



# PAN101B

## General Description

The PAN101B is a low cost CMOS process optical navigation sensor with DSP integration chip that serves as a non-mechanical motion estimation engine for implementing a computer mouse.

## Features

- Single 3.0 volt power supply
- Optical motion estimation technology
- Complete 2-D motion sensor
- No mechanical parts
- Accurate motion estimation over a wide range of surfaces
- High speed motion detection up to 16+ inches/sec
- High resolution up to 800cpi
- Shutdown pin for low power dissipation.
- Power saving mode during times of no movement
- Serial Interface for programming and data transfer
- I/O pin 5.0 volt tolerance

## Applications

- Mice for computers
- Trackballs
- Integrated input devices



Top View

## Key Specifications

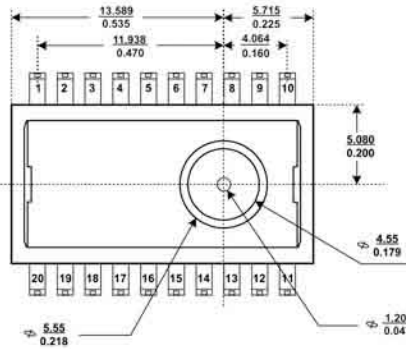
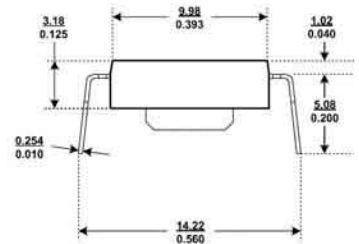
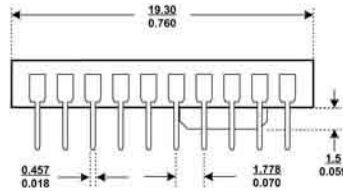
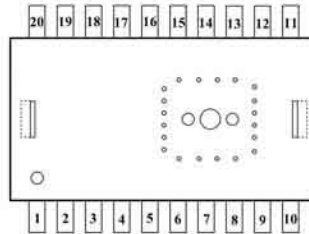
Power Supply	Wide operating supply range: 2.7V~3.6V
Optical Lens	1:1
System Clock	18.432 MHz
Speed	16+ inches/sec
Resolution	400/800 cpi
Frame Rate	3000 frames/sec
Operating Current	<15mA @Mouse moving (Normal)
	< 5mA @Mouse not moving (sleep1)
	< 2mA @Mouse not moving (sleep2)
	< 100uA @Shutdown mode
Package	Shrunk DIP20



# PAN101B



## Package Information



### NOTES:

1. All dimensions in mm/inch
2. All dimensions tolerance: +/- 0.15mm
3. Max. molding flash: +0.2mm

## Ordering Information

Order number	I/O	Resolution
PAN101BOI-204	Open-drain output	400 cpi
PAN101BOI-208	Open-drain output	800 cpi
PAN101BSI-204	CMOS output	400 cpi
PAN101BSI-208	CMOS output	800 cpi

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