

# MicroJoystick Data Sheet

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



## 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°C <=5%RH for 96 hours
Hot Dry	60°C <5%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°C <-5%RH
Hot Dry	70°C <=5%RH
Hot Humid	70°C 95%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

## Connector Options

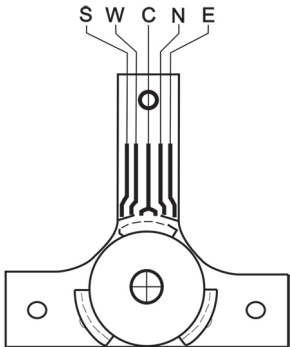
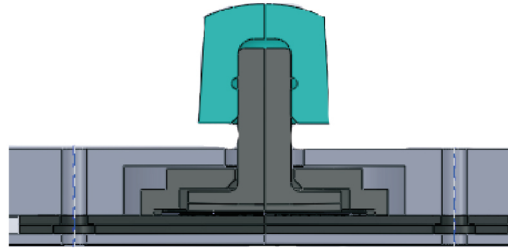
### Fully Customizable

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

## Application Information

### Mounting:

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



(TAIL UP CONFIGURATION)

S - FSR South  
W - FSR West  
C - FSR Common  
N - FSR North  
E - FSR East

### Cap Options

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



*Standard Cap*



*(Custom Example)*



*(Custom Example)*

### Microcontroller

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

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## Orderable Part Numbers

### Hardware Development Kit, 54-89654

This Hardware Development Kit includes:

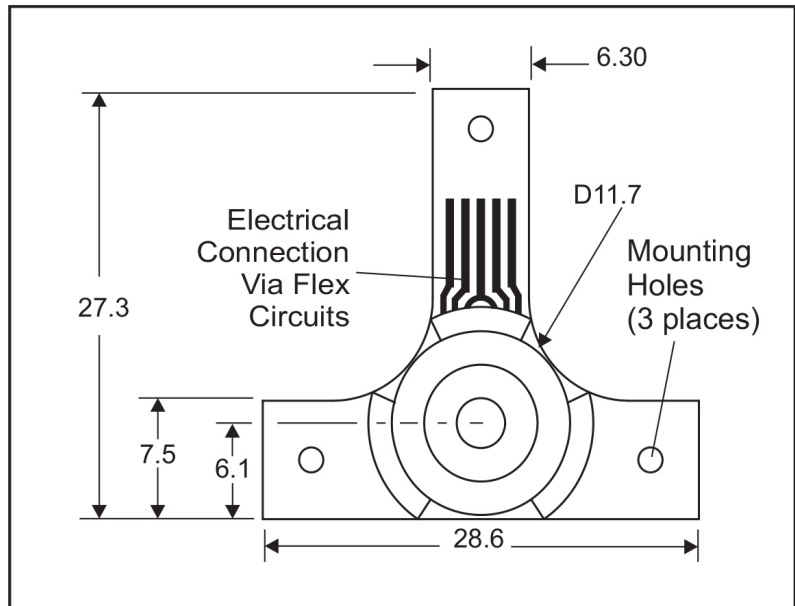
- MicroJoystick, 7.4mm with cap and
- Flex Tail (Qty. 2)
- VP710 Cable Ribbon (Qty. 1)
- VP650 Cable PS/2 Adapter (Qty. 1)
- USB Flash drive with product literature (Qty. 1)

### MicroJoystick Individual Option,

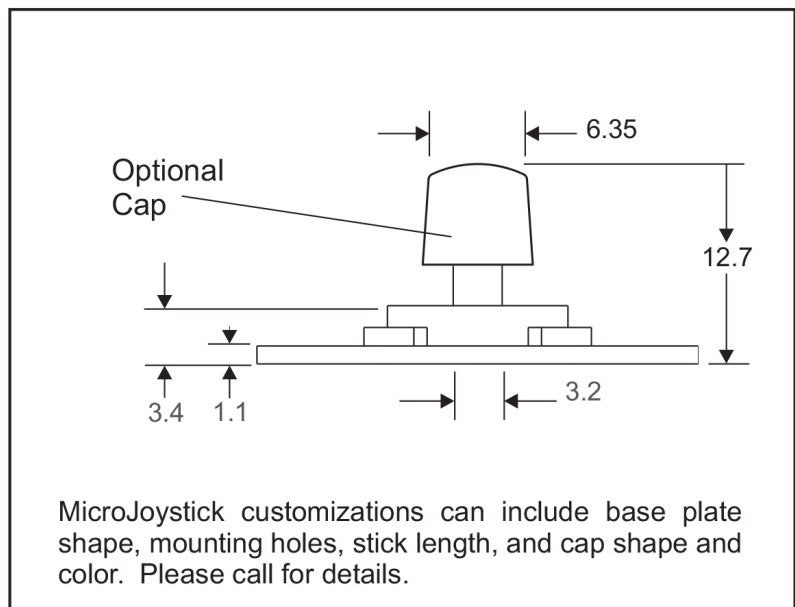
7.4mm without Cap, PN 54-45289

### 4-Zone USB Microcontroller,

PIC18F14K50, PN 54-00005



All dimensions in millimeters.



## Contact Us

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