

## 34 X 128 Pixel Matrix Driver

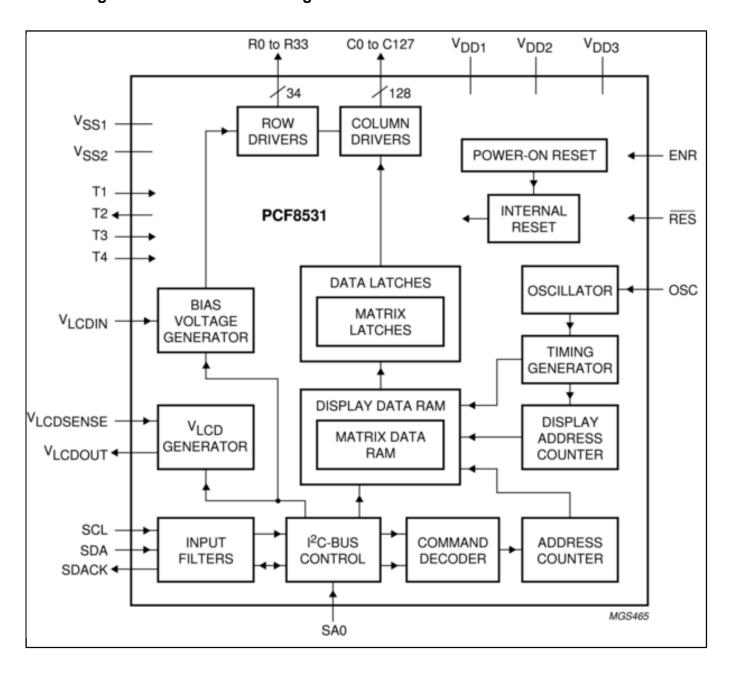
## PCF8531U

Last Updated: Feb 19, 2025

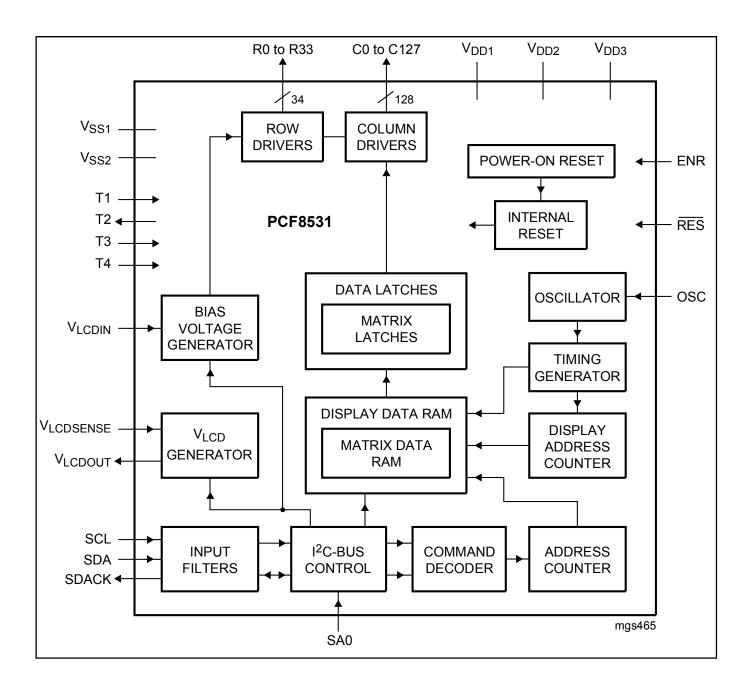
The PCF8531 is a low-power CMOS LCD row and column driver, designed to drive dot matrix graphic displays at multiplex rates of 1:17, 1:26, and 1:34. Furthermore, it can drive up to 128 icons. All necessary functions for the display are provided in a single chip, including on-chip generation of VLCD and the LCD bias voltages, resulting in a minimum of external components and low power consumption. The PCF8531 is compatible with most microcontrollers and communicates via a two-line bidirectional I<sup>2</sup>C-bus. All inputs are CMOS compatible.

Remark: The icon mode is used to reduce current consumption. When only icons are displayed, a much lower operating voltage (VLCD) can be used and the switching frequency of the LCD outputs is reduced. In most applications it is possible to use VDD as VLCD.

## Block diagram: PCF8531U Block Diagram



PCF8531 Block Diagram Block Diagram



View additional information for 34 X 128 Pixel Matrix Driver.

Note: The information on this document is subject to change without notice.

## www.nxp.com

NXP and the NXP logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. The related technology may be protected by any or all of patents, copyrights, designs and trade secrets. All rights reserved. © 2025 NXP B.V.