

This document includes two AI prompts that help you prepare a complete and structured request.

Prompt #1

I am preparing a request for Pilot Batch Manufacturing by the EnCata team and want to make sure my input contains enough information to start the work without delays, incorrect assumptions, or major redesign later.

Here is my current input:

"<<<INSERT YOUR INPUT HERE>>>"

At EnCata, a request for Pilot Batch Manufacturing should clarify the following areas:

1. Product and MVP overview

- What type of product or device is being moved into a pilot batch
- What problem the product solves and who the early users are
- The current state of the MVP: whether it is stable, demonstrable, and has been tested
- What has already been validated on the MVP and what is still uncertain

2. Pilot batch goals and validation purpose

- Whether the batch is intended for early paying customers, field testing, certification samples, crowdfunding fulfillment, investor or partner demos, or internal manufacturing validation
- What must be proven during the pilot batch: assembly repeatability, quality consistency, tooling behavior, yield, or readiness for larger production
- Which manufacturing assumptions should be validated first

3. Design freeze and production readiness state

- Whether the design is locked or still expected to change
- Whether BOM, CAD, and engineering documentation are final
- Whether DFM/DFA has been performed
- Whether firmware is stable and version-controlled

4. Batch size and unit configuration

- Target number of units in the pilot batch
- Whether all units will be identical or include variants (color, firmware build)
- Whether some units must be shippable to real customers

5. Electronics and PCBA readiness

- Current state of the PCB design: revision number, known issues, test points
- Whether the firmware is final, includes a production flashing procedure, and supports calibration
- Whether custom test fixtures or in-circuit testing are required
- Expected operating time, power profile, and any battery handling constraints during production

6. Mechanical, enclosure and tooling

- Approximate device size, weight, and material requirements
- Current enclosure technology and whether it must change for the pilot (3D printing, soft tooling, bridge tooling, CNC, quick molds, production-intent injection molding)
- Number and complexity of tooled parts
- Whether ingress protection (water, dust) or shock/vibration resistance applies

7. Assembly, QA/QC and test setup

- Whether assembly instructions exist and have been tested by someone other than the developer
- Required fixtures, jigs, and assembly aids
- Inspection checkpoints, functional test procedures, and acceptance criteria

- Expected yield target and how defects should be handled

8. Certification and compliance requirements

- Target markets and required certifications: CE, FCC, UL, RoHS, REACH, medical or other domain-specific
- Whether the pilot batch must produce certification samples
- Known compliance risks: antenna placement, RF shielding, materials, EMC

9. Components

- Whether component sourcing should be handled by EnCata or by the client
- Constraints on cost per unit at the pilot stage

10. Packaging, logistics and delivery

- Whether boxing and packaging design is ready or still required
- Labelling, serialization, and traceability needs
- Destination of the pilot units and shipping conditions (temperature, customs, regulated goods)

11. Timeline, budget, and downstream production

- Target dates: certification submission, crowdfunding shipment, customer delivery, trade show, next investment milestone
- Budget expectations or known limitations for the pilot batch
- Expected next step after the pilot: low-volume production, mass production, redesign for cost, or hand-off to another manufacturer
- Approximate target unit volume for the production run that follows

12. Existing materials, risks and open questions

- Available CAD, schematics, firmware, BOM, test reports, MVP units, supplier contacts, certification reports
- Engineering decisions that should not be revisited
- Known concerns about reliability, manufacturability, sourcing, certification, or quality

Your task:

- Identify missing, unclear, or weakly defined areas in my input.
- Structure your answer by the categories above.
- For each gap, briefly explain why it is important for Pilot Batch Manufacturing.
- Do not rewrite my request. Focus only on identifying gaps.

Important instructions for your response:

- When describing missing information, use clear and non-technical language whenever possible.
- Avoid unexplained engineering abbreviations or specialist terminology.
- Keep each clarification request short and practical.
- Focus on helping a non-engineering person understand what information is needed and why.
- If a technical term is necessary, briefly explain it in simple language.

Prompt #2

I am continuing preparation of my Pilot Batch Manufacturing request based on your previous analysis.

Here is my initial input:

"<<<INSERT INITIAL INPUT HERE>>>"

Here is the additional information I have provided to fill the gaps:

"<<<INSERT ADDITIONAL INFORMATION HERE>>>"

At EnCata, Pilot Batch Manufacturing requires clarity in the following areas:

1. Product and MVP overview
2. Pilot batch goals and validation purpose
3. Design freeze and production readiness state
4. Batch size and unit configuration
5. Electronics and PCBA readiness
6. Mechanical, enclosure and tooling
7. Assembly, QA/QC and test setup
8. Certification and compliance requirements
9. Components
10. Packaging, logistics and delivery
11. Timeline, budget, and downstream production
12. Existing materials, risks and open questions

Your task:

1. Re-evaluate the combined input (initial + additional information)
2. Identify what is still missing, unclear, or weakly defined
3. Structure your answer by the categories above
4. Based on the available information, compile a structured Pilot Batch Manufacturing request for EnCata

If some information is missing, make reasonable assumptions and clearly mark them as assumptions.

Structure the final request as follows:

1. Project overview
2. Pilot batch goals and validation purpose
3. Design freeze and production readiness state
4. Batch size and unit configuration
5. Electronics and PCBA readiness
6. Mechanical, enclosure and tooling
7. Assembly, QA/QC and test setup
8. Certification and compliance requirements
9. Components
10. Packaging, logistics and delivery
11. Timeline, budget, and downstream production
12. Existing materials, risks and open questions
13. Expected pilot batch outcome

Output requirements:

- A structured draft request for EnCata
- Clearly mark assumptions or missing data
- Keep the response clear and structured
- Do not include explanations outside of this output