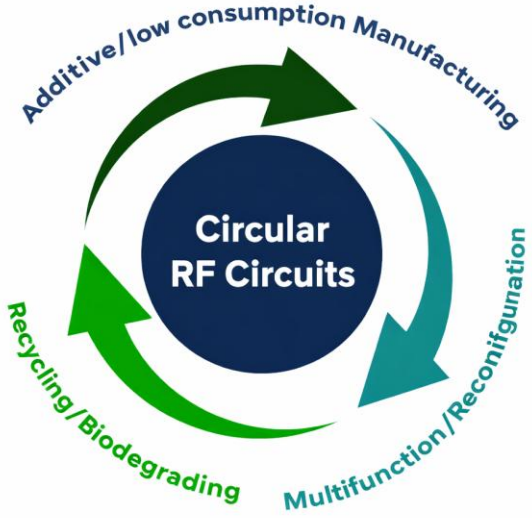
Circular RF Circuits

REACT

The large-scale deployment of RF circuits intensifies concerns regarding material consumption, manufacturing emissions and e-waste.

We propose a circular RF circuit that integrates design-to-recycle and sustainable manufacturing to minimise resource use, reduce emissions and strengthen material recovery and reuse.



APPROACH

- We manufacture RF circuits sustainably, reducing the energy, water consumption and carbon emissions
- We use recyclable or biodegradable metals/materials
- RF circuits are designed for enabling multiple functions or can be reconfigurable.
- A fully circular resonator enabling multi-factor sensing and identification

BENEFITS

- 5 bits, reprogrammable identification codes, broadband operation up to 7GHz
- Reduce material risk through increased recoverability of high-value metals
- Reduce the cost of consumables used for circuit manufacturing by recycling
- Reconfigurability reduces the replacement frequency of the packaged circuits
- Reduce greenhouse gas emissions and e-waste production

Looking for RF manufacturers interested in integrating sustainable solutions in fabrication processes

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