Datasheet | Datasheet | Datasheet |
| **Cost** | $2,495 | $1,995 | |
| **Image** |  |  |  |

**(*1)** Device count as of **January 2013**. See SuperPro7000 and SuperPro5000 Device List from Download Center for the latest device supported.
New devices are continuously added to SuperPro7000 until the device library reaches over SuperPro6000 / 5000 device count. Since the firmware is designed from scratch, new algorithms are developed to support devices from the current SuperPro5000/6000 device library. However, **any device a user wants programmed could be added quickly**.

Device and manufacturer count for Hi-Lo Systems is based on Hi-Lo Systems device list generated from January 17, 2000 - January 17, 2013.

**(*2)**

- Xeltek SuperPro universal programmers are equipped with a 144-pin universal pin driver to accommodate large pin count devices. **Special adapters with higher than 144 pin-count is available and special designs are based upon user request.**
  **Built-in 144-Pin vs. 48-Pin Advantage:** http://www.xeltek.com/pages.php?pageid=293
- One Xeltek universal adapter accommodates all devices with the same package type. Some manufactures still release programmers and adapters with old designs (requiring numerous adapter variations for the same chip package type) which are not practical.
- High quality materials used to improve production reliability.

**(*3)** **PC mode** via USB2.0 port and PC communication.

**Local Area Network (LAN) mode** for access to LAN local or remote control. LAN is a computer network that interconnects computers in close proximity to each other such as in an office building, a home or a school; LAN is extremely useful for sharing resources like files and applications. SuperPro7000 contains a user-friendly interface to control the programmer under LAN mode. Setting up for the LAN mode is similar to that of current USB mode - an Ethernet cable is connected between SuperPro7000 and the network hub. See user manual for detailed instructions and illustrations.

   **a)** One or more units may be controlled by an operator for gang / cluster operation for volume programming. (Optional)
   **b)** One unit may be shared by multiple users in a lab environment. (Optional)
   **c)** A unit on the factory floor may be controlled remotely.

**Stand-Alone mode (no PC required)**.Operates via built-in keyboard, LCD display and removable memory (standard SD card). Setup is flexible and simple to expand (**1-15 units**) for large  volume production on the factory floor. Projects files (limited only by SD card capacity limit) are created online and downloaded into the SD card. **See Stand-Alone_Graphic_Illustrations.pdf**

Hi-Lo requires two different programmer models to transition from development (Flash-100S) to production (Flash-100).

**(*4)**  SuperPro7000 = 10% faster programming speed for eMMC devices  than SuperPro5000.
                  = 30% faster programming speed for NAND Flash (and other devices) than SuperPro5000).

ARM 7/9/11 processors are much faster than FPGA & CPLD processors for today's programming standards.

Hi-Lo maximum USB2.0 transfer rate is 480 Mb / second with FPGA & CPLD processors.

**(*5)** **EX** socket adapter series were developed specifically for SuperPro7000. EX socket adapters are flexible in  transforming a single-socket Super7000 into a mini gang programmer.

**(*6)** In-system programming cable optional for serial programming. Also see SuperProIS01 for serial programming applications.

**(*7)**  SuperPro7000 - Customized 4-socket gang adapter + Programming algorithm (optional). Customized gang adapter transforms SuperPro7000 into a mini gang programmer. Extremely flexible for production applications, simply add SuperPro7000 units for project expansion. Not limited to fixed number of sockets.

**(*8)** ARM9 cores contain an improved design architecture that significantly increase its potential processing speed. Another key improvement that ARM9 cores have over ARM7 cores is lower heat production which decreases overheating risk during device programming. SuperPro7000 contains an even more advanced processor, ARM11, for enhanced eMMC programming speed.

ARM 7/9/11 processors are much faster than FPGA & CPLD processors for today's programming standards. Hi-Lo Systems utilizes a 16-bit core control circuit with FPGA & CPLD, resulting in slower processing speed.