



SK8720 ToughPoint™ Pointer Mouse Module

Industrial USB or PS/2, CellMute™ Technology

FEATURES

- Standard USB or PS/2 mouse interface
- Robust mechanical design for industrial applications. Passed the 10 million cycle test.
- Advanced smooth motion control algorithm
- CellMute™ technology filters the wireless EMI noise from cellular phones and wireless networks
- Works with standard Windows® mouse drivers
- 4.3V to 5.25V operating voltage
- Temperature range: -40°C to +85°C

APPLICATION

- Industrial/Medical Keyboards
- Instrumentation Control Panel

DESCRIPTION

The SK8720 ToughPoint™ silicone rubber pointer mouse OEM module is a robust PS/2 pointer mouse device deploying a Sprintek advanced pointing stick controller. The module can be easily integrated into industrial / medical control panels, keyboards as a mouse function. The module has high ESD protection.

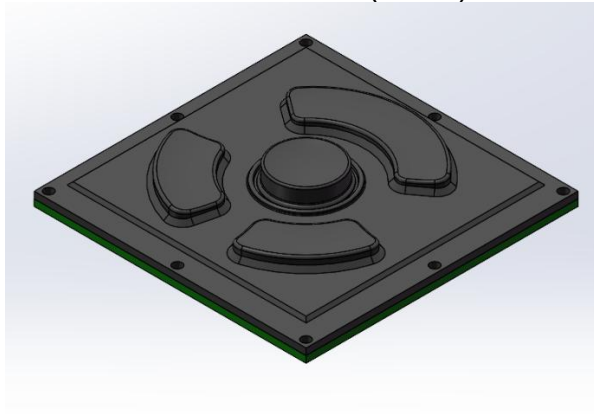
Deploying CellMute™ technology and patented signal conditioning circuit to filter the wireless EMI noise from cellular phones and wireless networks, the SK8720 modules can work quietly in wireless environment.

ORDERING INFORMATION

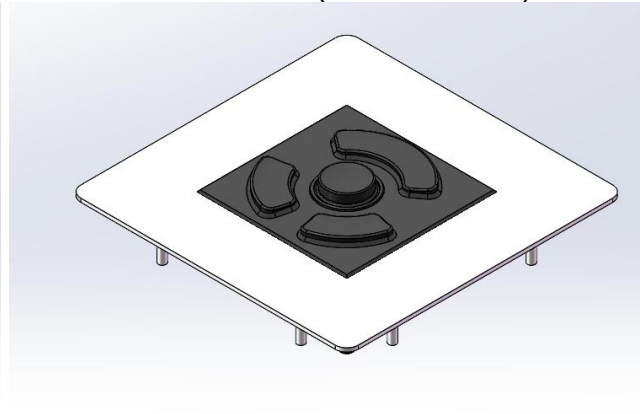
- SK8720-70-003 (USB, OEM)
- SK8720-70-004 (USB, Panel Mount)
- SK8720-70-005 (PS/2, OEM)
- SK8720-70-006 (PS/2, Panel Mount)

MODULE PICTURES

SK8720 (OEM)



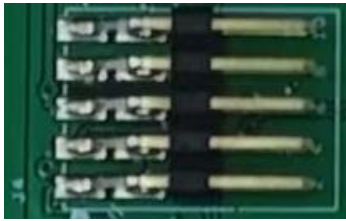
SK8720 (Panel Mount)



SK8720 PCB



Connector Pinout – PS/2 Interface



9 10
7 8
5 6
3 4
1 2

J4 Pin	Signal	Description
10	VCC	+5V
8	DATA	PS/2 Data
5	GND	Ground
4	SHIELD	Shield ground
3	CLK	PS/2 Clock

Connector Pinout – USB Interface



5
4
3
2
1

J1 Pin	Signal	Description
5	VCC	+5V
4	GND	Ground
3	SHIELD	Shield ground
2	D-	USB D-
1	D+	USB D+

Communication Protocol

SK8720 simulates standard USB and PS/2 mouse and follows its command protocol.



ELECTRONICS SPECIFICATION

Absolute Maximum Ratings

Symbol	Description	Min	Typ	Max	Units	Notes
TSTG	Storage Temperature	-40	-	+85	°C	

Operating Temperature

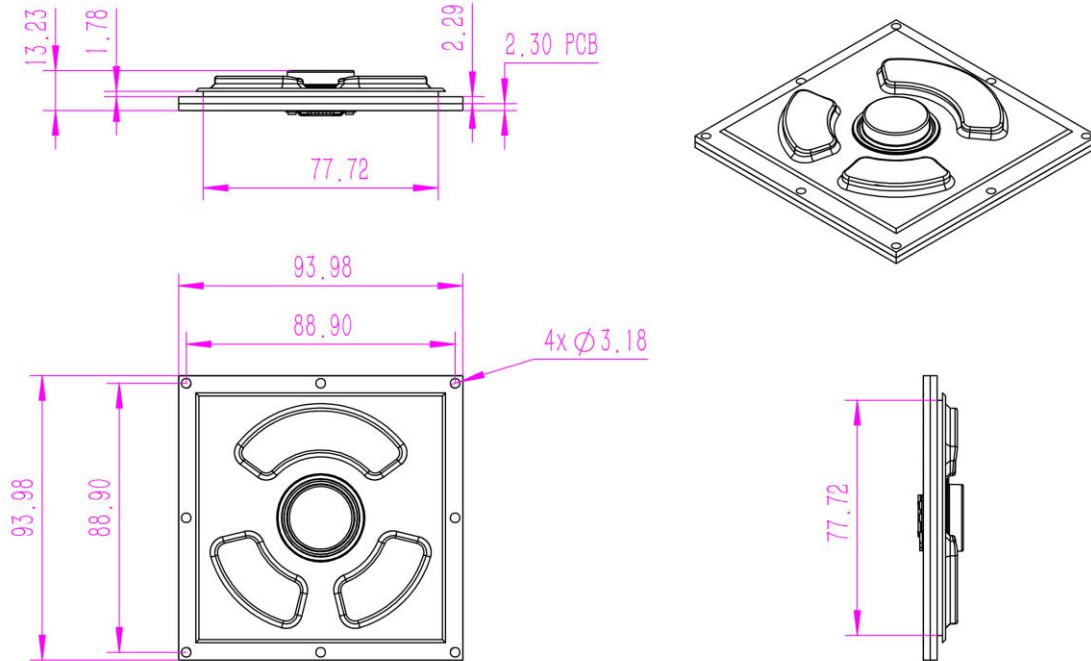
Symbol	Description	Min	Typ	Max	Units	Notes
TOP	Operating Temperature	-40	-	+85	°C	

DC Electrical Characteristics

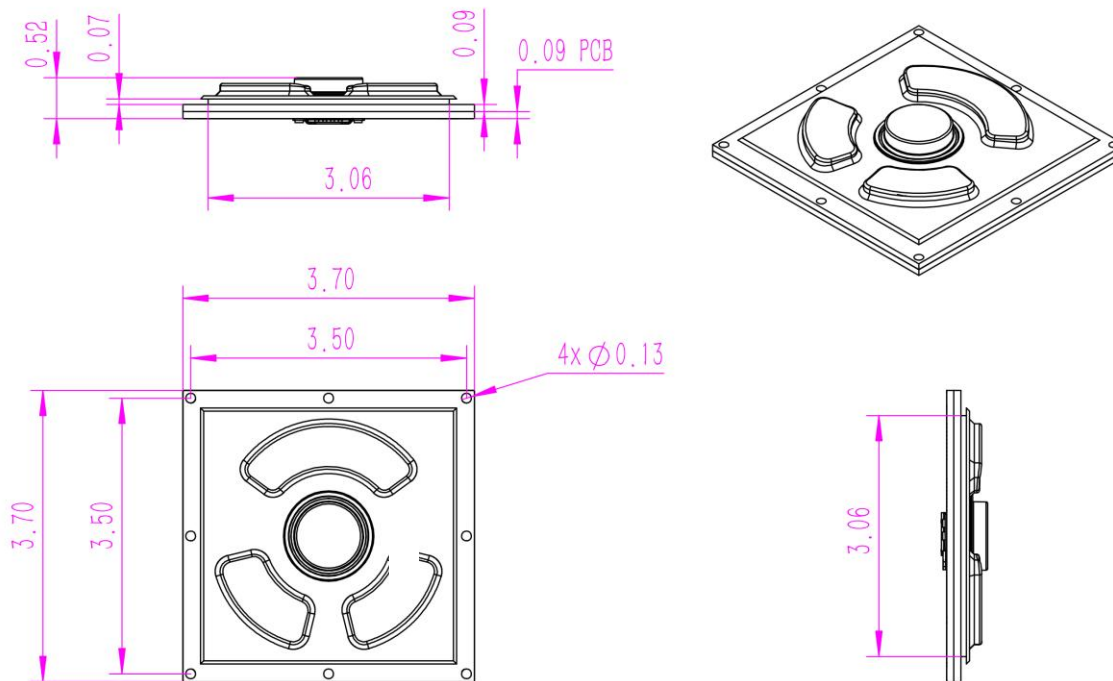
Symbol	Description	Min	Typ	Max	Units	Notes
VDD	Supply Voltage	4.3	-	+5.25	V	
IOP	Supply Current when module is in operation mode		15		mA	
RPU	Pull-up Resistor	4	5.6	8	kΩ	PS/2 mode

MECHANICAL SPECIFICATION

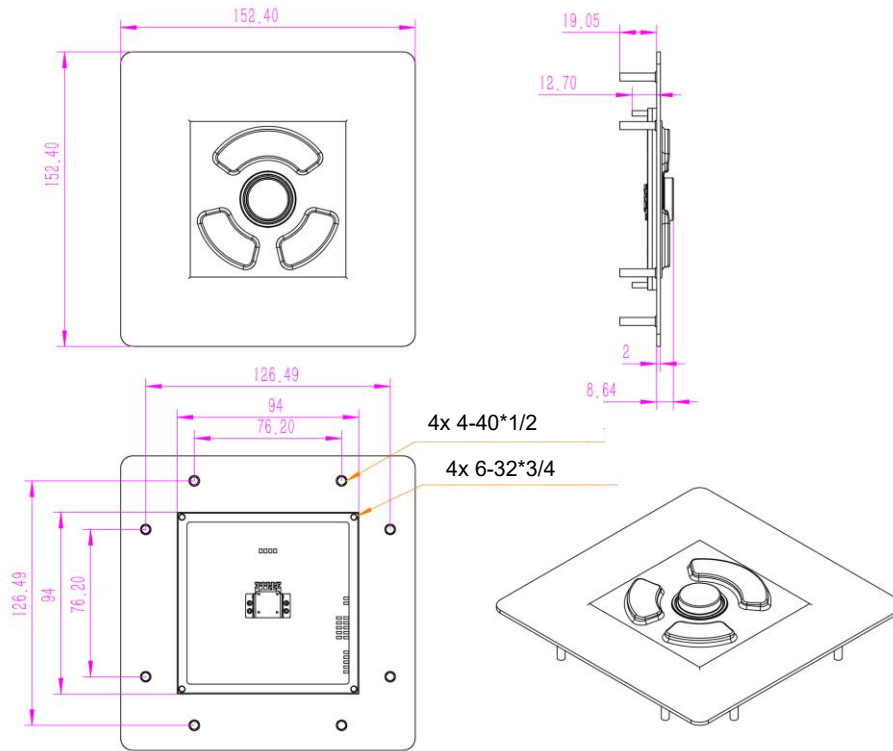
SK8720-70 (OEM) Mechanical Drawing (Unit in mm)



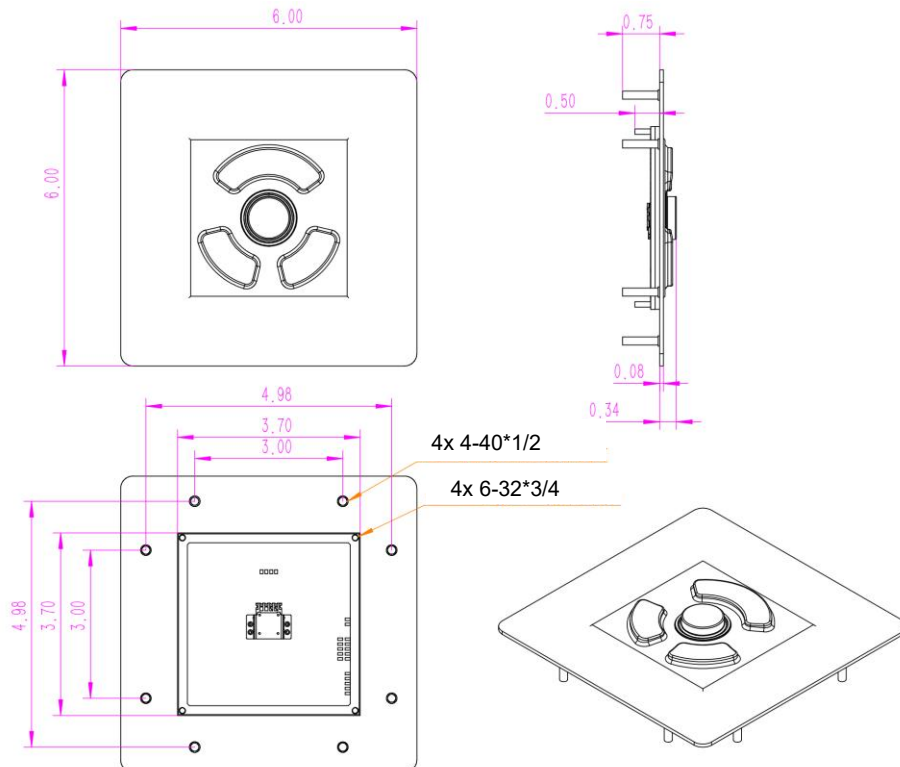
SK8720-70 (OEM) Mechanical Drawing (Unit in inch)



SK8720-70 (Panel) Mechanical Drawing (Unit in mm)



SK8720-70 (Panel) Mechanical Drawing (Unit in inch)





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	March 15, 2025	Initial Release