

Product performance

Description:

This product is a Bluetooth wireless optical mouse, dedicated, PS3 and PC host, the host of three key (Left key/Middle key/Right key) with the wheel.

This product incorporates TOD3003 Bluetooth® Single Chip for HID, External 12MHz oscillator oscillation, coupled with the EERPOM AT24C128 (8K Bit) control, The TOD3003 is a highly integrated single chip Bluetooth device with a stand-alone baseband processor and integrated 2.4 GHz transceiver and is compliant to Bluetooth 2.0. This chip is specifically designed for applications in wireless input

devices. Built-in firmware is fully compliant to Bluetooth® Human Interface Device (HID) profile. Wireless module frequency coverage: 2402-2480MHz, Channel: 79, data modulation mode: FSK. Antenna type: IFA, Antenna gain: 3.3dBi (Max) ; Compliant with Bluetooth® Specification V2.0 ; Compliant with Bluetooth® HID profile version 1.0 ; Support AFH ; Embedded 8-bits 'C51 compatible Micro-Controller; Internal 128 kB mask ROM and 8 kB SRAM;

Working (movement principle):

Through the PS3/PC Bluetooth wireless technology, and this product for wireless connections, transport communications.

The TOD3003 output three keys, that is, the LEFT KEY, KEY, KEY MIDDLE RIGHT) with wheel

1. product

1.1. describe:

Bluetooth wireless optical mouse with PS3 host and PC host wireless connections to use, original by cable connection, the use of cable connections are causing activities distance is limited, this product adds Bluetooth technology, not only can improve distance limitations, effective distance up to 10 meters, and can host internal or external Bluetooth device wireless communication, the PS3 and PC notebook normally built-in Bluetooth wireless communication device, so simple, easy-savings.

Bluetooth wireless optical mouse is a PS3 and PC peripheral controller, connected directly to the PS3 and PC host to support operations.

Built-in KEY LEFT .MIDDLE.RIGHT and pulley.

Compliant with Bluetooth® Specification V2.0 .

Compliant with Bluetooth® HID profile version 1.0 .

Support AFH .

Embedded 8-bits 'C51 compatible Micro-Controller.

Internal 128 kB mask ROM and 8 kB SRAM .

1.2. work principle (action):

1.2. 1. wireless work principle:

wireless connect:

Frequency hopping technology with AFH Bluetooth, This product incorporates a separate baseband processors and integrated 2.4GHz transceiver, Bluetooth 2.0. Use 2.4 G wireless data communication with PS3 console(or bluetooth adapter). Wireless module frequency coverage: 2402-2480MHz, Channel: 79, data modulation mode: FSK. Antenna type: IFA, Antenna gain: 3.3dBi (Max) .

Bluetooth wireless optical mouse with a matching key (key), Pairing and connection LED (LED1) direct-mount 2 AAA batteries 3V, turn the power switch, the LED light in 2.04 seconds.

Press the pairing key (key), Pairing starts blinking, blinking LED in time: 1.28 seconds off once, paired up to 180 seconds. Enter search status. start Host Bluetooth device finder, search for Bluetooth devices around the Host, such as Bluetooth wireless optical mouse (named: Bluetooth Mouse) is found,

entering the line; to Host last display appears when installation is complete, ", now Host the registration was successful, Bluetooth wireless optical mouse is available;

If no, restart the connection;

And the Host connection OK, turn off the power switch to reopen, Bluetooth wireless optical mouse automatically and Host connection;

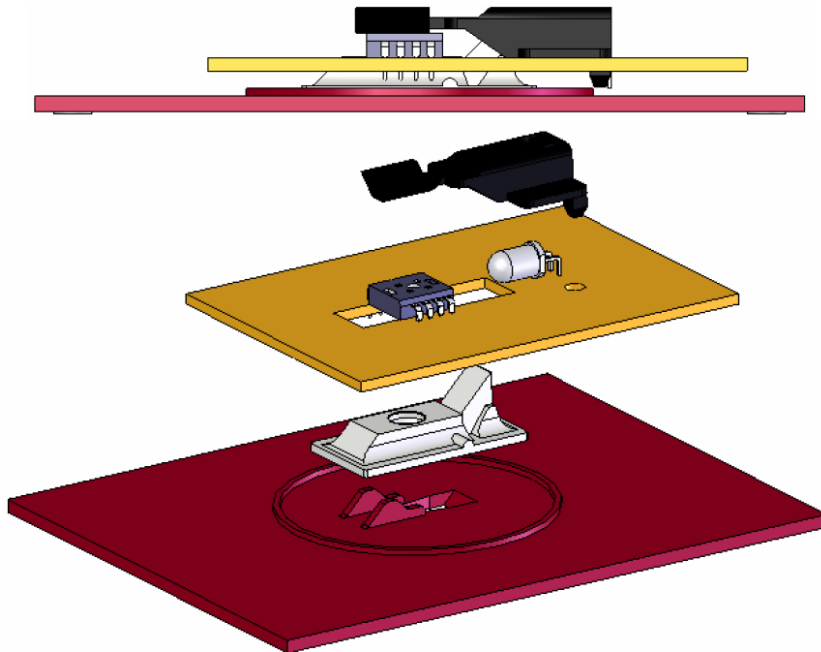
work principle:

This product incorporates TOD3003 Bluetooth ® Single Chip for HID, an 12MHz oscillator, coupled with the EERPOM AT24C128 (8K Bit) control, built-in three-button left.middle.right key and scroll wheel, the wheel up and down slide, driven encoder coding work, so that the image down.

TOD3003 output SPI Data bus,and low cost wireless mouse sensor: Communicate, PAW3204DB

The PAW3204DB is a high performance, low power and low cost CMOS-process optical mouse sensor with DSP integration chip that serves as a non-mechanical motion estimation engine for implementing a wireless computer mouse. It is based on new optical navigation technology, which measures changes in position by optically acquiring sequential surface images (frames) and mathematically determining the direction and magnitude of movement. The mouse sensor is in an 8-pin optical package. The current X and Y information are available in registers accessed via a serial port. The word "mouse sensor," instead of PAW3204DB, is used in the document.

PAW3204DB led brightness control sensor, sensor LED light refraction LENS with optical lens to the plane, then by the work plane beam feedback to optical lens LENS focus to PAN3204, then by internal photoelectric SENSOR PAW3204DB. SPI bus, Data is transferred to the TOD3003. When Bluetooth wireless optical mouse to the X or Y axis four move by the beam scanning work plane, detected the workplane structure displaced. scan to the displacement of the image back to the SENSOR PAW3204DB, showing cursor accordingly.



1.2. 2. Power converter works:

Built-in BUCK and BOOST to provide whole system power with 1.8V and 2.7V while using two batteries.

Switch-mode Regulators TOD3003 contains two regulated switch-mode power converters -- one Buck mode, and one Boost mode. The Buck regulator is for +1.83V to support the 1.8V power of this chip, and other devices. The optional Boost regulator can provide +2.7V, to support an external device of the same voltage level.

Among them, the output of the SENSOR PAW3204DB 1.8V to provide power; 2.7V for the sensor power supply LED and LED1.

2. LED1 displays and other functional specification:

LED1 show description:

function/status	LED show description
starting up	LED light 2.04 seconds off
Press the Pairing key	1. Search, LED flashes per 1.28 seconds at a time; 2. Pairing, non-regular Flash.
Battery voltage falls below 2.2V	Go every 1 second Flash once more.
Battery voltage falls below 2.05V	LED light 2 seconds, mouse auto shutdown
Deep-sleep	LED light 2 seconds after entering the Deep-sleep

Other function elucidation:

function	show
Low voltage show	Battery voltage automatically detect and display low-voltage condition to LED1 to replace the battery tips.
Low voltage shut down	When the battery voltage falls below 2.05V, mouse auto shutdown
Deep-sleep	When the mouse moves not 10 minutes, automatically enter Deep-sleep.
Move -wake up	When you enter Deep-sleep, move the mouse to change.
Switch back to automatic connection	If the mouse even after new switch machine automatically even machine
DPI Conversion	While pressing the middle key and right key for 5 seconds after the release, you can toggle the DPI level (DPI: 800/1200/1600), when switching to 800 DPI, LED1 1; when you switch to 1200 DPI, LED1 2 flashes; when the DPI switch to 1600, LED1 3; default value of 800 DPI.