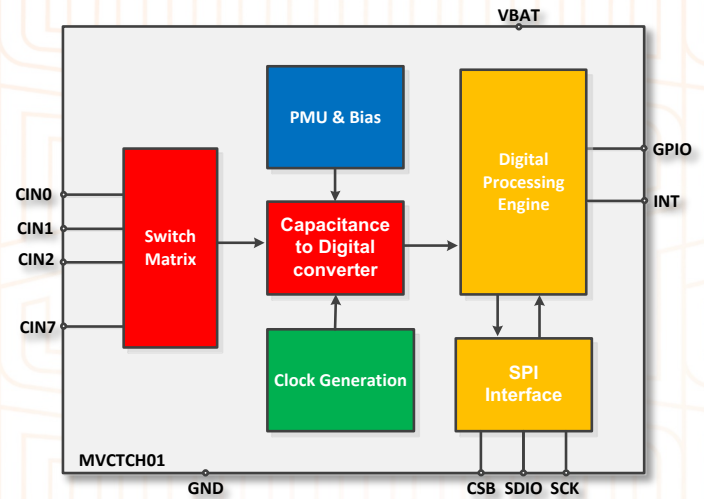# MEMS Vision
YOUR SMART SENSORS EXPERTS

8-Channel Ultra-Low Power Capacitive Touch Interface

- 8-channel input switch matrix
- Wide input capacitance range from 5 to 45pF
- Low measurement current: 40µA
- Low average current for one measurement/second: 0.5µA
- Programmable alarm feature to signal touch events
- Trimmable RC oscillator for accurate clocking
- Small form factor:
  Die size: 1.24 x 0.83 mm2

Applications:

- Smart-Home Devices
- Wearables
- Remote Controls
- Printers
- Whitegoods
- Medical Devices
- Industrial
- IoT

The Infinite Possibilities of the Infinitely Small ™

8-Channel Ultra-Low Power Capacitive Touch Interface MVCTCH01

The MVCTCH01 ASIC is an ultra-low power and high-sensitivity 8-channel capacitive touch interface that is designed to be easily integrated with capacitive touch pads.

Ultra-low power operation is achieved by using a novel capacitive-to-digital converter, making it suitable for battery powered and portable devices.

The chip supports a low-power sleep mode, a scanning mode where the chip periodically scans the input channels for touch events at programmable intervals, and an active mode where the chip always scans the input channels.

Temperature Range	-40 to 85°C
Low Capacitance Noise	<16fF for 40pF input
RC Oscillator Trimming Error	<0.4%
Low Sleep Current	<10nA
Scanning Time (8-channels)	12.5ms
Power Supply Voltage	1.8 to 3.6V
Small Footprint	1.24 x 0.83mm2
Chip Communication	3-wire SPI interface
* Customization is available. Talk to us!	

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ABOUT MEMS VISION

Headquartered in Montreal, Canada, with offices around the world, MEMS VISION INTL. capitalizes on a strong portfolio of patents and intellectual property on MEMS and ASICs (integrated circuits), and a team of highly qualified personnel, to offer hardware and software smart sensing solutions to its customers and partners serving the Consumer, Industrial, Medical, and Automotive markets. Our products include sensors for humidity, temperature, absolute pressure, differential pressure, particulate matter, as well as ultrasonic sensors.

Our expertise in developing and manufacturing smart sensors, based on our proprietary MEMS, ASICs, and calibration technologies, enables us to deliver sensor solutions with very low power consumption, very small form factor, and a world class performance, all at competitive pricing.