

FEATURES

- Standard PS/2 mouse interface
- Robust mechanical design for industrial applications
- Mechanically compatible with Fujitsu FID-828
- Advanced motion control algorithm
- CellMute™ technology filters the wireless EMI noise from cellular phones and wireless networks
- Works with standard Windows® mouse drivers
- Works with Lenovo TrackPoint® drivers
- Low power consumption. 890uA (idle), 3.21 mA (operation)
- 4.3V to 5.25V operating voltage. Other operating voltage is available upon request
- Temperature range: -40°C to +85°C

APPLICATION

- Industrial/Medical Keyboards
- Instrumentation Control Panel

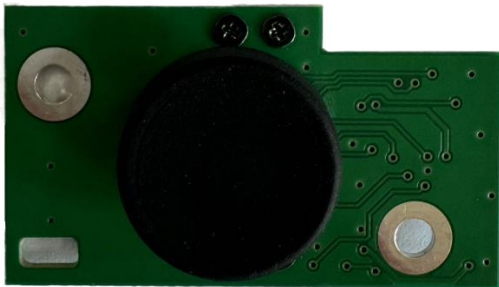
ORDERING INFORMATION

SK8721-71-001 (4.3V to 5.25V) Pb-Free, RoHS

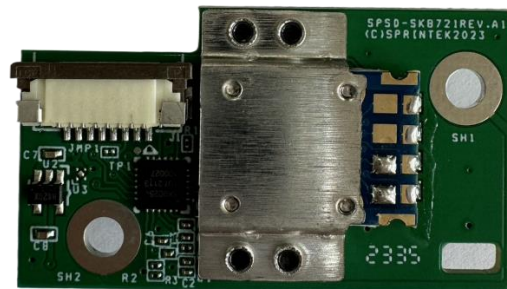
Sprintek U.S. patent number 8,593,403 applies to this module.

MODULE PICTURES

TOP VIEW



BOTTOM VIEW



DESCRIPTION

The SK8721-71 ToughPoint™ module is a cost-effective, space-saving PS/2 pointer mouse device deploying a Sprintek advanced pointing stick controller.

Typically, consuming 890uA in idle state, the SK8721-71 is ideal for battery-operated systems.

Deploying CellMute™ technology and patented signal conditioning circuit to filter the wireless EMI noise from cellular phones and wireless networks, the SK8721-71 modules can work quietly in wireless environment.

The SK8721-71 ToughPoint™ module partially implements the Lenovo TrackPoint® extended command protocol and can work with Lenovo TrackPoint® device drivers directly.

CONNECTION DEFINITION

Pin No	Type	Name	Description
1	P	VCC	Power supply 5V
2	IO	IPD DATA	PS/2 data line
3	I	IPD RST	Reset. Active high external reset with internal pull down.
4	IO	MIDDLE	Middle button
5	IO	RIGHT	Right button
6	IO	LEFT	Left button
7	P	GND	Ground
8	IO	IPD CLK	PS/2 clock line

LENGENG P = Power, I = Input, O = Output, IO = Input/Output

Communication Protocol

SK8721-71 simulates standard PS/2 mouse and follows its command protocol.

ELECTRONICS SPECIFICATION

Absolute Maximum Ratings

Symbol	Description	Min	Typ	Max	Units	Notes
TSTG	Storage Temperature	-55	-	+100	°C	
VDD	Supply Voltage on Relative to VSS	-0.5	-	+6.0	V	
ESD	Electro Static Discharge Voltage	2000	-	-	V	Human Body Model ESD

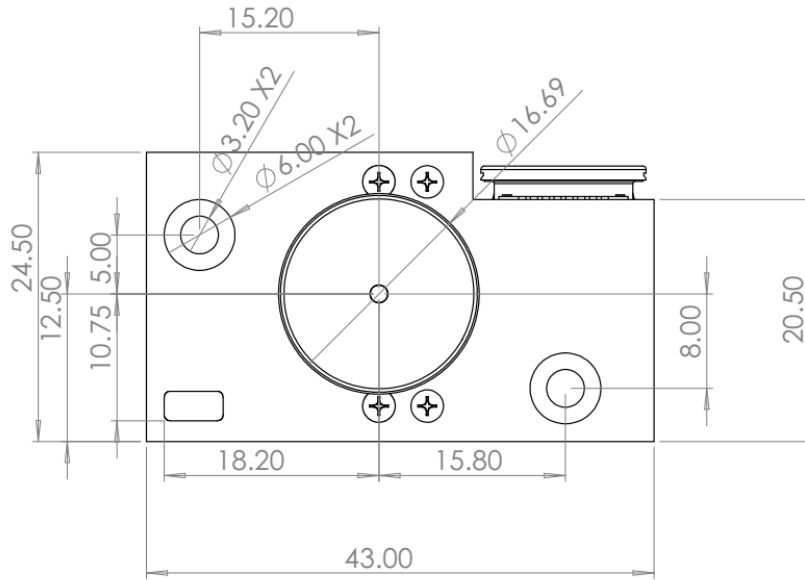
Operating Temperature

Symbol	Description	Min	Typ	Max	Units	Notes
TOP	Operating Temperature	-40	-	+85	°C	

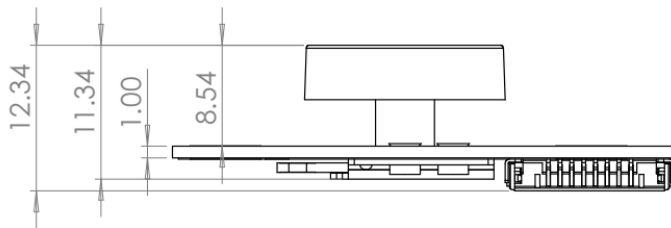
DC Electrical Characteristics

Symbol	Description	Min	Typ	Max	Units	Notes
VDD	Supply Voltage	4.3	-	+5.25	V	
IOP	Supply Current when module is in operation mode		3.21		mA	
IIDLEZ	Supply Current when module is in idle mode with Z-Tap enabled		1.94		mA	
IIDLE	Supply Current when module is in idle mode with Z-Tap disabled		890		uA	
ISD	Supply Current when module is in power down mode		32		uA	
RPU	Pull-up Resistor	4	5.6	8	kΩ	
VPOR	Power on reset voltage		2.92		V	

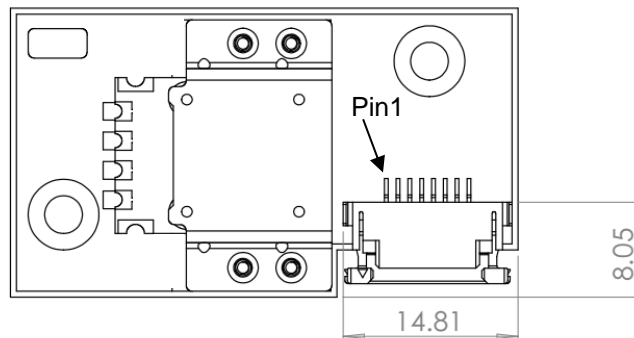
MECHANICAL SPECIFICATION



TOP VIEW



FRONT VIEW



BOTTOM VIEW

SK8721-71-001 Mechanical Drawing (Unit in mm)



SALE AND SERVICE INFORMATION

To obtain information about Sprintek Corporation or ToughPoint™ product sales and technical support, reference the following information.

Sprintek Corporation

4969 Corral Street

Simi Valley, CA 93063, USA

Web Site: <http://www.sprintek.com>

REVISION HISTORY

Revision	Issue Date	Description
1.00	August 7, 2024	Initial Release