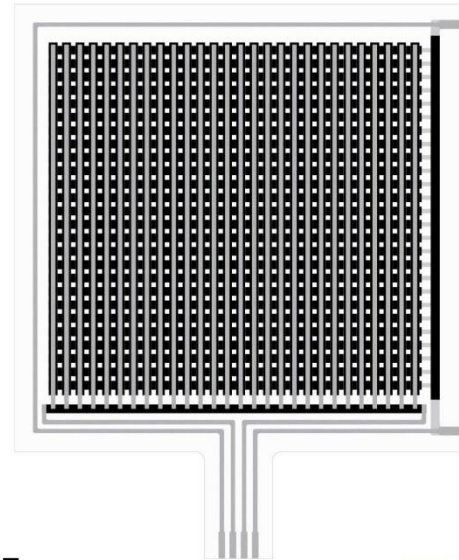


Features

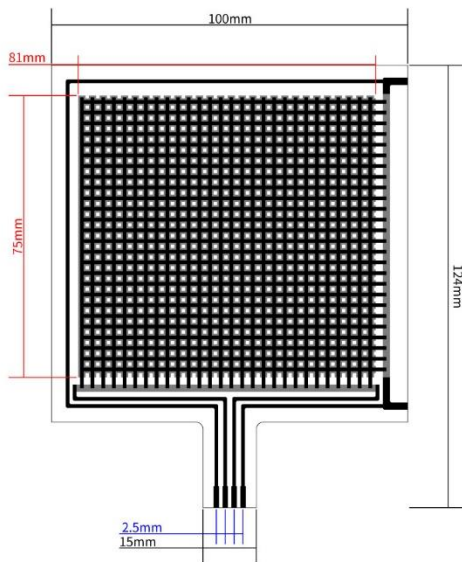
- Single point 3 axis sensing (position & pressure)
- Flexible and lightweight
- Ultra-thin
- Instant responding sensitivity
- Low actuation force
- Low power consumption
- Easy to integrate



XYZ1T
3 Axis sensor - Thru mode



Technical specifications



Technical dimension

XYZ1T
3 Axis sensor - Thru mode



Sensor	XYZ1T
Length	124mm
Width	100mm
Active area	81mm x 75mm
Pin spacing	2.5mm
Nominal thickness	0.58mm
Substrate	PET
Sensor style	Close
Connector	4-pin male solder tabs
Thickness	0.73mm
Width	1.6mm

Note: Ceradex offer customize sensor solution for application-specific integration. Including the sensor’s dimension, single-zone or multi-zone sensing area, connector options, waterproofs, humidity tolerance, and heat tolerance. Contact us for more information.

Characteristics

Sensor type	Thru mode
Force sensing range	200 g - 10 kg
Actuation force	≤ 100 g/cm ²
Force resolution	1% (full scale)
Force repeatability	Single part ± 10%
Non-actuated resistance	> 10M Ω (Ohm)
Response time	< 40 ms
Operation temperature	-20°C - +60°C

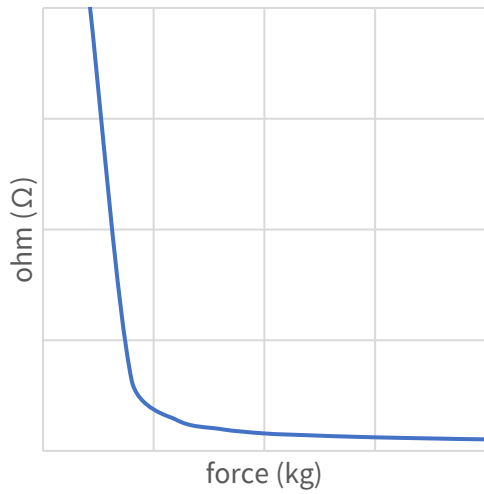
Durability

Tap durability	1kg/1Hz > 10M actuation
Standing load durability	2.5kg/24hr < 5%
Operating temperature performance	
Cold	-40°C/1hr < 5%
Hot	+60°C/1hr < 15%
Storage temperature performance	
Cold	-40°C/1hr < 10%
Hot	+60°C/1hr < 15%

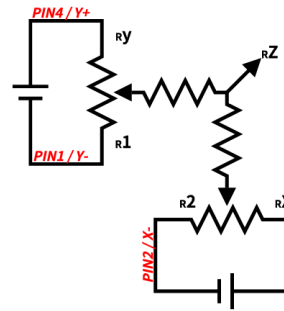
Safety

Maximum driving power	< 240mW
Electromagnetic interference (EMI)	No
Electrostatic discharge (ESD)	No

Response curve



Electrical layout



X-value

connecting: *PIN3 & PIN 2*
reading: *PIN4 & PIN 1*

Y-value

connecting: *PIN4 & PIN 1*
reading: *PIN3 & PIN 2*

Z-value

connecting: *PIN3 & PIN 4*
reading: *PIN1 & PIN 3*
via voltage difference

Note: Force sensing range, response curve, and actuation force can be modified in Ceradex’s customized sensor solution.

Applications

Interactive applications

Integrated within interactive devices that connected with Apps.

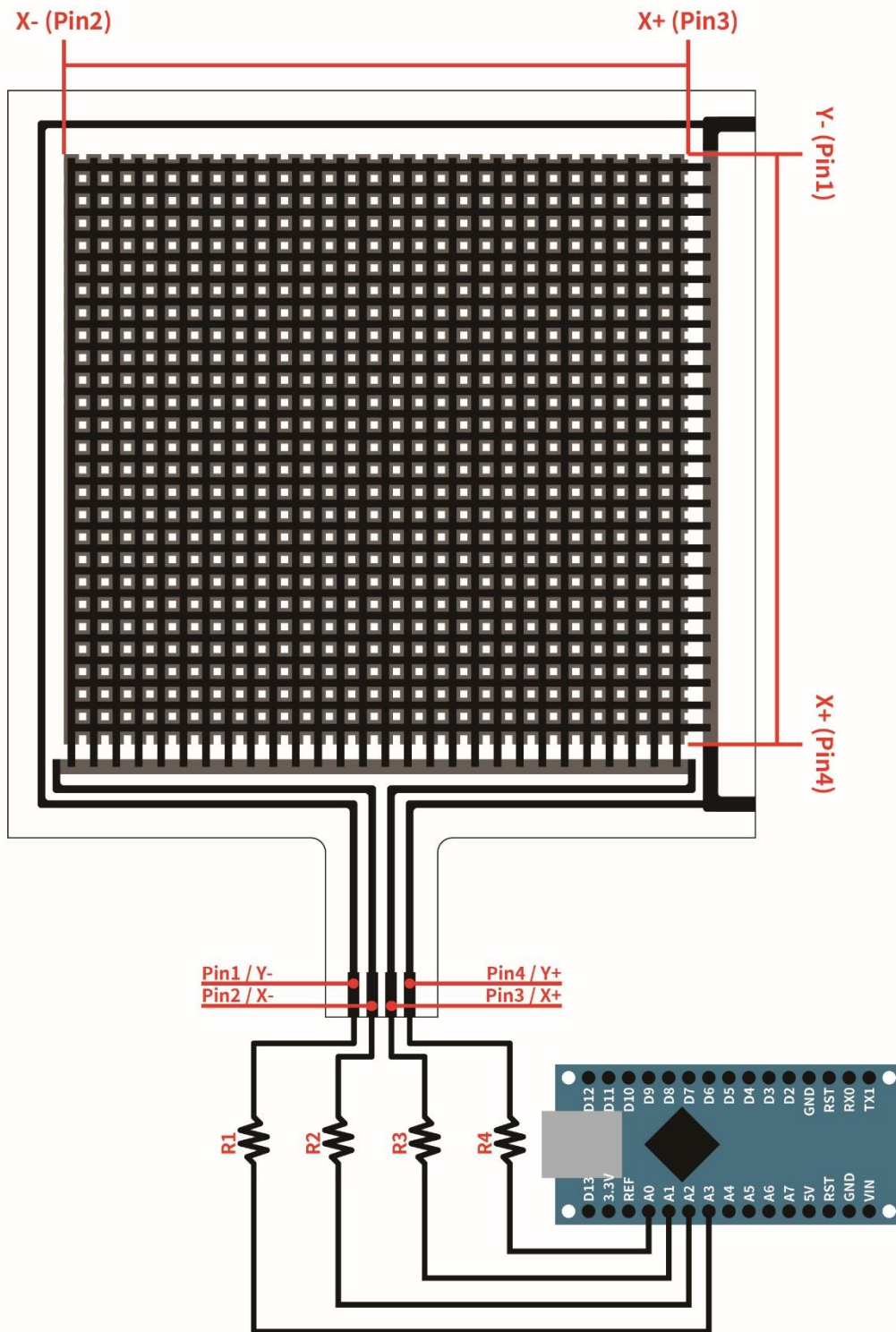
Electronic instrument

Detecting stroke and impact and output corresponding data (sound).

User Interface

Can be operated under glove-wearing conditions and detects touch/press control as trackpad.

Integration layout



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