



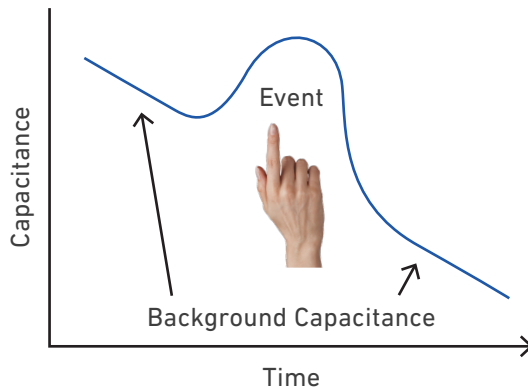
Ultra-Low-Power Capacitive Touch Switches

Capacitive Touch Switches

Capacitive touch switches are being used in many different applications including controls in automotive consoles, mirrors and keys, LCD-screen on/off, lighting, medical wearables, door locks, smart homes, white goods and more.

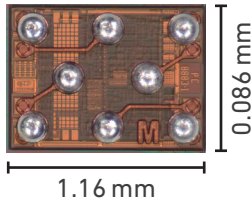
Capacitive Touch Switches from Microdul

Microdul's ultra-low-power, affordable, capacitive, touch and proximity switches provide reliable switching using a single electrode. A touch event is detected when the circuit leaves its equilibrium state due to a change in the capacitance at the electrode. Manufacturing tolerances and slow changes of capacitance caused by dirt or water are compensated. The touch switches are especially suitable for battery applications.



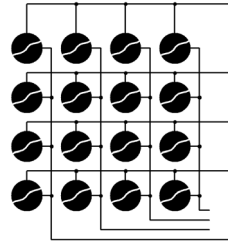
Device	Channels	IDD	Package
PCF8883T/1	1	3 μ A	S08
PCF8883US/7EA/1	1	3 μ A	CSP
PCF8885TS/1	8	10 μ A	TSSOP28
PCA8885TS/Q900/1	8	10 μ A	TSSOP28
MS8883C	1	3 μ A	DFN8
MS8885B	8	10 μ A	QFN28

Single channel applications are served by the 8883-family with a typical IDD of 3 μ A, an input range of 10 to 60pF and a wide VDD range of 3 to 9V. The 8883 can be provided in an industry standard S08 package, a small Chip Scale Package or in a DFN8 package.

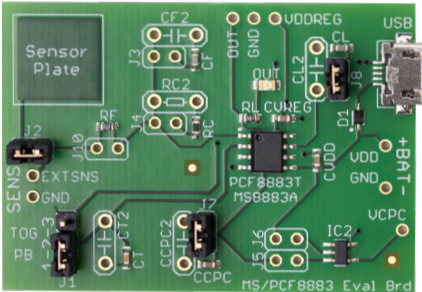


The Chip Scale Package (PCF8883US/7EA/1) measuring 1.16 x 0.86 x 0.55mm is delivered in tape and can be soldered like a conventional SMD component.

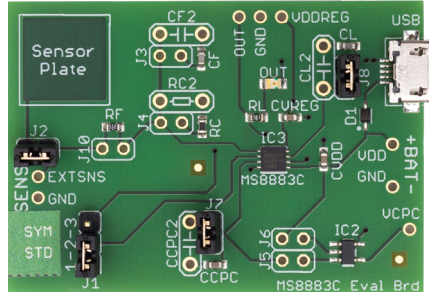
Each member of the 8885-family contains eight capacitive sensing channels with a typical total I_{DD} of 10 μ A (sleep-mode <100nA), an input range of 10 to 40pF (50pF) and a VDD range of 2.5 to 5.5V. The 8885-family can be provided in a TSSOP28 or a QFN28 package. The PCA8885 is qualified for automotive. The 8885-family allows the implementation of a 4x4 switch matrix with a single chip or an 8x8 matrix using two chips.



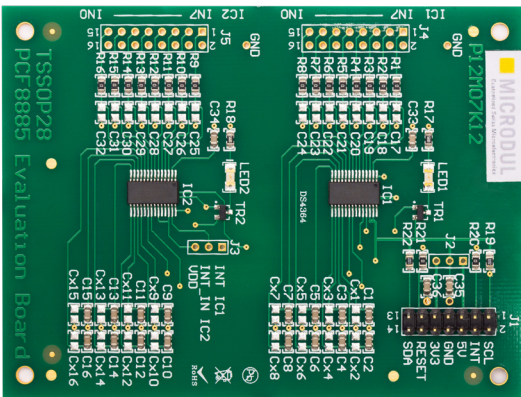
Evaluation boards are available for all types.



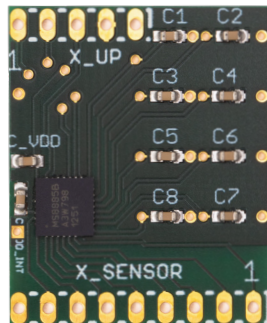
PCF8883 Evaluation Board



MS8883C Evaluation Board



PCF8885 Evaluation Board



MS8885 Evaluation Board



More information about the
PCF8883 and PCF8885 here.



More information about the
MS8883 and MS8885 here.



About Microdul

Microdul AG is a privately-owned Swiss company and was founded as an MBO from Philips Semiconductors in 1991. We manufacture modules especially for medical applications including active implants and we are both ISO9001 and ISO13485 certified. Our Semiconductors group develops and supplies ultra-low-power, mixed-signal, custom products as well as standard products. We have extensive experience in IC development for temperature monitoring, capacitive sensing, power management and 32kHz timing.

MICRODUL AG

Grubenstrasse 9
8045 Zürich
microdul.com

CONTACT PARTNER

semiconductors@microdul.com
+41 44 455 35 11