



Technological Advancements And Market Potential Assessment Of Ultra Low Power Nodes



Client	A leading electronics components manufacturer
Industry	Consumer/Electronics
Products	Electronics division of the company

Context

- Our client wanted to understand the technological advancements in ultra low power nodes, the potential for integrating sensors to improve efficiency, accuracy and profitability, and the market potential for new applications.

Our Key Business Questions

- What is the market potential by segment of ultra low power nodes in identified applications?
- How can ultra low power nodes be deployed across wide and inaccessible environments in new applications across diverse areas?
- What is the status of research into ultra low power nodes and what future industry changes can be foreseen?
- Who are the key players and what is the status of their technology/patent portfolio?

Engagement Scope

1	Industry Understanding	2	Technology Mapping	3	Players Mapping	4	Key Technology Developments
<ul style="list-style-type: none"> Understanding the various energy models for the design of ultra low power nodes for identified applications. Identifying the specific design elements according to the specifications of the application. Analyzing the design requirements for minimizing power consumption. 	<ul style="list-style-type: none"> What is the approach to mapping technologies for various applications? What are the major design aspects from various vendors for each application that are the focus for development? 	<ul style="list-style-type: none"> Identify the activity of leading vendors regarding: <ul style="list-style-type: none"> Lowering power consumption Process nodes Design aspects Increasing functionalities 	<ul style="list-style-type: none"> Who are the key players that are investing heavily in the ultra low power node segment? What are the key developments currently taking place in this segment? What logic/memory architectures are under development? What is the market potential for new applications? 				

Research Methodology

Secondary Research

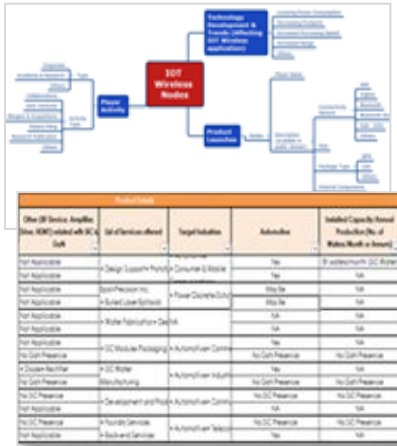
- Conducted desk research studying various design models, identifying key players across the value chain, and analyzing annual reports, press releases and industry overviews.
- Researched paid data sources, including vendor databases and electronics association reports.

Primary Research

- 80+ telephone interviews with suppliers and industry experts.

Sample Analysis

1 Supply Chain Identification



2 Vendor Filtering

Name	Location	Financials	Other
Vendor 1	USA	High	Low
Vendor 2	USA	Medium	Medium
Vendor 3	USA	Low	High
Vendor 4	USA	High	High
Vendor 5	USA	Medium	Low

Benefits to Client

- We helped our client both to identify various design models for deploying ultra low power nodes and to increase market penetration.
- Our report is being used by our client's electronics division to understand current technology developments and the market potential for newer applications in areas of interest.

3 Technology Mapping



4 Key Technology Developments

Patent Insights

Thank you

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