

A complete reference board to demonstrate SAA6714 features in an SXGA LCD monitor and projector

Reference Design Kit for SAA6714 SXGA Triple-input TFT-Display Controller

Applications

- LCD monitors
- Smart panels
- Projectors
- LCD TV/PDP TV/rear-projection TV

Key Kit Components

- Main board including:
 - SAA6714 triple-input SXGA LCD controller
 - SAA7118 multi-standard video decoder
 - P89C664: 8051-based micro-controller with 64 kB built-in Flash memory
- Keyboard
- Connection accessories
- Complete reference software application and library support

SAA6714 Triple-input SXGA LCD Controller

- 160 MHz
- Maximum resolution 1280x1024 pixels
- Integrated triple ADC for analog PC interface
- Integrated DVI receiver for digital PC interface
- High-bandwidth digital content protection (HDCP)
- Parallel 8-bit YUV input
- Advanced color processing
- Horizontal/vertical up/down-scaling
- Programmable scaling filter
- 10-bit gamma correction
- Enhanced character OSD
- OSD rotate (90° steps)
- Picture-in-Picture support
- Motion adaptive de-interlacing and movie-detection
- Dynamic noise reduction
- Built-in memory controller
- Horizontal and vertical flip
- Vertical keystone correction
- Integrated TCON (panel Timing controller)
- I²C interface

Description

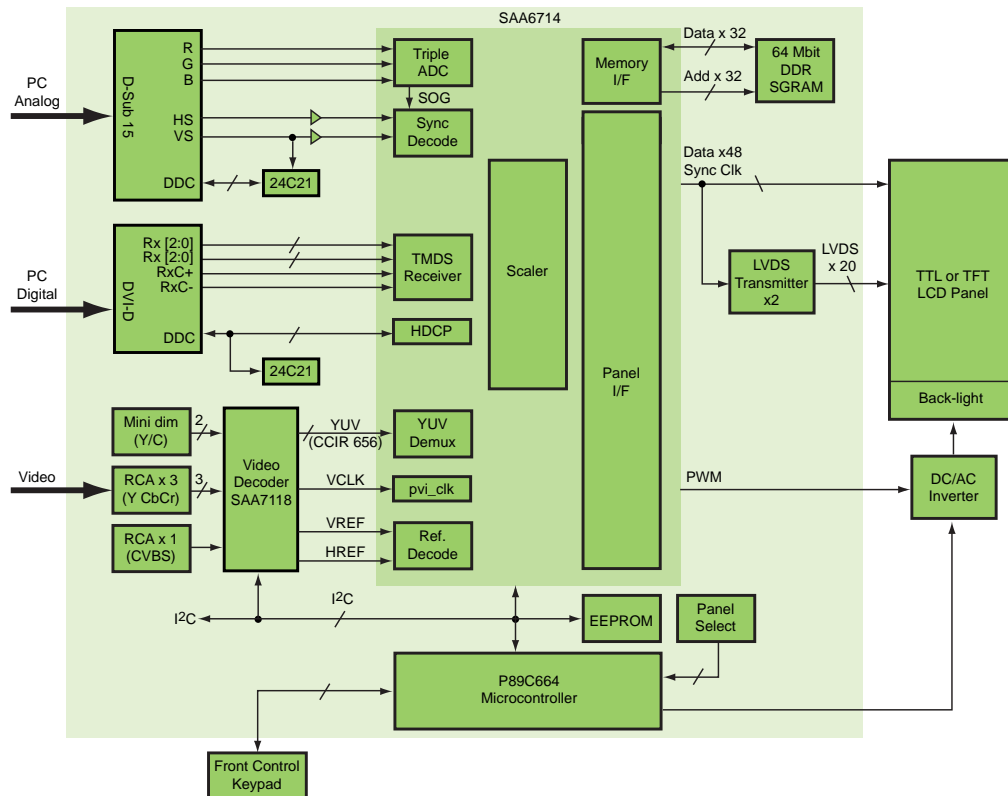
A highly integrated, triple-input SXGA LCD controller, the Philips SAA6714 offers outstanding flexibility and picture quality for LCD monitors and projectors. The SAA6714 Reference Design Kit demonstrates the full range of SAA6714 features and application possibilities. It gives system builders a 'template' that can be tailored to fit a variety of product specifications and market requirements, an approach that enables product development to begin sooner and cost-effective SAA6714-based products to enter the market more quickly.

High-quality LCD monitor/projector chassis design

The SAA6714 Kit's main board houses the SAA6714 controller, an SAA7118 video decoder and a P89C664 microcontroller. A keyboard, connection accessories, a reference software application and software library support are also included. The Kit allows quick setup of an LCD monitor for evaluating SAA6714 capabilities, including projector-related features such as keystone correction. The main board supports input of up to three different types of video. Analog RGB (through a VGA connector) and digital DVI (through a DVI-D connector) can be received from a PC. Video from components such as a VCR, VCD, or DVD can be received through a component video, composite video or Y/C video connector.

The SAA6714 Reference Design Kit offers outstanding video performance, flexibility and cost reduction for developers of SXGA LCD displays. Its main board receives analog RGB and digital DVI signals from PC and signals from components such as VCR, VCD, and DVD video signals that are decoded by the onboard SAA7118. A complete reference design, the SAA6714 Kit allows system designers and manufacturers to develop cost-effective LCD monitors, projectors and other innovative display-related products quickly and with minimal effort.

SAA6714 Block Diagram



Full-featured Reference Software Package and Library Support

- Software library available for LCD monitor/projector application
- Software library includes:
 - Micro-controller (P89C664/P89CRD2) drivers

- Drivers for SAA6714 controllers and built-in OSD functions
- SAA7118 video decoder drivers
- Simple user interface (keyboard and LED) drivers
- Monitor power management drivers
- OSD font editor in Windows® 95

Philips Semiconductors

Philips Semiconductors is a worldwide company with over 100 sales offices in more than 50 countries. For a complete up-to-date list of our sales offices and distributor partners, please visit our website www.semiconductors.philips.com or contact any of the following sales offices by phone or mail:

North America

Philips Semiconductors
811 E. Arques Avenue
Sunnyvale, CA 94088
United States

Tel: +1 800 234 7381
Fax: +1 800 943 0087

Europe, Africa, Middle East and South America

Philips Semiconductors International
Fulfillment and Sales Support Center
P.O. Box 366
2700 AJ Zoetermeer
The Netherlands

Fax: +31 79 3685126

Asia

Philips Semiconductors Asia Pacific
Market Response Management Center
P.O. Box 68115
Kowloon East Post Office
Hong Kong

Fax: +852 2756 8271

Japan/Korea

Philips Semiconductors
Philips Building 13-37
Kohnan 2-chome
Minato-ku,
Tokyo 108-8507

Tel: +81 3 3740 5130
Fax: +81 3 3740 5057

© Philips Electronics N.V. 2001

All rights reserved. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice. No liability will be accepted by the publisher for any consequence of its use. Publication thereof does not convey nor imply any license under patent - or industrial or intellectual property rights.

Printed in the USA

301678/5K/FP/2pp/0501

9397-750-08311