Human Interface Devices (HID) for Easy Connectivity

Microchip's USB and I²C™ Solutions for 2D Touch and 3D Gestures

Summary

The Human Interface Device (HID) protocol enables the automatic and seamless installation of new input devices on most operating systems. The concept of "plug and play" functionality has now become the norm for a wide range of applications. USB HID class devices include traditional peripherals—such as keyboards, mice and game controllers—as well as new hybrid products. To address the need for easy-to-integrate communications in the rapidly-evolving touch-sensing market, the HID protocol also allows direct communication to the host over the I²C™ bus for both Android™ and Windows® operating systems. This enables the development of innovative touch-controlled devices for a variety of embedded applications including Point-of-Sale (POS), smart TV remotes and gaming.

HID-Compliant Electronics Solutions

Incorporate seamless HID connectivity into your latest design with our wide variety of HID-compliant solutions. Our 2D touch controller and 3D gesture solutions will help reduce your product development time, relieve you of the task of writing/updating drivers and speed your time to market. We offer turnkey products like our MTCH6XXX touch controller family, as well as software libraries, which allow you to create a human-interface solution that is customized to meet your requirements and offers out-of-the box use with Windows, Linux® or Android operating systems. Our HID-compliant solutions are available for USB-connected peripherals as well as embedded designs which implement HID over the I²C bus. Source code is provided under a royalty-free license agreement.

Industry's First USB-HID 2D/3D Touchpad

The 3DTouchPad is the world's first development platform for 2D touch and 3D gestures for the PC market. It is an innovative blend of our 2D projected-capacitive touch solutions and our patented GestIC® technology for 3D gesture recognition.

3DTouchPad (DM160225)

Features

- Connects to a PC via a USB cable
- USB-HID protocol for automatic installation
- State-of-the-art 10 finger touch tracking
- 2D surface gestures and 3D free-space gestures
- No driver required

Working seamlessly on all major operating systems, the 3DTouchPad offers a comprehensive set of features to enhance your productivity daily as you use your PC. It demonstrates how easy HID support enables the driverless installation and use of peripherals.

The available library of gestures can be used with your existing software. These gestures offer an intuitive and easy method to control content flow. For example, you can review the results of an image search in your web browser by using left and right flicks of your hand. You can control a presentation, view pictures or manage your music player with the same ease of use. Our GestIC technology allows you to control the volume of an audio player using the natural rotation of your hand to implement the Air Wheel feature.

The 3DTouchPad SDK/API offers additional features to help you implement gestures for PCs using the USB-HID protocol.

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Access to Algorithms

The mTouch® technology algorithms for proximity, buttons, sliders and touchpads are open firmware-based solutions that can be ported to our PIC® microcontroller families consisting of more than 500 products.

You get complete access to these algorithms to integrate them into your system. This enables you to differentiate your products from the competition, easily maintain them over their product life cycles and adapt them to new and different use cases with field upgrades.

It also allows easy integration of additional functions into a single microcontroller to further reduce size and cost.

Getting Started

Microchip offers turnkey products and development kits to get you started with our low-power 1-2-3D touch and input sensing electronics solutions.

Development Tools from Microchip

Part Number	Platform	User Interface	Description
DM160225 	3DTouchPad	2D + 3D	**3DTouchPad:** Dedicated PC and PC peripheral development kit supporting 2D touch including surface gestures, 3D free-space gesture recognition and 3D motion tracking. SDK/API available.
DM320016 	MTCH6301	2D touch	**Projective Capacitive Touchpad Development Kit:** Development kit to create rich, PCAP-based user interfaces with full X-Y coordinate output.
DM160219 	MTCH6102	2D touch, lowest power	**Low-Power Projective Capactive Touchpad Development Kit:** Development kit to create rich, low-power PCAP-based user interfaces in applications such as wearable devices with full X-Y coordinate output and surface gesture recognition.

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www.microchip.com/mtouch

Visit our web site for additional product information and to locate your local sales office.

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Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
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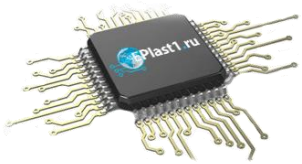
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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