



JABIL

Human Machine Interface

Applying Deep Expertise with Interactive Components

The proliferation of IoT products has dramatically increased expectations for ease-of-use. When industrial controls are as clear as a smartphone app, operators work quicker with fewer errors. When a consumer device is sleek and intuitive, brands shine and sales increase. And when there's a choice between a tactile touchscreen and a traditional interface, buyers choose what's innovative.

Jabil — Partnering with Top Brands

The most-recognized brands worldwide and their OEMs partner with Jabil for its deep expertise with interactive components for human-machine interface (HMI) — touchscreens, sensors, and tactile, haptic feedback. From design through manufacturing, from factory controls through consumer medical devices, Jabil helps integrate these diverse technologies into products that feature user-friendly HMI.

Haptic technology is a particularly critical advance in HMI. With controls and devices, Jabil uses the sense of touch both to direct a machine and to guide a user. For example, in an excavator, an operator can use a soft touch on the control to lighten hydraulic force for a slow and careful dig. At the same time, if the machine encounters hard rock, it can add resistance to the control, guiding the operator to use more force. To both react to and guide user responses, touchscreens can use a variety of haptic technologies including ultrasonic vibrations, electroactive polymers, and microfluidics.

Diverse Applications

Jabil focuses on developing, exploring, and mastering these and other HMI technologies, and Jabil is uniquely able to implement them with innovative design and cost-effective manufacturing techniques.

- Capacitive/discrete/resistive touchscreens
- 3D gesture recognition lasers and optics
- Voice recognition microphones and acoustic testing
- Haptic feedback (touch-based signals and responses)
- Sensors — light, proximity, current/power, environment, motion, flow, and others
- IoT architecture



The most-recognized brands worldwide and their OEMs partner with Jabil for its deep expertise with interactive components for HMI.

Learn about all Jabil design, engineering, manufacturing, packaging, and supply chain capabilities at www.Jabil.com.