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Product Carbon Footprint for **runjepiviq**

Total: 218.18 kg CO₂e

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Carbon Footprint Overview

Total Product Footprint

218.18 kg CO2e

Per functional unit (1.0 unit)

Carbon Intensity

218.18 kg CO2e/unit

System boundary: Cradle-to-grave

Top Material Hotspot

Circuit Board

1.50 kg CO2e embodied emissions

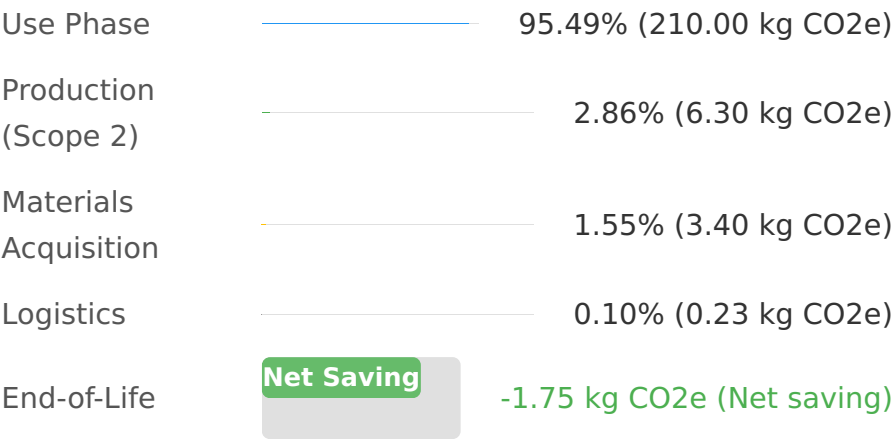
Primary Emission Scope

Scope 3 - Use Phase

Dominant impact from energy consumption

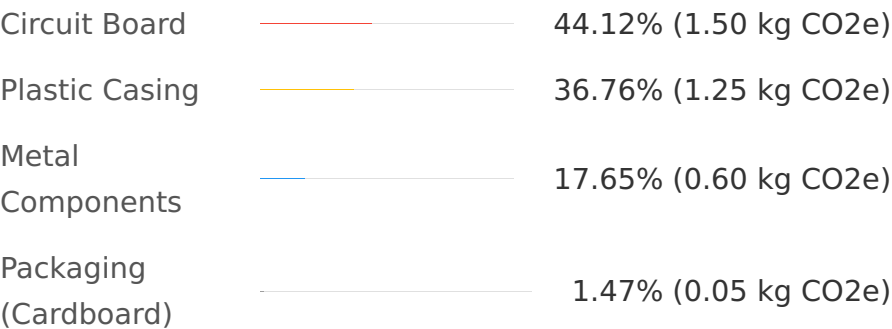
Lifecycle Stage Breakdown

Contribution to total positive emissions (219.93 kg CO2e)



Material Carbon Impact

Breakdown of 3.40 kg CO2e from materials



Key Insights & Hotspots

- **Use Phase Dominance:** The product's operational lifespan contributes overwhelmingly (210.00 kg CO₂e, ~96%) to the total footprint due to energy consumption. This is the primary area for intervention.
- **Renewable Energy Mitigation:** Despite significant energy intensity, 60% renewable energy use in production helps mitigate Scope 2 emissions, though the remaining grid electricity is still a notable factor.
- **Circular Economy Advantage:** High recyclability (80%) and robust circular/take-back programs result in a net carbon saving of -1.75 kg CO₂e at End-of-Life, demonstrating a positive circular economy impact.

Action Plan for Reduction

1. **Enhance Energy Efficiency in Use:** Implement product redesigns focusing on significantly reducing energy consumption during the 7-year operational lifespan.
2. **Expand Renewable Energy Sourcing:** Target 100% renewable energy usage at production facilities to further minimize Scope 2 emissions.
3. **Decarbonize Material Sourcing:** Collaborate with suppliers to procure lower-carbon and higher recycled content alternatives for key components, especially circuit boards and plastic casings.
4. **Optimize Logistics & Distribution:** Review and optimize transportation modes, routes, and load factors for both inbound and outbound logistics to reduce associated emissions.