

# Optical Finger Nav System Targets Portables



Avago Technologies , a leading supplier of analog interface components for communications, industrial and consumer applications, today announced a new miniature optical finger navigation (OFN) input system for use in a variety of mobile and consumer electronic devices. Avago's OFN solution is user-friendly and targets designers of electronic devices such as mobile phones, MP3 Players, Ultra-Miniature PCs, Game Pads, Digital Cameras and keyboards.

Building on its optical navigation sensor technology that was pioneered in 1997, Avago's OFN features a low-power architecture and power management modes, making it ideal for use in battery- and power-sensitive applications. Moreover, it is capable of high-speed motion detection of up to 15 inches per second (ips). It also has an on-chip oscillator and integrated LED to minimize external components. Due to the fact that there are no moving parts in this OFN solution, end-users benefit from a device that is highly reliable and requires little or no maintenance. Additionally, precision optical alignment is not required – enabling high volume assembly.

Since 2007, all major cell phone manufacturers have begun to replace 5-way rocker switches and trackballs with OFN solutions. With the successful adoption of OFN, manufacturers are now shipping millions of cell phones and other handheld electronic devices to customers throughout the world with this innovative technology. To date, Avago has shipped a combined total of over a billion optical navigation sensors to a wide range of global customers.

### Key OFN Features

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- Low power architecture
- Surface mount technology device
- Self-adjusting power-saving modes for longer battery life
- Self-adjusting frame rate for optimum performance
- Motion detect pin output
- Internal oscillator – no clock input needed
- Selectable 250, 500, 750, 1000 and 1250 cpi resolution or auto
- Dual 2.8V/1.8V or single 2.8V supply options
- Selectable Input/Output voltage at 2.8V or 1.8V nominal
- Serial peripheral interface (SPI) or Two wire interface (TWI)
- Integrated chip-on-board LED compliant to eye safety standards
- Pb-Free and RoHS compliant

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