

Microdul CapSwitch product family

Reliable touch and proximity interfaces using Capacitive Sensors with low-power and advanced Auto-Calibration

Capacitive sensors for touch or proximity control are changing the way people interact with products. The sensors require no mechanical pressure, the flexible shape of the sensors offers design benefits and they are robust and unique for sanitary environments. A new patented approach, which includes auto-calibration, increases reliability in difficult environments.

Product family:

Type	channel	I/O
MS8883	1	1 digital output
MS8886	2	2 digital output
MS8884	4	I ² C -Bus
MS8885	8/16*	I ² C -Bus

* cascable to 16 channel

Product benefits:

- 1, 2, 4, 8 and 16 channel solution
- Reliable one key, dual key and multi-touch detection
- Auto-calibration
- Wake-up function with interrupt
- Low power:
 - 1 channel typically <3μA
 - 2 channel typically <6μA
 - 8 channel typically 10μA
- Voltage range 3.0 to 9V
- Temperature range -40 to 85°C
- QFN, (TS)SOP or CSP packages

Applications:

- Automatic switch-off for phone display
- Elevator panels
- Car doors
- Keypads
- TV buttons
- Headsets auto on/off
- White goods keyboards
- Coffee machines
- Automotive
- Plus many more.....



Designing with auto-calibration requires application dependent optimization. Once tuning is set the sensor offers enhanced performance, robustness and long life time. As a result auto-calibrated capacitive sensors bring a new level of user friendliness to a wide range of applications. Demo boards are available for evaluation and development.