

3-channel PMIC for mobile AMOLED display



CSP-25 (2.161x2.069mm)

Features

- 2.9V to 4.8V input voltage range.
- VOUT1 boost converter output current up to 550mA with programmable output voltage by ESwire (4.6V to 5.0V) default 4.6V.
- VOUT2 single-phase buck-boost inverting converter output current up to 550mA with programmable output voltage by ESwire (-0.8V to -6.6V) default -3.0V.
- VOUT3 boost converter output current up 150mA with programmable output voltage by ASwire (5.5V to 7.9V) default 7.3V.
- · VOUT1-VOUT2 combined output current capability,
 - Up to 800mA, PVIN=3.2V, VOUT1=4.6V, VOUT2=-3V
 - Up to 700mA, PVIN=3.2V, VOUT1=4.6V, VOUT2=-5V
 - Up to 600mA, PVIN=3.2V, VOUT1=4.6V, VOUT2=-6V
- Support of AOD features with dual SWIRE interface to separately control ELVDD/ELVSS and AVDD power supplies.
- UVLO on input voltage.
- · Fast Discharge circuitry for outputs Hi-Z.
- · True shut down mode.
- · Soft-start with inrush current limitation.
- Over temperature protection.
- · Short circuit protection.
- Package CSP-25 2.161x2.069 mm.
- Bumps pitch 0.4mm.

Product summary	
Order code	STMP30QR
Package	CSP-25 (2.161x2.069mm)
Packing	Tape and reel

Application

- · Mobile Phone and portable applications
- · Full solution for Active Matrix OLED power supply management

Description

The STMP30 is a power management for AMOLED display. It integrates triple DC/DC converters for AMOLED display panel.

The device is particularly suitable for battery operated products, in which the major concern is the overall system efficiency.

All the output voltages can be programmed by SWire. Soft start with controlled inrush current limit, thermal shutdown and short circuit protection are integrated functions of the device.



Revision history

Table 1. Document revision history

Version	Dates	Changes
1	25-Feb-2022	Initial release

DB4625 - Rev 1 page 2/3



IMPORTANT NOTICE - PLEASE READ CAREFULLY

STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. For additional information about ST trademarks, please refer to www.st.com/trademarks. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2022 STMicroelectronics – All rights reserved

DB4625 - Rev 1 page 3/3