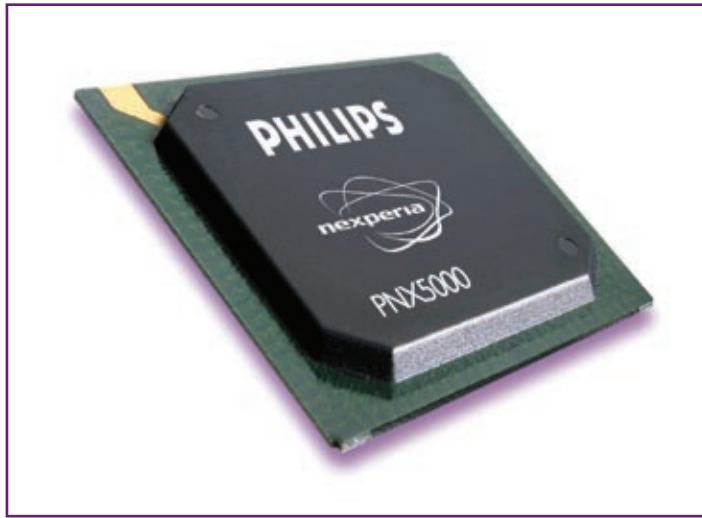


# Nexperia PNX5000

## High-performance scaler

Exceptional performance and world-class picture quality make Philips' Nexperia PNX5000 the scaler of choice for next-generation LCD flat-panel televisions.



### Key features

- Advanced 3D motion compensated de-interlacing (MCDI)
- Edge dependent de-interlacing
- Advanced picture quality improvement features
  - 3D digital noise reduction
  - DCTI
  - DLTI
  - Dynamic color management
  - Adaptive contrast and color control
- Movie mode
- Panorama scaling
- High-quality bitmapped graphics
- 1000 teletext pages at level 2.5
- Support for display resolutions up to and including 1366 x 768
- Powerful 32-bit controller

Optimized for LCD TV applications, the Nexperia PNX5000 is the first scaler on the market to integrate motion compensated de-interlacing. Its extensive range of advanced features provides world-class picture quality at a highly competitive price.

The PNX5000 works seamlessly with the Ultimate One Chip (UOC) Third Generation analog TV signal processor to provide a cost-effective yet high-performance complete LCD TV system solution. Compatibility with the UOCIII ensures that design effort and costs are kept to a minimum, giving manufacturers a quick and easy entry into the mid-range and high-end LCD TV market. A complete LCD TV reference design and software development kit is available to support development of new PNX5000-based systems.

A Windows-based user interface tool is also available for creating on-screen graphics according to customers' own specifications.

The PNX5000 is the first in a family of high-performance scalars. Future derivatives will include advanced features such as HD input and processing, movie judder cancellation, JPEG and MP3 decoding, picture-in-picture support and PC inputs, adding value to mid-range and high-end LCD TV applications.

# PHILIPS

# Nexperia PNX5000

## High-performance scaler



### Video input processor (VIP)

The VIP unit captures and processes digital video for use by on-chip units. It accepts up to 10-bit parallel YUV 4:2:2 digital video from any device or component outputting a CCIR656-compliant stream or a YUV stream with separate H and V syncs.

### Video scaler and de-interlacing

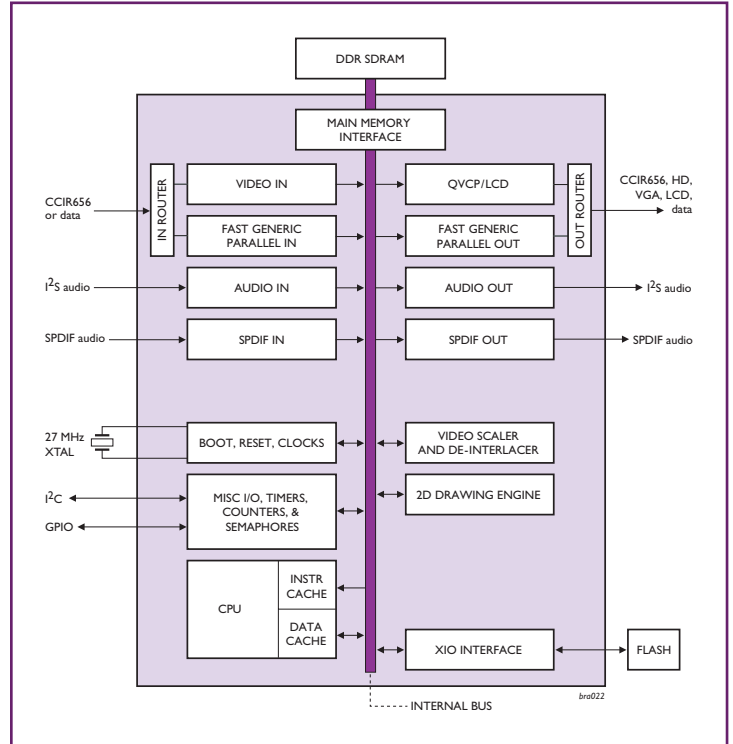
A versatile, programmable memory-based scaler unit applies a wide variety of image size, color and format manipulations to improve video quality and prepare it for display.

### 2D drawing engine (2D DE)

An on-chip 2D rendering and DMA engine accelerates high-speed 2D graphics operations.

### Quality video composition processor (QVCP)

The QVCP unit combines two planes of display data from different sources before output. It supports either two video planes or one video and one graphics plane, such as video from a TV tuner and OSD graphics. Together with the on-chip 2D engine and the memory-based scaler, the QVCP enables the PNX5000 to deliver world-class picture quality optimized for LCD TV applications.



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