



Obsolete Component Sourcing Checklist

A practical white paper for sourcing EOL, NRND and legacy electronic components without losing control of authenticity, traceability and engineering risk.

ENGINEERING RESOURCE - EOL / NRND / LEGACY

Prepared for procurement leaders, sustaining engineering teams, repair programs, quality managers and OEM/EMS buyers responsible for long-lifecycle products.

EXECUTIVE SUMMARY

Obsolete sourcing is risk management under supply pressure

When a component becomes obsolete, the buyer is rarely buying only parts. The buyer is buying continuity: production recovery, repair capability, warranty support, field service stability and time to redesign. The correct sourcing process must protect those outcomes.

EOLLIFECYCLE
TRIGGER**L3**SOURCE
EVIDENCE LEVEL**48h**INITIAL
FEASIBILITY
TARGET**100%**RISK RECORD
REQUIRED

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02	Evaluate source channels	04
03	Quality and authenticity controls	05
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Core principle

Do not treat obsolete inventory as a commodity search. Treat it as a controlled exception that requires part identity, source evidence, inspection planning and release criteria.

ERSA perspective

ERSA supports customers with global shortage sourcing, legacy component searches, replacement review and sample validation. The most successful projects provide the application context early: product type, required quantity, acceptable date code, and whether redesign is possible.

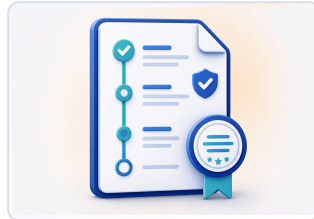
Start by defining the part, not the purchase

An obsolete sourcing request should begin with a complete part dossier. This prevents accidental substitutions and gives sourcing teams enough information to distinguish acceptable inventory from risky inventory.



Exact MPN and suffix

Capture every suffix, package code, temperature grade, revision and customer-specific marking.



Lifecycle evidence

Record EOL notice, NRND status, last-time-buy date and recommended replacement if available.



Application role

Identify whether the part is safety-critical, boot-critical, power-critical or cosmetic.



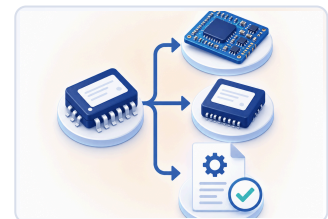
Quantity profile

Separate validation samples, immediate repair needs, annual demand and lifetime service reserve.



Date-code rules

Define acceptable date code, lot preference, storage requirement and humidity sensitivity.



Redesign flexibility

Clarify whether a drop-in replacement, board change or firmware update is possible.

Practical recommendation: Send the part dossier with your RFQ at [ersaelectronics.com/rfq](https://www.ersaelectronics.com/rfq). A richer request improves search quality and reduces the risk of receiving irrelevant offers.

SOURCE CHANNELS

Every obsolete source has a different evidence profile

Obsolete parts may come from authorized distributors, franchise residual stock, OEM/EMS excess, independent suppliers or open-market inventory. Each channel can be valid, but each requires a different level of verification.

Evidence levels

Define evidence as Level 1: basic quote only, Level 2: photos and date code, Level 3: traceability documents, Level 4: inspection or test report. High-risk programs should not rely on Level 1 offers.

Commercial discipline

Do not let a low price overrule source confidence. In EOL sourcing, the cheapest offer can become the most expensive failure mode.

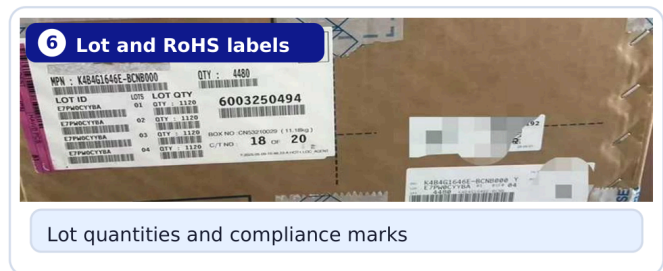
Channel	Typical advantage	Primary risk	Recommended control
Authorized residual stock	Strong traceability and predictable quality.	Limited quantity and strict MOQ.	Secure immediately after lifecycle notice.
OEM / EMS excess	Original production inventory may exist after project closure.	Documentation may vary by source.	Request photos, labels and source history.
Specialized independent supplier	Can locate hidden EOL inventory quickly.	Counterfeit or relabeled stock risk.	Supplier screening and inspection required.
Broker market	Useful in emergencies when no standard channel exists.	Highest authenticity and traceability risk.	Use only with strong quality gates.
Replacement part	May reduce long-term risk.	Engineering validation required.	Run cross-reference and sample validation.



SOURCE EVIDENCE REQUEST

What Evidence Should Be Requested Before Purchase

Before approving EOL or legacy inventory, buyers should request evidence that proves what stock exists, how it is packed, and whether moisture-control, traceability and logistics conditions are acceptable. Evidence should be reviewed before PO - not after parts arrive.



Evidence gate

- Request clear photos of outer cartons, inner packaging, anti-static bags and seals before PO.
- Verify MPN, quantity, date code, lot code, RoHS/MSL marks and logistics labels against the RFQ.
- Escalate when labels conflict, seals are broken, packaging is mixed, or source history is unclear.

Practical recommendation: Ask suppliers for label, packaging, seal, lot/date and logistics evidence before releasing EOL buys.

Quality control should be planned before the purchase order

Inspection is not a late-stage formality. It should be matched to the risk of the channel, component type and application. A buyer should know what evidence is required before approving the source.

Control	What it catches	When to use
Label and packaging photo	Wrong package, mixed lots, suspicious labels.	All EOL sourcing projects.
Visual inspection	Remarking, resurfacing, bent leads, corrosion, physical defects.	Independent and broker-sourced inventory.
X-ray or decapsulation	Die mismatch, internal defects, package inconsistency.	High-value ICs or high-risk sources.
Electrical test	Functional failure and gross parametric mismatch.	Critical ICs, power devices and repair-sensitive parts.
Traceability review	Missing chain of custody and questionable stock origin.	Medical, industrial, automotive-adjacent or controlled programs.

Practical recommendation: Ersa can support source screening, photo confirmation, date-code review and inspection coordination for qualified projects. Visit [Prototype Validation Samples](#) when you need samples before committing larger quantities.

Choose between buy, bridge, redesign and dual-track planning

EOL decisions often fail because teams treat sourcing as the only path. In practice, the right answer may be a temporary bridge buy, a controlled lifetime buy, a validated replacement, or a redesign plan.

Lifetime buy caution

A lifetime buy is only safe when storage conditions, demand forecast, shelf-life and product roadmap are realistic. Excess lifetime stock can become obsolete twice: first by manufacturer, then by internal design change.

Replacement caution

A replacement should not be approved solely by parametric similarity. Package, suffix, firmware behavior, thermal performance and compliance status must be reviewed.

01

Stabilize demand

Confirm immediate demand, service reserve and forecast uncertainty.

02

Search and classify

Separate clean stock, questionable stock, replacements and redesign options.

03

Validate samples

Use engineering samples to reduce uncertainty before volume purchase.

04

Secure continuity

Place controlled buy or create an approved alternate list.

05

Plan exit path

Define redesign, firmware update or platform migration when risk remains high.

CHECKLIST

Before buying EOL or legacy ICs

Use this checklist as a gate before purchase approval. It is intended for procurement, engineering and quality to review together.

- ✓ Original MPN, suffix, package, temperature grade and revision are confirmed.
- ✓ EOL or NRND notice has been reviewed when available.
- ✓ Application criticality and acceptable risk level are documented.
- ✓ Immediate demand, annual demand and lifetime reserve are separated.
- ✓ Acceptable date code, lot code and storage condition are defined.

- ✓ Source channel is classified and evidence level is recorded.
- ✓ Photos, labels and traceability documents are requested before PO where possible.
- ✓ Inspection or test requirements are agreed before purchase.
- ✓ Sample validation is complete or formally waived by the engineering owner.
- ✓ Reorder rule and alternate-source plan are documented.

Red flag	Why it matters	Action
Price far below market	May indicate counterfeit, reclaimed or unusable stock.	Escalate
No date code disclosure	Aging, storage and lot risk cannot be assessed.	Request evidence
Mixed packaging	Could indicate consolidated stock from multiple origins.	Inspect
Urgent pressure to pay	High-risk behavior in open-market sourcing.	Pause

A practical workflow for EOL projects

This workflow balances speed with control. It helps teams avoid endless searches while still protecting the product from avoidable supply risk.

When ERSA is a good fit

Hard-to-find ICs, shortage allocation parts, legacy repair stock, medical or industrial maintenance programs, and projects where procurement needs engineering-oriented source review.

When to redesign

If available stock is repeatedly high-risk, date codes are unacceptable, or long-term demand exceeds credible inventory, redesign may be the safer commercial decision.

01

Submit dossier

Part number, application, quantity, date code and risk constraints.

02

Global search

ERSA checks distributor, independent and regional supply channels.

03

Source screening

Offers are filtered by source confidence, documents and inspection feasibility.

04

Sample release

Evaluation samples support validation and internal approval.

05

Controlled supply

Approved stock moves into delivery, reorder planning or alternate strategy.

How ERSA supports obsolete component sourcing

ERSA combines sourcing reach with engineering-aware risk control. We are not only searching inventory; we are helping customers decide which inventory is usable for their project conditions.

01 Hard-to-find sourcing

Search support for obsolete, NRND, allocation and long lead-time components.

02 Source risk review

Supplier screening, evidence review, photo confirmation and date-code control.

03 Replacement support

Initial cross-reference review and sample sourcing for validation.

04 BOM and RFQ workflow

Submit part lists through the RFQ or BOM tool for faster structured processing.

Recommended next step

Start at <https://www.ersaelectronics.com/rfq> or upload a BOM at <https://www.ersaelectronics.com/tool/bom>. For validation samples, visit <https://www.ersaelectronics.com/prototpye-validation-samples>.

Website: www.ersaelectronics.com | Email: info@ersaelectronics.com