SIEMENS

Product Brief SDA 9388X

Single-Chip Picture in Picture IC

The SDA 9388X integrates analog (clamping, ADC, DAC, RGB switch) and digital signal processing (decimation, memory, output signal processing etc.) on a single silicon.

Potential Application

The SDA 9388X is a cost-effective single-chip Picture in Picture IC that requires only a small amount of external components. It is suitable for the following applications:

- TVs for NTSC, PAL M and PAL N markets
- Display and surveillance equipment

Features

- Picture reduction to 1/9, 1/16 and 1/36 of original size
- Freely programmable positioning of PIP on the main picture as well as POP positioning

- PIP frame control including color, shape and width
- Format matching of PIP to 16:9 screen
- Digital signal processing for picture quality optimization
- Three CVBS inputs; analog YUV or RGB output
- Integrated high speed video switch for inserting an external RGB source onto the screen (i.e. OSD)
- I²C-Bus control
- 0.5 μm CMOS technology
- P-DSO-28 package

Documentation and Support Package

- Data sheet
- Technical articles
- PIP module and interface board for evaluation
- SIMON Software for Windows based PC to control evaluation boards via I²C Bus
- SIMON interface module
- Auto demo package for demonstration

SDA 9388X Block Diagram



The SDA 9388X integrates different functional blocks on a single chip

- Signal clamping and 7-Bit AD Converter
- NTSC/PAL M/ PAL N Chroma decoder
- Decimation logic
- 72-Kbit field memory
- Output signal processing, i.e. peaking
- Triple 6-Bit DA Converter
 RGB Switch
- RGB Switch
- SYNC processing/generation and memory control logic

Availability

Samples of the SDA 9388X are available with complete documentation for evaluation. SIEMENS' highly experienced engineering support team can assist you with your design in work. Please contact your local Siemens office for further details.

SDA 9388X Application Example



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"With our on-chip system solutions we are providing innovative, in every respect optimized key products for the multimedia age. In so doing Siemens Semiconductors is going to get one of the major players in the market of logic ICs."

Dr. S. Mehrgardt,

President, Siemens Semiconductors Signal Processing Division

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