

STEVAL-CLP001V1

Demonstration board for PMOLED display power supply based on the STOD2540

Data Brief

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Features

- PFM mode control
- Supply voltage from 3.0 V to 5.5 V
- High efficiency over wide range of load (1 mA to 40 mA)
- Integrated load disconnect switch
- Overvoltage protection with automatic restart
- Soft-start with adjustable peak current limit
- Low shutdown current
- Small external inductor

Description

This demonstration board is based on the STOD2540 and is dedicated to passive matrix OLED (PMOLED) displays for portable handsets and provides the pre-charge and biasing voltage of the column matrix driver.

The STOD2540 is a boost converter that operates from 3.0 V to 5.5 V and can provide an output voltage as high as 25 V.

The current capability of the STOD2540 allows the supply of a 1", 1.3" or 1.5" color PMOLED. The maximum output current capability is 40 mA with an output voltage up to 25 V, while the supply voltage is from 3.0 V to 5.5 V.

For further information contact your local STMicroelectronics sales office.



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Circuit schematic STEVAL-CLP001V1

1 Circuit schematic

Figure 1. Schematic diagram L1 D1 V_{I} 0 C_O V_{I} SW V_{CAP} V_0 -O V₀ ΕN STOD2540 R_1 $\mathsf{R}_{\mathsf{SET}}$ $\mathsf{R}_{\mathsf{SET}}$ FB **PGND** GND R_2 CS24370

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STEVAL-CLP001V1 Revision history

2 Revision history

Table 1. Document revision history

Date	Revision	Changes
21-Aug-2008	1	Initial release.

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