

Product Description

The IP00C813 is a dual-input/dual-output de-interlacer and scaler on a single device. It features a built-in video decoder, ARM9 CPU, LVDS output, along with Ethernet and USB interfaces. Its inputs and outputs can be any interlaced format, SD or HD, or any progressive format, up to 1080P/WUXGA/2K1K.

The IP00C813 features 2 independent de-interlacer/scaler blocks, with full 10-bit internal processing. The IP00C813 can be configured in several ways. In the single-output mode, it can generate Picture-in-Picture, Picture-by-Picture output. In the dual-output mode, it can generate separate outputs at any resolution.

First, it can correct for geometry distortion based on a user-programmable "warp table" loaded in an external CPU or Flash memory. This geometry correction can be applied to the entire image with a resolution as small as 16x16 pixels. It supports image rotation up to +/- 25 degrees, as well as 90-degree rotation and mirror image.

Second, the IP00C813 can correct for color distortion in the image. This is accomplished by a powerful brightness and contrast adjustment system that is independently programmable for each 64x64 pixels region in the image.

The IP00C813 also features a state-of-the-art edge blending function to allow for the seamless tiling of multiple images.

Applications

The IP00C813 is an ideal solution for camera systems where the input image contains optical distortion, and for projectors to be able to produce high-quality images on non-flat surfaces.



Actual Size

