



Niharika Computational Engineering
Solutions Pvt Ltd

Semiconductor Industry vertical

Case study

Turn key thermal cooling solution for high heat Flux power amplifier (GaN RF module) assembly





Client: Bharat Electronics Limited

Duration: Six weeks

Description of the work:

The project scope is to develop a turn-key thermal cooling solution for a power amplifier unit (GaN RF module) employed in one of the critical defence telecommunication systems for Bharath Electronics Limited, a Government of India Defence Enterprise.

The cooling solution we developed is with locally available resources due to procurement challenges faced by Bharath Electronics.

Our domain expertise and strong fundamentals in theoretical heat transfer have enabled us to arrive at a conceptual design. Computational Fluid Dynamics analysis technology is used to assess the performance of our conceptual design, and the analysis results have enabled us to make smarter product decisions and accelerated our Innovation process.

Tests on the prototype have shown that the accuracy of our predictions is very high, and our solution meets all the functional requirements.

Niharika Computational Engineering Solutions Pvt Ltd

No.716 (35), JC Plaza, Rajajinagar 3rd block, Bangalore-560010

Karnataka State, India, www.nicecae.com