

MicroJoystick

Features and Benefits

- Intuitive control
- Durable
- · Smooth cursor movement
- Versatile
- · Low power usage
- Customizable
- · Compact design

Description

The high-precision MicroJoystick is an innovative, intuitive, OEM pointing system that delivers simultaneous 360° control of direction and speed at the touch of a fingertip. It is based on Interlink Electronics' patented pressure-sensitive Force Sensing Resistor® (FSR®) technology. The dynamic response for FSR® technology enables the lightest of touches to be translated into smooth, intuitive cursor control while simultaneously enabling dynamic speed control by altering the amount of applied pressure. The result is smooth cursor movement in any direction, from a precise crawl to a screen-crossing zip. Call us for more information 805-484-8855



P/N: PDS-10006-B



MicroJoystick

Device Characteristics

Weight 2 grams or less

Actuation Force Range 0.2N-1.7N, typical

Deflection at Maximum Use Force 0.7mm from tip centerline for a 10mm stick

Stick Strength Capacity Side load: 20kg, Compressive load: 100kg, Tensile load: 13kg

Operating Temperature Performance Functional before, during, and after exposure to the below conditions:

Cold Dry $0^{\circ}\text{C} <= 5^{\circ}\text{RH}$ for 96 hours Hot Dry $60^{\circ}\text{C} < 5^{\circ}\text{RH}$ for 96 hours Hot Humid 60°C 95% for 96 hours

Storage Temperature Performance Functional after 96 hours of exposure to the below conditions:

Cold Dry $-40^{\circ}\text{C} < -5\%\text{RH}$ Hot Dry $70^{\circ}\text{C} < =5\%\text{RH}$ Hot Humid $70^{\circ}\text{C} 95\%\text{RH}$

Lifetime Durability >5 million cycles

Mechanical Shock Comparable to MIL-STD-202, 80G accelerated in 11 msec

Mechanical Vibration Comparable to MIL-STD-202, Method 204, Condition A

EMI - Sensor Generates no EMI

ESD Not ESD sensitive

EMC - Controller IC Passes IEC61000-4-4 test at 4KV

UL All materials UL grade 94 V-1 or better

RoHS Compliant

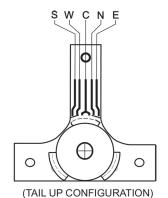


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Connector Options

Fully Customizable

There is no connector specifically for the MicroJoystick because of the versatile design. The connector can be of a custom design, or Interlink Electronics can supply a standard board to connect the MicroJoystick. For more information, see the Integration Guide



S - FSR South

W - FSR West

C - FSR Common

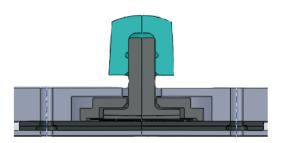
N - FSR North

E - FSR East

Application Information

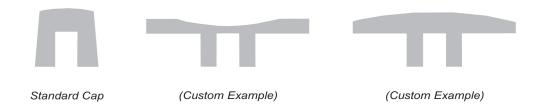
Mounting:

The MicroJoystick has the capability to be easily fitted into a custom mount. For more examples, please see the Integration Guide.



Cap Options

Interlink Electronics can custom make caps to fit any demand, customized colors are also available.



Microcontroller

The MicroJoystick can be paired with the Interlink 4-Zone Mouse Sensor USB Controller IC (Microchip PIC18F14K50).



MicroJoystick

Orderable Part Numbers

Hardware Development Kit, 54-89654

This Hardware Development Kit includes:

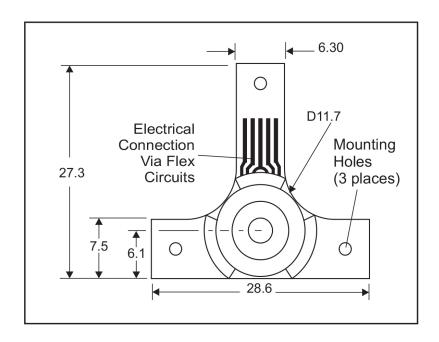
- · MicroJoystick, 7.4mm with cap and
- Flex Tail (Qty. 2)
- VP710 Cable Ribbon (Qty. 1)
- VP650 Cable PS/2 Adapter (Qty. 1)
- USB Flash drive with product literature (Oty 1)

MicroJoystick Individual Option,

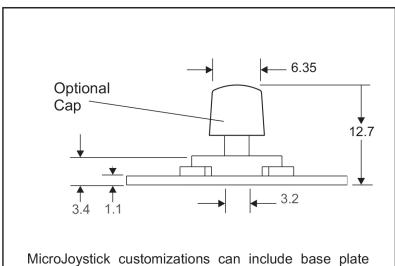
7.4mm without Cap, PN 54-45289

4-Zone USB Microcontroller,

PIC18F14K50, PN 54-00005



All dimensions in millimeters.



MicroJoystick customizations can include base plate shape, mounting holes, stick length, and cap shape and color. Please call for details.

Contact Us

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