

BOM Risk & Cost Checklist for EMS Procurement

Catch the expensive lines before the RFQ goes out

The cost of a bad BOM shows up weeks later — as a stopped line, a distress buy, or a redesign. Most of it is preventable at the spreadsheet stage. This checklist is the walk-through: hygiene first, then risk, then the buying decisions.

How to use this: run sections 1–2 on every new BOM before it goes to quote. Sections 3–6 are the buying decisions that follow. Section 7 is where a sourcing partner fits — read it last.

1 BOM hygiene — fix the spreadsheet first

Every quoting error downstream starts as a sloppy cell upstream.

- Full MPNs, not truncated** — Complete manufacturer part numbers. The suffix carries packaging, tolerance and termination — a truncated MPN quotes as the wrong part.
- Manufacturer column, mandatory** — A part number without a maker is a guess. Every line names its manufacturer; “generic” is not a manufacturer.
- Lifecycle status column** — Active / NRND / EOL for every line, checked against manufacturer or distributor data, with the date you checked. NRND today is EOL soon.
- Approved-alternates column** — Pre-approved substitutes per line — even when empty. An empty cell is information: it marks a single-source line.
- Quantities reconcile** — Qty per board × build quantity = order quantity, and the reference-designator count matches the qty. Mismatches surface at the feeder, the worst place.
- Revision control** — The BOM carries a rev number and date, and every RFQ references the rev. Quoting rev B while engineering builds rev C is a classic self-inflicted delay.

2 Risk-score your BOM

Walk the BOM once and flag lines that match any of these:

- **Single-source** — no approved alternate on file.
- **EOL or NRND** — the clock is already running.
- **Allocation-prone categories** — MCUs, FPGAs, memory, power MOSFETs. These tighten first when the market turns.
- **Long-lead passives** — specific dielectrics, precision or high-power resistors, large-case MLCCs.

Tier	What qualifies	What to do
HIGH	EOL or single-source with no alternate; allocation-prone part with a long quoted lead time.	Secure stock at RFQ stage, before the build is scheduled. Start alternate qualification now.
MEDIUM	NRND; single-source but a common part; long-lead passive.	Buy ahead one build. Put alternate qualification on the plan.
LOW	Active, multi-source, short lead time.	Order on the normal cycle.

3 The 3-blocker rule

Most BOM delays trace back to a handful of line items — not the whole list. Everything else arrives on time and then waits for them.

- **Name the likely blockers at RFQ stage.** They are the HIGH-tier lines from your risk table, plus anything a distributor quotes with a shrug.
- **Quote them first, order them first** — ahead of the PO for the rest of the BOM if needed.
- **Track them separately.** A 200-line tracker hides the three lines that matter. Give the blockers their own status row in the build review.
- **Plan to the slowest line.** The build date is set by the slowest part, not the average lead time.

4 MOQ versus need

MOQ overshoot feels like waste. Sometimes it is the cheapest line on the build.

- **Do the arithmetic per line.** Overshoot cost = (MOQ – need) × unit price. Compare it to the cost of a stopped line or a distress buy at spot prices. For low-value passives the overshoot is often the smaller number — but calculate, don't assume.
- **Consolidate across builds.** If the same MLCC appears in three products, buy to combined demand — one MOQ, a better price break, one goods-in.
- **Check storage before you overshoot.** Moisture-sensitive parts have MSL handling limits; date-code-sensitive customers may reject old stock. Overshoot only helps if you can hold it.
- **Cut tape is for NPI, reels are for production.** Cut tape dodges the MOQ but costs more per unit and complicates feeder setup at volume.

5 Second-source discipline

- **Qualify alternates before the crisis.** Qualification done under line-down pressure skips steps — that is how a “same value, same size” part ends up failing in the field.
- **One qualified alternate per HIGH-tier line** is the minimum target. Start with the blockers from section 3.
- **Alternate means verified on your board** — fit, form and function tested, not matched from a parametric search.
- **Keep the evidence.** Which rev was tested, the results, who approved. That record is what lets a buyer switch the same day when allocation hits.
- **Re-check alternates yearly.** Alternates go EOL too, and quietly.

6 Lead-time buffers by category

Honesty note: as of mid-2026, typical franchised lead times run a wide range and move with the market. Treat this table as planning guidance, not quotes — verify per part at RFQ.

Category	Planning note
MCUs / FPGAs	Allocation-prone. Anything from stock to several months for specific parts. Secure HIGH-tier lines first; don't average across the family.
Memory (DRAM, NAND, NOR)	Price and lead time move together; the spot market is volatile. Re-quote close to the order date.
Power MOSFETs / IGBTs	Automotive and industrial demand cycles swing availability. Qualify alternates early.
Standard passives (common MLCC, chip resistors)	Often stock to a few weeks — but specific values, case sizes and dielectrics can run far longer. Don't assume.
Precision / high-power passives	Typically longer than the standard equivalent; smaller pool of makers.
Connectors / electromechanical	Commodity parts move fast; keyed and custom variants run longer. Check tooling status before committing a date.

A workable default: hold buffer stock on HIGH-tier lines to cover 4–8 weeks of demand, 2–4 weeks on MEDIUM, none on LOW. Adjust to your own build cadence.

7 Where an independent sourcing partner fits

The checklist above assumes your team fights every line itself. A sourcing partner takes on specific rows — the blockers, the EOL parts, and the import paperwork. Here is what **Nikivya Semiconductor** covers:

- **Blocker and EOL lines** — As an independent distributor, we search outside the franchised channel for hard-to-find, obsolete and allocation-constrained parts.
- **Stocked passives in India** — MLCC capacitors and thick-film chip resistors held in India — dispatch against PO, no import wait.
- **80+ manufacturer lines** — Sourced through a global agent and distributor network, one point of contact.
- **Predictable timelines** — Standard sourcing 4–6 weeks; emergency air 7–10 days.
- **One GST invoice** — Full import handling on our side — you buy in INR from a GST-registered Indian company, with the paper trail kept.

ABOUT NIKIVYA SEMICONDUCTOR

Independent distributor. MSME, IEC and GST registered. Send a BOM or a single part number — we reply with availability, price and lead time.

Send us your three blockers. We'll quote those first.

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