



# Automotive LCD Driver for Low Multiplex Rates Including 6 Channel PWM Generator

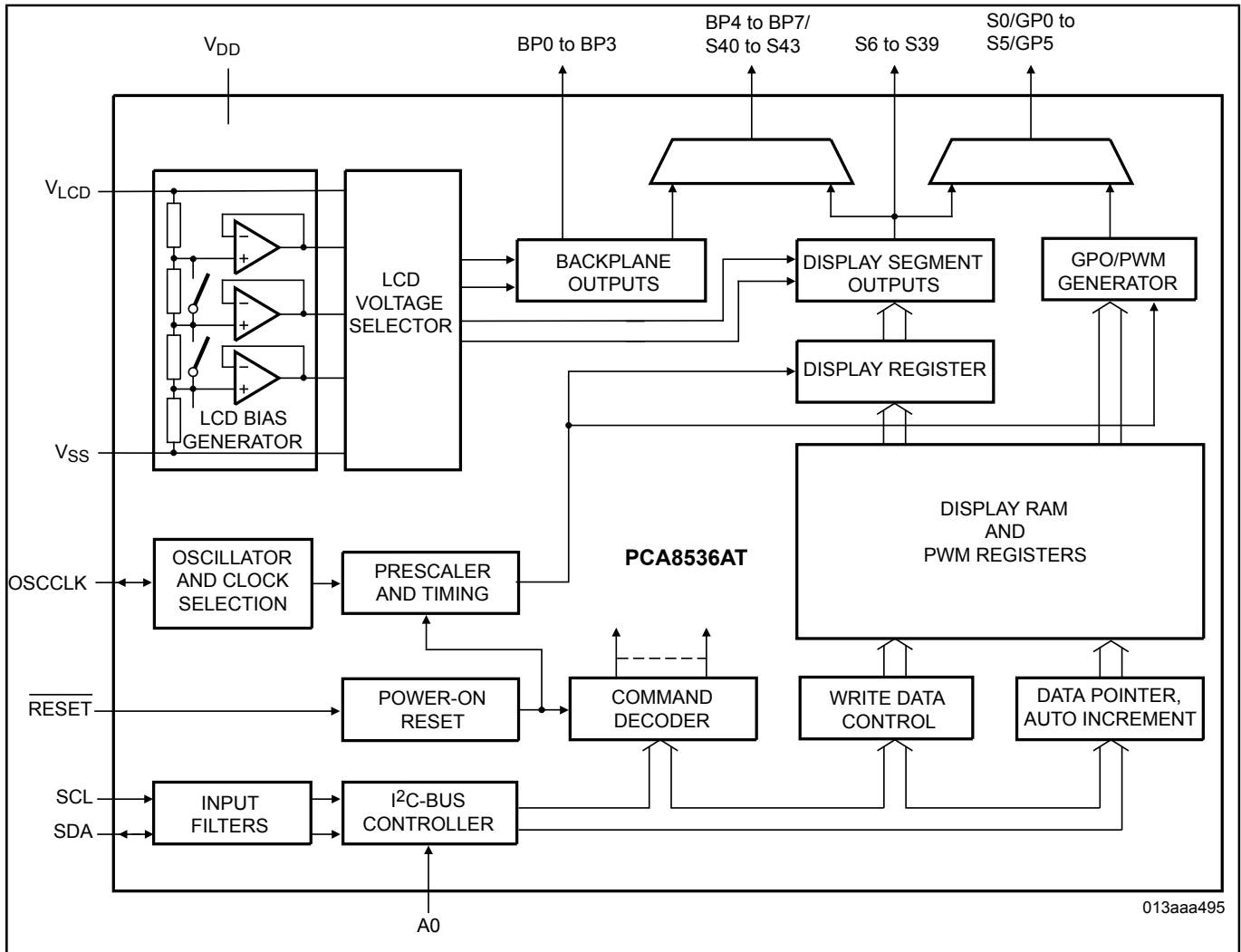
## PCA8536

Last Updated: Oct 13, 2023

The PCA8536 is a peripheral device which interfaces to almost any Liquid Crystal Display (LCD) with low multiplex rates. It generates the drive signals for any multiplexed LCD containing up to eight backplanes, up to 44 segments, and up to 320 elements. The PCA8536 is compatible with most microcontrollers and communicates via the two-line bidirectional I<sup>2</sup>C-bus (PCA8536AT) or a three line unidirectional SPI-bus (PCA8536BT). Communication overheads are minimized using a display RAM with auto-incremented addressing.

The PCA8536 features an on-chip PWM controller for LED illumination. Up to six independent channels can be configured. Each channel has 128 levels allowing the possibility for two RGB controllers. Each of them provides over 2 million colors. Each channel can also be used for static drive.

# PCA8536 Block Diagram Block Diagram



View additional information for [Automotive LCD Driver for Low Multiplex Rates Including 6 Channel PWM Generator](#).

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

[www.nxp.com](http://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. © 2024 NXP B.V.