

Custom Capacitive Touch and Graphic Overlay Design and Manufacturing Service

The incorporation of capacitive touch technology into every day devices such as smart phones and tablets has created an expectation for all other devices to follow suit. This expectation is driving engineers and product designers to integrate capacitive touch into their new products. However, these engineers soon realize that learning and implementing a capacitive touch interface design is not trivial and requires a huge investment of time and money.

The first hurdle they face is the design examples provided by chip manufacturers are far from what would be used in real projects. The practical tradeoffs that can be made while doing the sensor layout are not thoroughly explained. No emphasis is made on the effect of the graphic overlay on button sensor reliability. Lighting and tactile feedback add another layer of challenges to this already complex design process.

With over **three years** of capacitive touch interface design and manufacturing experience serving clients in a range of industries, we at Blue Sparq, Inc. have the answers to all the above mentioned issues and more.

- We possess the expertise to develop driver electronics for film and pcb based capacitive touch keypads.
- Our Fast Touch™ system has enabled us to use different **overlays**, add **haptics**, **audio feedback** and **lighting** to capacitive touch interfaces.
- We also possess the graphic design skill required to convert napkin sketches of interfaces into modern looking graphic overlays.
- This unique engineering and graphic design expertise allows us to achieve the highest performing capacitive touch keypads for our clients.
- All of this coupled with the **rapid prototyping** capabilities of **RapidKeypads.com**, enables us to design and develop prototypes quickly and efficiently.

Once these prototypes are approved, we can manufacture the production quantities required and deliver it to our clients in a timely manner.

Overlays

Use any non-conductive material such as safety glass, acrylic, and other plastics

Tuning

Robust noise rejection algorithms tune out false button presses

Haptics

Feel the sensation of a "click" upon button actuation

Audio Feedback

Hear a custom sound upon button actuation

Lighting

FORE LIGHT™
Uniform lighting while maintaining a thin profile

Communication

UART (RS232 & RS485), SPI, I2C and USB HID, and more



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www.BlueSparq.com www.RapidKeypads.com

Visit our web site or call (239) 558-8810 for additional information.

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