



Highly Integrated Ultra Low Power LCD Controller/Driver ICs

STE20XX controller/driver family meets stringent portable terminal requirements

STMicroelectronics has expanded its wide off-the-shelf components offer for portable communication terminals introducing state-of-the-art Liquid Crystal Display Controller/Driver ICs.

Following STE2001, launched during 2001, we'll be soon introducing a number of new products covering B/W and Gray Scale display. All our Display/Controller are designed to meet all key criteria for today's Cellular Phones application, including GPRS enabled terminals.

They provide the highest possible integration level, minimizing external part count, and reducing power consumption by more than 50% using specifically developed driving schemes and power supply solutions.

All products are particularly suited for the mainstream in assembly technology such Chip-on-Glass (COG) and Chip-on-Flex (COF).

To meet growing needs of this rapidly changing market, including 3G terminals, STMicroelectronics is also developing a complete range of highly integrated and cost effective solutions for Color Super Twisted Nematic (C-STN) and Thin Film Transistors (TFT) Displays. R&D efforts are also put to offer driving solutions for innovative display technologies.

STMicroelectronics's unique ability to combine leading edge technology with high volume manufacturing enables us to provide complete driver solutions for LCD displays.

Main Applications

- Portable communication terminals
- Office automation telephones
- Consumer electronics
- Electronics toys
- Car radio
- Car cockpit



STMicroelectronics
More Intelligent Solutions



Solutions for Black & White Displays

	Matrix Size (V x H)	Memory Size	Charge Pump	Min AV _{DD} / DV _{DD}	Max VLCD	Interfaces	Status
STE2001	65 x 128	65 x 128 (8.3Kbits)	Up to 5X No Ext Cap	2.4V/1.8V	9V	4-line SPI, I ² C parallel	Production
STE2002	81 x 128	104 x 128 (13.3Kbits)	Up to 6x Super Booster* No Ext Cap	1.8 V/1.7V	15V	4-line SPI, I ² C parallel	Sampling
STE2004	65 x 102	65 x 102 (6.6Kbits)	Up to 5x Super Booster* No Ext Cap	1.8 V/1.7V	15V	I ² C, 3-line SPI 4-line SPI 3-line 9 bits serial 8080 & 68k parallel	Development
STE2005	81 x 128	162 x 128 (20.7Kbits)	Up to 6x Super Booster* One Ext Cap	1.8 V/1.7V	15V	I ² C, 3-line SPI 4-line SPI 3-line 9 bits serial 8080 & 68k parallel	Development

* Patent Pending

Solutions for Gray Scale Displays

	Matrix Size (V x H)	Memory Size	Charge Pump	Min AV _{DD} / DV _{DD}	Max VLCD	Interfaces	Status
STE2010	81 x 128	81 x 128 x 2 (20.7Kbits)	Up to 6x Super Booster* One Ext Cap	1.8 V/1.7V	15V	I ² C, 3-line SPI 4-line SPI 3-line 9 bits serial 8080 & 68k parallel	Development
STE2012	129 x 128	129 x 128 x 2 (33Kbits)	Up to 7x Super Booster* One Ext Cap	1.8 V/1.7V	15V	I ² C, 3-line SPI 4-line SPI 3-line 9 bits serial 8080 & 68k parallel	Development

* Patent Pending

Aimed at mobile terminal applications, the STE20xx range of LCD display driver/controller chips offer the highest possible level of integration and low power consumption. All types are available in chip form to be mounted on glass or on flex cable.



©STMicroelectronics - May 2002 - Printed in Italy - All rights reserved

The STMicroelectronics corporate logo is a registered trademark of the STMicroelectronics group of companies. All other names are the property of their respective owners.

For selected STMicroelectronics sales offices fax:

France +33 1 55489569; Germany +49 89 4605454; Italy +39 02 8250449; Japan +81 3 57838216; Singapore +65 64820240; Sweden +46 8 7504950; Switzerland +41 22 9292900; United Kingdom and Eire +44 1628 890391; USA +1 781 861 2678

Full product information at www.st.com/wireless