

Touch Technology

APAGCoSyst designs and manufactures automotive electronics controlled with touch – an elegant feature growing in various applications in luxury cars.

With the proliferation of smartphones, the user's intuition is increasingly familiar with a display surface extended to be an interface. Touch technology facilitates this extension. Touch-based systems do not even need contact, they can respond simply with an approach. These capacitive touch systems are increasingly common especially in applications without a display. They are replacing mechanical switches in dashboards, central consoles, and overhead consoles – often with integrated indicator lighting. They could also be in door handles or used for controls on steering wheels.



We develop systems based on 'self-capacitance' (approach) or 'mutual-capacitance' (contact). We can integrate sensors on PCBs, foil, or mesh. We can also provide haptic feedback. Signal processing is either discrete or using an integrated touch controller. The trend, for cost efficiency, is to use a discrete signal processing system. We understand the need for EMC optimization and can develop mechanisms such as guard channels, 'sample hopping,' or the requisite software filter to avoid an operating error.

We are your ideal partner for a touch surface control solution.



Specifications

- Capacitive touch technology
- Interior switches and controls
- Capacitive buttons, sliding and rotary controls
- Touch in 3D components
- Self-capacitance and mutual-capacitance systems
- Various touch technologies from discrete to SOC
- IML touch films
- Combination with IMD decoration methods
- With 'flat applications,' possibility to integrate touch structures on the PCB
- Guard channels and Sample hopping for EMC optimization and to avoid operating errors