

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

Prompt #1

I am preparing a request for Hardware Proof of Concept (PoC) development by the EnCata team and want to make sure my input contains enough information to start the work without unnecessary iterations or unclear assumptions.

Here is my current input:

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

At EnCata, a Hardware PoC request should clarify the following areas:

1. Product idea and technical goal

- What product or function is being explored
- What exactly should be proven or tested
- What technical principle is still uncertain

2. Critical hypothesis

- What is the main engineering question behind the PoC
- What may fail technically
- What must be validated before moving to prototype or MVP

3. Technical approach

- What technologies, mechanisms, sensors, materials, or methods are currently being considered
- Whether several technical approaches are possible
- Whether any approach has already been tested

4. Expected operating conditions

- Where and how the system should work
- Indoor or outdoor use
- Temperature, lighting, vibration, moisture, movement, noise, interference, or other environmental factors

5. Inputs and outputs

- What data, signal, movement, measurement, or physical response is expected
- Required accuracy, speed, force, range, or response time, if known

6. Electronics and control logic

- Whether the PoC requires sensors, motors, connectivity, embedded logic, firmware, or data logging
- Whether off-the-shelf modules are acceptable
- Whether power consumption or battery operation matters

7. Mechanical and physical setup

- Whether moving parts, fixtures, mechanisms, or temporary structures are needed
- Approximate size constraints, if any
- Whether the PoC should fit into an existing enclosure or physical space

8. Test and validation expectations

- What result would be considered successful
- What should be measured or observed
- Whether video, measurements, logs, or demonstrations are required

9. Existing materials and inputs

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- Sketches, photos, references, CAD files, sensor datasheets, test results, videos, or previous experiments
- Existing prototypes or partial solutions

10. Risks and uncertainties

- What is still unclear
- Known concerns about sensing, stability, mechanics, thermal behavior, signal quality, power, or repeatability

11. Business and development context

- Why this PoC is being developed now
- Whether the next step is prototype, MVP, investor demo, internal R&D, or technical validation
- Timeline expectations, if any

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 matters for PoC development

Important instructions for your response:

- Use clear and practical language
- Avoid unexplained engineering abbreviations or specialist terminology
- Keep clarification requests short and easy to understand
- If technical wording is necessary, briefly explain it in simple terms
- Focus on helping a non-engineering person understand what information is needed

Prompt #2

I am continuing preparation of my Hardware Proof of Concept (PoC) development 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, Hardware PoC development requires clarity in the following areas:

1. Product idea and technical goal
2. Critical hypothesis
3. Technical approach
4. Expected operating conditions
5. Inputs and outputs
6. Electronics and control logic
7. Mechanical and physical setup
8. Test and validation expectations
9. Existing materials and inputs
10. Risks and uncertainties
11. Business and development context

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 Hardware PoC development 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. Core technical hypothesis
3. What must be proven
4. Proposed technical approach
5. Operating conditions and constraints
6. Electronics, mechanics, and system setup
7. Test conditions and expected measurements
8. Existing materials and references
9. Risks and open questions
10. Expected PoC outcome
11. Recommended next development step

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