Xeltek SuperPro® vs. Elnec BeeProg

Pin Drivers

Xeltek SuperPro® 144 Pin-DriverDesign

- Xeltek SuperPro universal programmers are equipped with 144-pin universal pin drivers to accommodate large pin count devices.
- One universal adapter accommodates all devices with the same package type.
- High quality materials used to improve production reliability.
- Multiple bottom adapters cause inventory nightmare. Keeping track of adapter variations would cause delay in today's production environment.
- Xeltek universal QFP64 cost: Averages $395 / adapter.

Elnec socket photo source: www.elnec.com

Elnec BeeProg 48-Pin Driver Design

- Special adapters (pin mapping) required to accommodate devices with more than 48 pins.
- The above scenario with the QFP64 adapter requires more than 60 variations of bottom boards for pin mapping.
- Inventory nightmare for packages greater than 48 pins.
- Repeated insertion causes pin ware out and reduces reliability.
- Elnec adapter cost: Average $385 / adapter. Cost of socket adapters and its variations could quickly rise over $20,000 just to support one package type: Cost of a single QFP64 adapter.

Device Count

Xeltek

A programmer is of no use if it doesn't support the IC device that needs to programming. Xeltek's mission is to support as many devices from semiconductor manufacturers as possible ahead of time.

- Xeltek had the largest device library in the programming industry, **over 83,000 memory devices supported** as of August 2012.
- Over 10,000 new memory devices added each year.
- Xeltek collect and support all new devices as it becomes available in the market.
- Requested device algorithm can be added within a week; average lead time from other manufacturers is over two months.

Elnec

- Currently support just over 70,000 devices as of August 2012.
- Each device added will most likely require a new bottom adapter design.
- New adapter design adds delay and increases cost to a project cycle.

Volume Programming

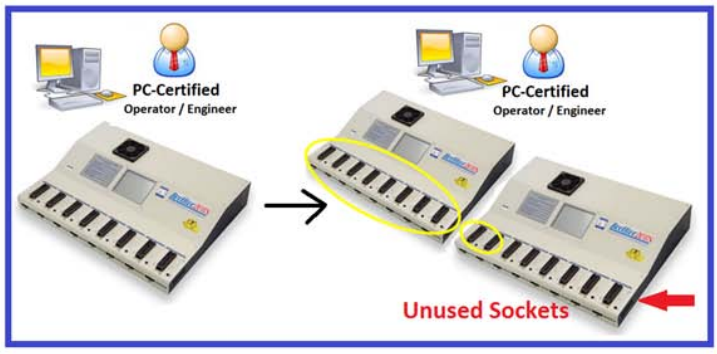
Seamless Migration to Volume Programming w/ Xeltek SuperPro Stand-Alone Programmers

Effortless to expand a project with Xeltek stand-alone programmers. There will never be unused sockets that consume extra space because stand-alone units could be added or removed based on application requirements.

- **Flexibility:** As project requirements change and production grows, the stand-alone programming mode gives flexibility for adding up to 15 programming units for volume production.
- **Lower Cost:** Stand-alone mode operates without a PC. Saves PC cost and maintenance fee. No experienced operator required, thus cutting cost on operator labor salary. **Less PC Malfunction = Increased Reliability**
- **Maintenance:** Gang programmers will cause delay when one socket breaks because the whole unit would be sent back for troubleshooting. With SuperPro stand-alone programmers, users can easily detach and send only the bad unit back. Production can resume with remaining units.

- **Security:** Project files are stored in the CF card so the original project files on the PC will not be tampered with.
- **User-friendly:** No PC knowledge is required during stand-alone mode. Operators can simply locate the project file from a CF card and run the program using a single button on the programmer.

Conventional Elnec Gang Programmer Setup



Multi-programming mode used by Elnec BeeHive208S halts manufacturing.

Elnec BeeHive208S photo source: www.elnec.com.

- **Additional cost** of maintaining a PC used with conventional 4/8 gang programmer setups. People tend to forget the cost of an additional PC when calculating overall cost.
- **Not User-friendly:** Elnec BeeHive204 requires an experienced operator to operate on a PC at additional manpower cost.
- **Expandability:** Maximum number of units allowed for connection is 8 (via a USB hub). In the SuperPro Stand-alone operation, limitation is the size of table space and length of arm of the operator.
- **Operator Reliability:** PC operation by an operator can lead to mistakes.
- **PC Reliability:** PC operation in the factory environment can lead to shut-down, crash, data contamination, virus infection and excessive noise that could interfere with equipment signals.
- **Data Security:** Data in a PC is susceptible to be copied and misused. Project files could not be removed for safekeeping.