

# 1. Description

A2637 is a single-chip 3D3Key optical mouse sensor with USB and PS2 interface. It is compatible with Microsoft 3D IntelliMouse and USB V1.1. It supports mechanical scroll Z-axis input. A2637 supports 800/1200 CPI. It requires minimal external components to implement 3D USB+PS2 mouse. Furthermore, A2637 is pin-to-pin compatible with A2633 and A2636, and saves PCB tooling cost and cuts down the time from testing to production.

## 1.1 Features

- Single 5V power supply
- Microsoft 3D and IBM PS/2 mouse compatible
- Single chip solution for both USB & PS/2 mouse function
- Designed for Vista, Windows 2000, XP, ME, and 98 and Linux
- Complete USB v1.1 1.5Mbps compatibility
- Supports three buttons (L, M, R) and 3D input
- High speed motion detection
- Support 800/1200 DPI and dynamic DPI toggle
- Adjustable frame rate
- Support USB-only and PS2-only mode
- Supports mechanical Z-axis scroll
- External-components-free internal oscillator
- WHQL certification
- Sleep mode(sensor not moving) function and wake-up feature
- Built-in de-bounce circuits
- Built-in power-on-reset
- Built-in regulators
- USB & PS/2 Plug and Play
- Minimal external components
- ROHS compliant
- 12-pin staggered DIP package

For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC NOTE:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:(1)this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC NOTE:

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.