

# ForcePad

**Product Brief** 



## Overview

Synaptics ForcePad® is a game-changing member of the Synaptics TouchPad<sup>™</sup> family that alters the human-machine interface by delivering a new dimension to TouchPad control. In addition to being a quality TouchPad, ForcePad detects per-finger pressure or force sensitivity. By varying the amount of pressure applied, ForcePad is engineered to enable more intuitive and precise user interactions in both operating system controls and applications.

ForcePad, the next generation of the capacitive TouchPad portfolio, is a multi-finger, variable pressure detection, button-less TouchPad, which maximizes the gesture area that is ideal for a fast and fluid Microsoft® Windows® experience.

This new TouchPad offers variable pressure detection, which allows for more efficient, and ergonomically-friendly gesture motions; easy and standardized programming model for developers; and more intuitive application-based user-interactions.

## Applications

ForcePad is very thin, and, because it does not require additional buttons, it is designed for larger surface areas that are compatible with Microsoft's TouchPad size recommendations.

No hinge. No button switches. Perfect for 2-in-1 PCs, which require thin components or other types of thin, light notebooks. OEMs can increase battery capacity by giving back more volume to the system for battery and cooling. ForcePad does not require tactile switches or hinges for button activations, allowing more space to be used for multi-touch gestures.

# Features and Benefits

#### **Multi-finger Pressure Detection**

In addition to best-in-class image sensing performance, ForcePad detects up to 5 fingers of variable pressure, at 6-bit resolution and up to 1000 grams of force.

#### Force-enhanced Gesture Continuation

Multi-touch gestures now benefit from forceenhanced gesture continuation technology, which allows more complete control (such as variable speed control) and eliminates repetitive motion.

#### **Application Control**

Synaptics' ForcePad API provides new pressure capabilities that enable software developers to deliver more control directly through the TouchPad, resulting in a smoother, more immersive user experience, and provides more control with fewer menus and buttons.

#### Auto-calibration

The auto-calibration feature solves a major challenge with mechanical ClickPads today: an inconsistent experience resulting from variance in ClickPad mechanical designs and click force feel.

# Uniform ClickEQ Click Anywhere Technology

Synaptics ClickEQ technology means no dead zones and drives the best user experience. This enables the accuracy and functionality of today's TouchPad technologies with image sensing fulltime finger tracking, and supports Windows gestures.

#### Industry-leading Gesture Suite

Synaptics Gesture Suite™ provides the industry's most comprehensive multi-touch gesture library, including Windows gestures and force-enhanced gestures that "just work out of the box."