

Alternator Regulator with LIN

AR6000

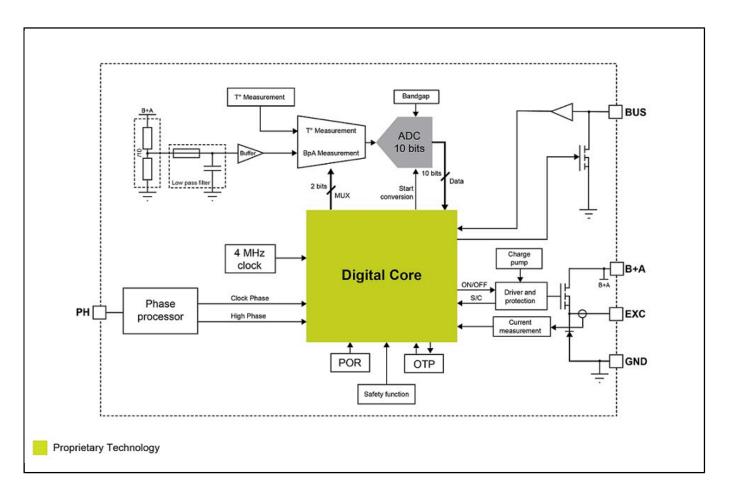
Last Updated: Jul 21, 2023

The AR6000 is an integrated circuit intended to regulate the output voltage of an automotive alternator.

- It supplies a current via a high side MOSFET to the excitation coil of the alternator and provides an internal freewheeling diode.
- Keeps the battery at its nominal charge and delivers current to electrical devices within the vehicle.
- Interface for the standard LIN protocol (1.3 or 2.1) to allow an ECU to control the regulated voltage and the LRC rate among other parameters.
- The ECU also can read back information about the status of the regulator and the alternator via LIN.
- Can be programmed for most functions using OTP (Fuses) and fits a large number of alternators and applications

The AR6000 devices are configurable with One Time Programmable (OTP) options described in Table 55. For easy design-in, contact your local NXP sales representative to receive limited engineering samples in the TO-220 package configured to your system requirements.

AR6000: Alternator Regulator with LIN Block Diagram



View additional information for Alternator Regulator with LIN.

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. © 2024 NXP B.V.