

Tier One Automotive Supplier Test Project Summary

A global tier one automotive supplier in Mexico needed to **lower total test cost and keep pace with SMT**. Their traditional test process separated ICT, programming, and FCT—creating a bottleneck before EOL and pushing too much verification to **end-of-line**, where it required extra stations, fixtures, and operators.



CheckSum Parallel Test Process Analysis - What We Unlocked

Bring Key FT Forward. Lighten EOL.

For the customer's **8-up CAN-module** project, our analysis showed that a single **ILS-X2—running sequential dual-panel handling with Quad-Core ICT**—can execute a **balanced two-bed flow**.

The Big Win: moving select functional tests to the panel level, which reduced EOL time, cut EOL tester/operator load, and trimmed fixtures/equipment—while keeping critical housing-dependent checks at EOL.

Operator Cost
Cut by 78%



Test Time
Reduced by
90.5%



5-Year Savings
\$600K
(fixtures + labor)

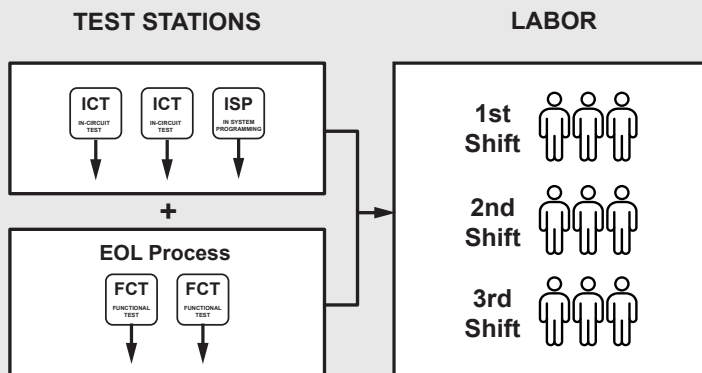


Why it Mattered:

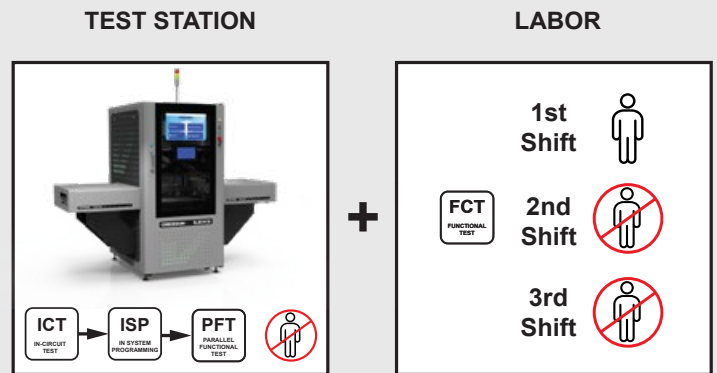
- **Faster Cycle & Handling:** One integrated cell replaces multiple handoffs.
- **Balanced with SMT:** Dual-panel + Quad-Core ICT keep pace with SMT TAKT time.
- **Lower Total Cost:** Fewer EOL stations, fewer operators, fewer fixtures; **>\$250kYear-1, ≈\$600k over 5 years.**

Current Process vs CheckSum

Current Process



CheckSum Automated Dual-Panel Parallel Test



Select FCT Steps
Conducted in Parallel

EOL = Reduced
Labor and Equipment

Parallel. Balanced. Flexible.

- **Parallel** - ICT + ISP + **PFT** in one automated cell - processing **two 8-up panels** per cycle to compress test time.
- **Balanced** - Dual-panel sequential process eliminates idle time unlocking **faster throughput** to keep pace with SMT.
- **Flexible** - Faster speed allows **key FT at panel level**, creating new options to mix concurrent/sequential strategies by product.



Results:

Substantial cost reduction, lean test cells, freed-up floor space, and higher throughput — uniquely enabled by CheckSum's **parallel test + parallel handling** architecture.

Here's What You Will Get with Your Free Project Analysis:

CheckSum's Parallel Test Consolidates ICT and ISP into One Automated Flow.

- **Application Review** – full evaluation of your boards and panels
- **ICT & programming analysis** – test coverage, time estimates, and programming feasibility
- **Functional test review** – opportunities for **Parallel Functional Test (PFT)**
- **Automated handling assessment** – one-panel vs. two-panel operation
- **Throughput & Capacity Estimate** – complete TAKT/capacity analysis
- **System Recommendations** – configuration tailored to your needs
- **Budgetary Cost Outline** – test systems and fixtures

Results:

Substantial cost reduction, enhanced quality, freed-up floor space, and higher throughput capacity — uniquely enabled by CheckSum's **parallel test + parallel handling** architecture.



Click Here: [Request a Free CheckSum Test Application Analysis](#)

With more than 30 years of experience and 4,000 systems deployed, CheckSum technologies meet the needs of the global electronics industry. Accuracy, stability and reliability combined with the industry's most innovative parallel test solutions produce the fastest production test speed available. CheckSum provides turnkey full-service solutions: test systems, fixtures, programs, and worldwide support.

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