

Configuration File & Memory Programming Software

Desktop Application Development

Database Integration

Manufacturing Tooling

CLIENT

A US-based company.

THE PROBLEM

The client's manufacturing process involved programming memory devices with configurations that varied — different products, different customers, different revisions — and they needed a way to define those configurations once, store them so they could be found and reused later, and then apply them to physical memory devices reliably, whether one at a time or dozens at once.

WHAT WE BUILT

We split this into two halves that work together but solve different problems. The first half is about getting the configuration right before anything touches hardware: a module where users enter system parameters, with validation built in so mistakes get caught at data-entry time rather than after a batch of parts has been programmed wrong. Every validated configuration gets saved to a database under a unique name, so it can be found and reused for the next batch without re-entering anything. The second half takes any saved configuration and programs it onto connected memory devices over a serial connection — either one device for a quick job, or up to 50 at once for a production run.

WHAT IT DOES

- ✓ Lets users enter and validate system parameters before any device is programmed, catching mistakes at data-entry time
- ✓ Stores every validated configuration in a database under a unique name for later reuse
- ✓ Programs any saved configuration onto connected memory devices over a serial connection
- ✓ Supports both individual programming for quick jobs and batches of up to 50 devices for production runs
- ✓ Programs a full batch of 50 devices in under 30 seconds once a configuration is selected

OUTCOME

The client's manufacturing team can define a configuration once, validate it before it ever touches hardware, and then reuse it across however many production runs need it — with the same toolchain handling a single test unit or a 50-device batch.