# Article information:

Bidirectional DC-DC converter using secondary LLC resonant tank | IEEE Conference Publication | IEEE Xplore  
<https://ieeexplore.ieee.org/document/7104639>

# Article summary:

1. A bidirectional Secondary LLC (SLLC) resonant converter is proposed to have high gain LLC resonant characteristics in the bidirectional power transfers.

2. An 1kW prototyped bidirectional SLLC resonant converter is built and tested to verify the validity and applicability of the proposed converter.

3. The proposed bidirectional DC-DC converter using SLLC resonant tank can be operated with the high gain characteristics in both directions of power transferring as with the conventional LLC resonant converters.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article provides a detailed description of a new type of bidirectional DC-DC converter using secondary LLC resonant tank, which is designed to provide high gain LLC resonant characteristics in the bidirectional power transfers. The article also presents an 1kW prototype of this converter that has been built and tested to verify its validity and applicability.

The article appears to be reliable, as it provides evidence for its claims through the testing of a prototype device, as well as providing references for further reading on related topics. However, there are some potential biases that should be noted when considering this article. For example, it does not explore any counterarguments or alternative solutions to the problem being addressed, nor does it discuss any possible risks associated with using this technology. Additionally, while it does provide references for further reading on related topics, these references are all from IEEE publications, which may indicate a bias towards IEEE publications over other sources of information.

In conclusion, while this article appears to be reliable overall, there are some potential biases that should be taken into consideration when evaluating its trustworthiness and reliability.

# Topics for further research:

* Bidirectional DC-DC converter design
* LLC resonant tank characteristics
* Bidirectional power transfer applications
* Prototype testing of DC-DC converters
* Alternative solutions to DC-DC converter design
* Risks associated with DC-DC converter technology

# Report location:

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