EPA9910 is an I²C interface programmable power management IC. The IC includes one synchronous boost converters for AVDD, one synchronous NAVDD buck-boost, one synchronous boost converter for VGH, one VGL charge pump, one high power LDO and one RESET voltage detector. With available in a WQFN-32L 5x5 package, this device is suitable for automotive TFT-LCD panel.

EPA9910 can operate from 2.7V to 5.5V input voltages. High switching frequency operation prevents the switching noise to interfere AM band. Current-limit functions are provided for all internal switch converters, and output-fault shutdown protects all converters against output-fault conditions, and output the FAULT signal to communicate with automotive computer.

Features

- Qualified for Automotive Applications
- AEC-Q100 Test Guidance with the Following Results:
 - Device Temperature Grade 1: -40°C to 125°C Ambient Operating Temperature Range fully I²C Programmable
 - Electrical Characteristics Tested Over -40°C to 150°C Junction Temperature Range
 - Device HBM: ±3KV
 - Device CDM: ±800V
- 2.7V to 5.5V Input-Voltage Range
- F_{sw}: 600KHz/800KHz/1MHz/2.2MHz
- High Integration
 - AVDD Programmable Output Voltage: 5V to 7.5V
 - AVDD Output Current up to 300mA
 - NAVDD Programmable Output Voltage: -5V to -7.5V
 - NAVDD Output Current up to 200mA
 - VGH Programmable Output Voltage: 7V to 30V
 - VGH Output Current up to 60mA
 - VGL Programmable Output Voltage: -6V to -18V
 - VGL Output Current up to 60mA
 - VADJ 4 bits Programmable LDO Output Voltage: 1.0V to 2.5V
 - VADJ Output Current up to 200mA
- Protection
 - UVLO, OCP, UVP, OVP, SCP Protection
 - Thermal Shutdown
- I²C Interface
- Power On/Off Sequence Free
- Output Power Off discharge function
- 5mm x 5mm QFN-32 Package

EPA9910 Product Brief



ESWIN

COPYRIGHT

© 2024 BEIJING ESWIN COMPUTING TECHNOLOGY CO., LTD. and its affiliates ("ESWIN Computing"). All rights reserved. Any modification, reproduction, adaptation, translation, distribution is prohibited without consent.

DISCLAIMER

ESWIN Computing reserves the right to update the document at any time or improve the product described in this document without notice. The information contained in this document is furnished for informational purposes only. ESWIN Computing makes no warranty of any kind in connection with this document. ESWIN Computing is not liable for any losses caused, including the loss of profits and loss of use.

BEIJING ESWIN COMPUTING TECHNOLOGY CO., LTD.