

Case Study

Project Name : Insular Bag PCB

About Client : Our client operates in the B2B market segment and specializes in providing products to restaurants, delivery and packaging industries. Among a variety of products they provide, they particularly have an edge in manufacturing high quality thermal bags for storing/transporting edible items while keeping it warm.

Client Need : The client needed us to design and develop a board that would seamlessly integrate with their electrical connections to the thermal bag which would be powered from a car/ bike power socket. Its main focus would be to maintain the temperature of the thermal bag within an acceptable range.

Project Scope :

1. Design a board for temperature control at 60 degree Celsius.
2. Manufacture and assemble the board.
3. Deliver the board after due testing.

Solution Offered : Avench Systems offered a solution which involved developing a design capable of meeting our client requirements. We constructed a board which was housed inside a car adapter. Through this arrangement we were able to get the setup powered inside a car and at the other end the car adapter containing our board was connected to the thermal bag developed by our client. Our team was able to achieve the desired temperature conditions of 60 degree Celsius and was able to maintain that temperature with the help of a thermistor.

Major Tech Used :

1. RENESAS R5F102AA Microcontroller.
2. RICOH 5432V420BD-FE battery balancing IC.
3. ST Microelectronics STCC2540 charging IC.

Conclusion: The successful completion of this project saw an important business partnership emerge out of this. Our team at Avench was able to obtain full job satisfaction out of this endeavour. Our client was impressed by the quality and timely product deliverance. We learnt how an efficient technical team's effort can be multiplied many times by supplementing it with an able and efficient project management team.