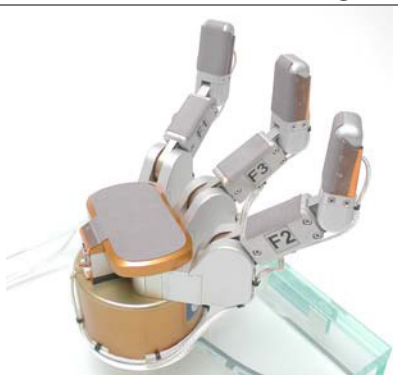
RoboTouch™ Tactile Sensors with Digital Output for the Barrett Hand



PPS Sensors on the Barrett Hand


Close-up of PPS Sensors on a Barrett Finger

PPS RoboTouch systems were developed to give robotic hands the sense of touch. The Barrett Hand Configuration neatly covers all hand-object contact points of the Barrett Hand using 7 sensor pads.

- 1 Palm Sensor (24 elements at 10x10mm resolution)
- 3 Mid-Digit Sensors (each with 24 elements at 6x6mm resolution)
- 3 Fingertip Sensors (each with 22 elements at 6x6mm resolution)

Each individual pad is constructed using our patented capacitive-based pressure sensing technology, ensuring the high sensitivity needed for tactile applications. Data from each pad is processed by a dedicated PSoC with an I^2C output, which can be directly integrated with your application or connected via our USB DAQ kit.

The RoboTouch system is available as a basic kit or as a fully integrated solution

- RoboTouch Basic includes 7 sensors molded to a 3D model of Barrett Hand for easy customer mounting and an API library. A DAQ kit including visualization software is available separately.
- RoboTouch Complete includes the RoboTouch Basic system, DAQ Kit and protective skin. Your system will be mounted and wired by our engineers.

System Capabilities:	
Pressure Range:	0-20 psi (0-140 kPa)
Sensitivity:	200:1
Repeatability:	< 2%
Sample Rate:	30 Hz
Temperature Range:	-40 to +85 C
Thickness:	< 0.5 mm
Sensing elements per pad:	20-24
Number of pads:	7
Interface:	I^2C

RoboTouch Sensors and DAQ Kit

