



„Adding new functions to a proven ventilation system with strict requirements? That’s when I called Elektrosil.“

Adding new innovative features to an already established product and thus contributing to its permanent upgrading can be a cost- and time-saving option.

THE CHALLENGE

Automated and self-regulating air conditioning systems increase the efficiency of fluid flow machines and can contribute to more climate comfort in vehicles or make the cooling of appliances more sustainable – but budget, schedule and technical requirements for the fan platform do not always allow completely new solutions to be developed.

THE SOLUTION

Elektrosil used an existing and well-proven fan platform and expanded it with a humidity and temperature sensor system to enable self-regulating, selective and demand-oriented air conditioning.

The existing PCB of the fans was adapted in such a way that a special CMOS sensor could be embedded - without having to significantly change the geometrical parameters of the fan. The result: the hardware could be further integrated into the respective applications despite the sensor extension.

In addition, the operating software was expanded to read out the sensor data, to check its plausibility and to process it further. Furthermore, the data could be integrated into a LIN protocol, for example, and processed by a higher-level control unit.

In this way, a well-proven product was innovatively upgraded with additional functions without losing its compatibility. The customer also saved a more costly system expansion, as the additionally data could be integrated into existing protocols and interfaces. The upgrade was cost- and time-efficient, as it did not require a completely new development with the associated effort.

OUR STRENGTHS

- Great expertise in the product area of cooling solutions
- In-house development of hardware and software
- Trustful and fast cooperation with the customer
- Extensive know-how in PCB design and manufacturing
- Experience in integration into existing systems with demanding parameters
- Implementation of ASPICE requirements

Are you also looking for a custom-fit solution for your system and a competent partner? Then give us a call: +49 40 840001-0.

Project information

- Client: internal project
- Product area: cooling solutions and fans
- Sectors: across the board from automotive to industry
- Project size: > 100,000 units
- Services: Software development, hardware integration, project management, testing

Elektrosil's services

- Application consultation, development assistance, design-in support
- Quality assurance
- Engineering and production
- Completely customised applications