



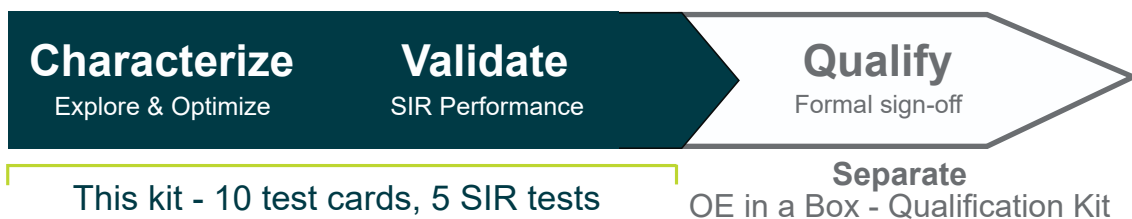
OBJECTIVE EVIDENCE PRE-QUALIFICATION KITS

Magnalytix Pre-Qualification Kits provide understanding through systematic investigation of material interactions, process parameters, and residue behavior. Process characterization represents the investigative foundation upon which reliable electronics assembly cleaning processes are built. While J-STD-001 Section 8 mandates process qualification, the standard implicitly recognizes that manufacturers must understand their processes before they can qualify them.



Applications: • New Process Development • Process Transfer • Troubleshooting
• Supplier Evaluation • Rework Process Development

Characterize, Validate, Qualify



Use any of the 10 cards for material and process exploration, then apply the five included SIR tests wherever your study needs them most — no fixed split required. Formal qualification is handled separately, by the OE in a Box Qualification Kit.

- Explore material compatibility
- Map process windows
- Optimize rework procedures
- Investigate failure modes
- Validate SIR performance using the five SIR tests included with the kit, following IPC-9202 protocols for sample size, test conditions, and acceptance criteria

Expected Outcome

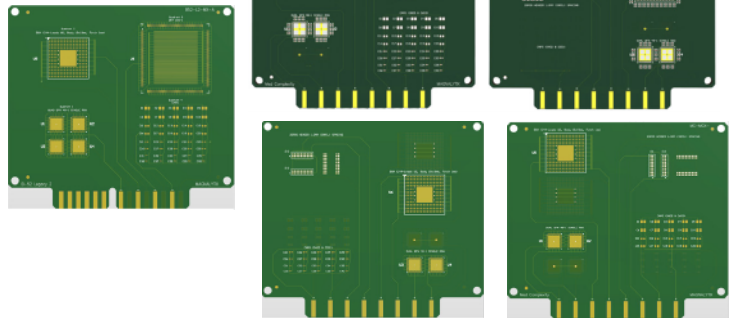
At the conclusion of a characterization study using this kit, your engineering team will have:

- Quantitative SIR performance data for candidate materials and process conditions
- Visual evidence of cleaning effectiveness under low-standoff components
- Defined process windows with upper and lower parameter limits
- Risk assessment for rework scenarios and cumulative thermal exposure
- Confidence in which process to advance to formal qualification
- Baseline data to compare future process changes or troubleshooting efforts

All Kits Include:

Test Vehicles

- SMT Essentials - B-52 Legacy 2 Test Boards
- Full Process – QMP Type B SIR Test Boards
- High Density – Mixed Technology SIR Test Boards



Component Sets

- Dummy components for all board positions, enabling realistic thermal mass, solder volume, and flux entrapment conditions
- Extra components specifically for rework characterization studies, including repeat reflow cycles, localized heating effects, and flux-on-flux interactions

Specialty Components

Ten RESIDVue Glass QFN (Quad Flat No-Lead) packages included, with transparent bodies that allow direct visual inspection beneath low-standoff components — the most challenging area to assess for flux residue.

Ordering and Support

The Pre-Qualification Kits arrive ready for use, including boards, components, and protective packaging for RESIDVue glass QFN packages. Five SIR tests are included with the kit; additional SIR testing beyond that is quoted separately. Test boards are unpopulated, and users must assemble them with provided dummy components using the candidate soldering process for characterization.

What's Next

Magnalytix's Objective Evidence in a Box simplifies the process of gaining a competitive advantage for your operations by providing a ready-made, standardized, and defensible report. We offer three kits tailored to meet your needs, allowing you to obtain results without any hassle.

For more information contact us at: www.magnalytix.com/PreQualify