

Application of SLA Series

Application Note

INTRODUCTION

A PDA product line, which offers from SSL, is suitable for portable devices such as PDA or Pocket PC. The display resolution can be mixed and matched to cater customers' requirement as well. SLA chipset can offer very cost-effective solution for your display.

Product list of SLA common/segment drivers

<i>Device Part Number</i>	<i>Descriptions</i>
SSD1701	160 Outputs Common/Segment Driver
SSD1702	240 Outputs Common/Segment Driver
SSD1703	320 Outputs Common/Segment Driver
SSD1706	480 Outputs Common/Segment Driver

This document contains information on a new product under definition stage. Solomon Systech Ltd. reserves the right to change or discontinue this product without notice.

Features of SLA common/segment drivers Summary

- Supply voltage for LC driver: +15.0V to +30.0V
- Supply voltage for logic system: +2.4V to +3.6V
- Pin selectable between common and segment mode
- Low output impedance and low power consumption
- Cascading
- Output shift direction option
- Available in Gold-bump die and TAB.

Features for segment mode

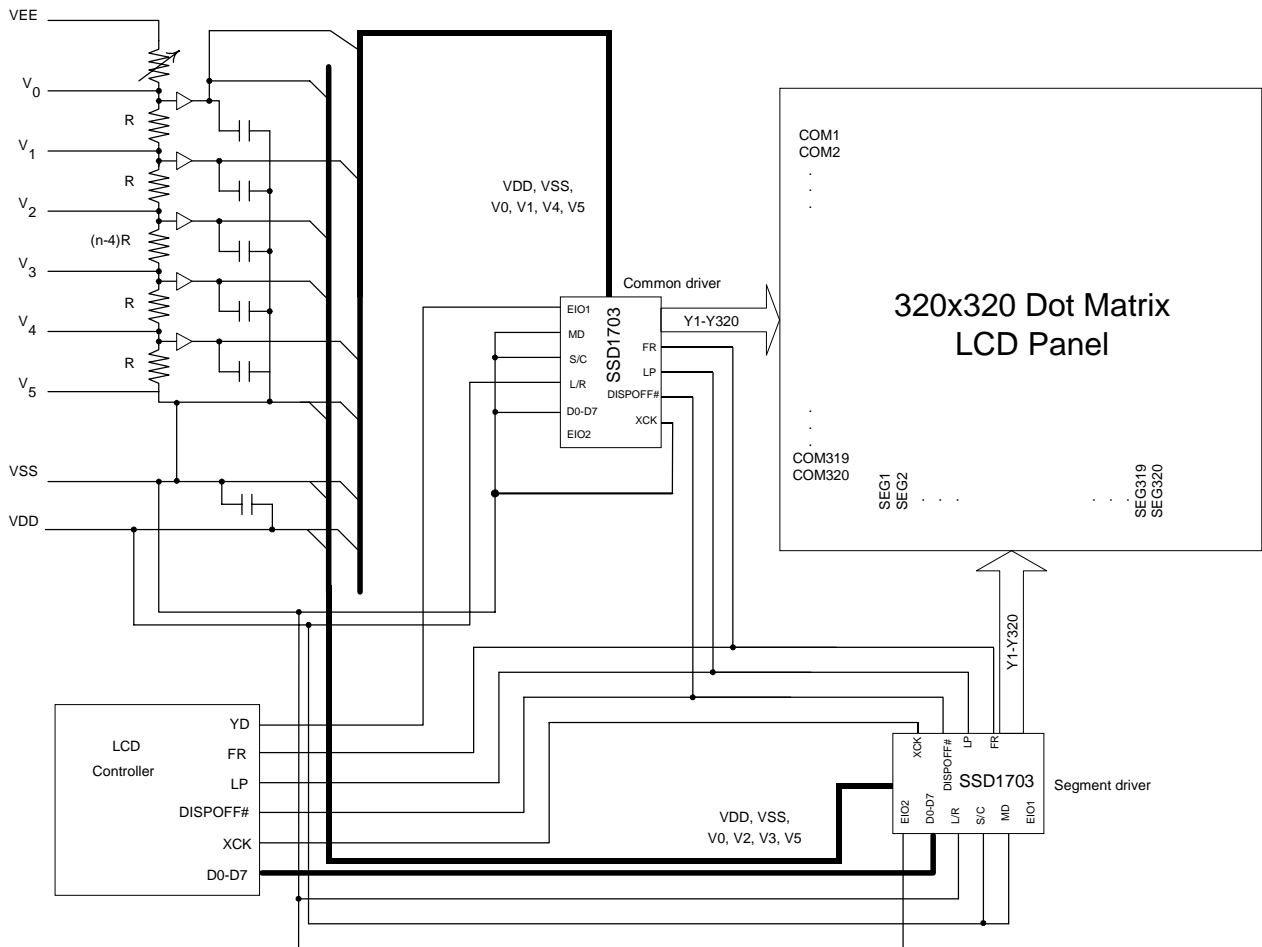
- Max shift clock frequency:
 - 20MHz (VDD = +3.0V to +3.6V)
 - 15MHz (VDD = +2.4V to +3.0V)
- Pin selectable 4 or 8 bits input modes
- Automatic counting function of line pulse (LP) signal

Features for common mode

- Max shift clock frequency: 2MHz (VDD = +2.4V to +3.6V)
- Single or Dual mode operations

APPLICATION DIAGRAM

Below figure shows an application circuit for a 320x320 STN display panel.



In a general application, signals including DISPOFF#, XCK, LP, FR, EIO(row) and data bus D0-D7 should be provided from LCD graphic controller, for example, Solomon Systech Ltd SSD1905 LCD graphics controller or CPU with LCD controller, for example, Dragonball. For the voltage supply, VDD and VSS are necessary for the whole system. LCD voltage levels including V0-V5 are provided from external power sources or they can be divided from an external source VEE.

SELECTION GUIDE

SLA chipset can be cascaded to suit for different panel size. The following table shows some examples,

Mono Display		
<i>Display Resolution</i>	<i>Column Driver</i>	<i>Row Driver</i>
160x160	SSD1701	SSD1701
160x240	SSD1701	SSD1702
240x320	SSD1702	SSD1703
320x240	SSD1703	SSD1702

Color Display		
<i>Display Resolution</i>	<i>Column Driver</i>	<i>Row Driver</i>
160xRGBx160	SSD1706	SSD1701
160xRGBx240	SSD1706	SSD1702
320xRGBx240	SSD1706x2	SSD1702
320xRGBx320	SSD1706x2	SSD1703

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