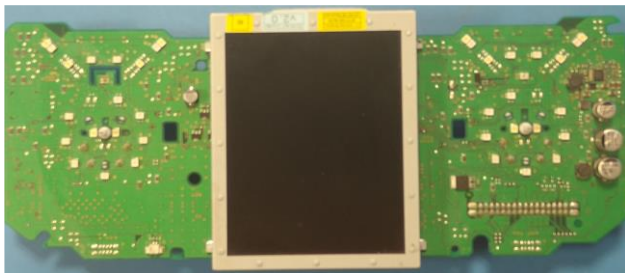


**Background**

Nippon Seiki are a leading designer and manufacturer of vehicle instrument displays. The manufacturing cost of a of one of the instruments displays and a head up display unit that Nippon Seiki supply to a major vehicle manufacturer were uneconomic to manufacture at the agreed sales price.

**Solution**

Tactiq reviewed the electronics design in detail. The overall architecture and design was reviewed to identify opportunities for cost saving while meeting all of the current specifications and interfaces. The detailed design was reviewed analysing each sub-system for alternatives and cost reduction opportunities. Every component was analysed to identify the security of supply and pricing and the available alternatives which met the stringent environmental and quality specifications but were available at a lower price. The manufacturing process was reviewed and opportunities to reduce assembly and tests costs identified.



Reports were generated for each vehicle display system with a range of options for reducing manufacturing cost and ensuring a long manufacturing life for the products. The options ranged from straight forward component changes to optimisations of the current architectural design to development of custom integrated circuits to minimal product cost.

The client selected changes which consisted of sourcing changes, detail design optimisations sub-systems. This achieved double the target cost savings with relatively low risk as the higher level architecture and interfaces were unchanged allowing verification to be focussed only on the areas changed. This changed loss making products into a profitable ones.



The client was so pleased with the outcome that they are considering adopting third party review of production designs to enhance manufacturability and reduce costs for all new display electronics.