



PRODUCT OUTLINE

CM6011ae – Capacitive Sensor

3pF Sensibility, 460–600kHz Output Frequency

Part Number

- CM6011ae

Features

- Capacitive sensing oscillator
- 3pF sensibility
- 400–600kHz output frequency
- Supply voltage: 2.7–3.6V
- Enable control
- Indicative area: 0.07mm²

Applications

- Touch sensing
- Microcontrollers
- Push-button replacement

Technology

- X-FAB 0.35µm XH035 CMOS

Deliverables

- Datasheet/Integration Guide
- HDL Model
- Flat GDSII database/LVS netlist
- Customer Support

Status

- Silicon proven

Overview

This macro-cell is a general purpose capacitive sensor core designed for X-FAB 0.35µm XH035 CMOS technology.

The circuit is intended for touch sensing applications for use in microcontrollers and has two multiplexed inputs. It detects a change in capacitance with a sensibility of 3pF in its inputs and sets the output frequency accordingly (from 460 to 600kHz).

The core is easily retargeted to any other CMOS technology due to its MOSFET-only architecture.

Functional Diagram

