



PRODUCT OUTLINE

CM1412ae – Power-On Reset

Flexible Threshold (down to 0.9V), Low Power ($6\mu\text{A}$)

Part Number

- CM1412ae

Features

- Power-On Reset
- Low current (typ. $6\mu\text{A}$)
- Assertion delays $> 1\mu\text{s}$ and $> 20\mu\text{s}$
- Configurable threshold from 0.9 to 5.5V (3.0V default)
- Hysteresis = 100mV
- Indicative area: 0.08mm^2

Applications

- Microcontrollers
- Consumer electronics
- Battery powered equipment
- Appliances

Technology

- X-FAB $0.35\mu\text{m}$ XH035 CMOS

Deliverables

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

Status

- Silicon Proven

Overview

This macro-cell is a low consumption Power-On Reset (POR) core designed for X-FAB $0.35\mu\text{m}$ XH035 CMOS technology.

The core has a voltage sense, an internal current bias circuit and two configurable assertion delays (default are $> 1\mu\text{s}$ and $> 20\mu\text{s}$). The threshold sensing voltage can be configured from 0.9V to 5.5V (default is 3.0V). A hysteresis of 100mV is added to avoid false reset glitches in noisy supplies.

The core is easily retargeted to any other CMOS technology with R-poly devices.

Functional Diagram

