

IP00C763

De-interlacer/Scaler up to 1080p



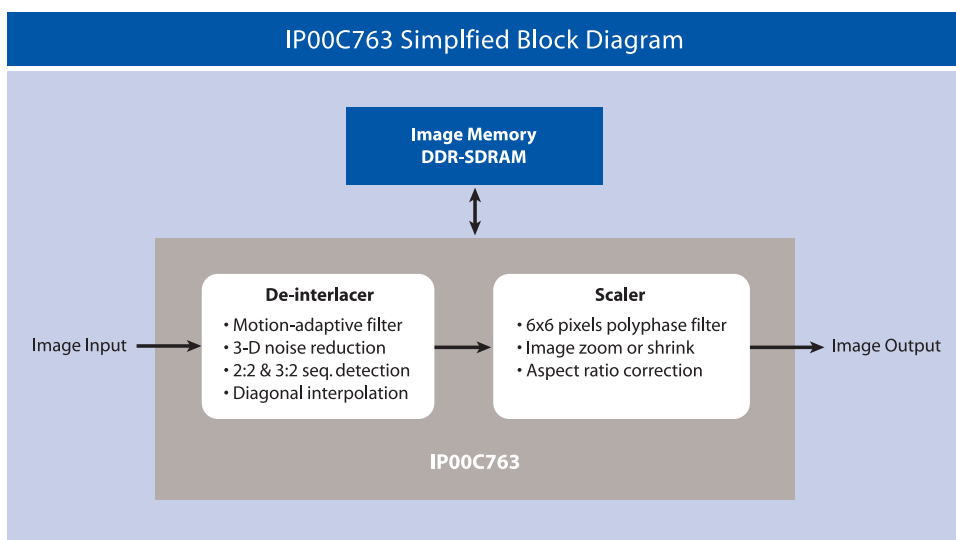
Summary

The IP00C763 is a scaler/de-interlacer chip used to process images for rendering on Flat Panel Displays and projectors. It supports all input types up to UXGA/1080P progressive and 1080i interlaced. It can output in any format, either progressive or interlaced, up to a speed of 162 MHz.

The IP00C763 supports 12-bit input/output and will provide clear and crisp images with its unique kernel-adaptive scaling engine and motion-adaptive de-interlacer. It also features a new engine for noise reduction that eliminates artifacts due to MPEG encoding. It also features the unique capability of flipping the image by +90 deg. or -90 deg.

Applications

- Digital Displays
- Video Processors/Switchers
- Video Walls
- Projectors



IP00C763 Specifications

INPUT

RGB 60-bit/YUV4:4:4 60-bit @81MHz
 RGB 36-bit/YUV4:4:4 36-bit/YUV4:2:2 24-bit/YUV4:2:2 10-bit @162Mhz
 Interlace/Progressive compatible

OUTPUT

RGB 60-bit/YUV 4:4:4 60-bit/YUV 4:2:2 40-bit @ 81MHz
 RGB 36-bit/YUV 4:4:4 36-bit/YUV 4:2:2 24-bit @ 162MHz
 Interlace/Progressive compatible

IMAGE SIZE

Input: Sync Interval - 4096 pixels, Active Width - 2048 pixels
 Output: Sync Interval - 4096 pixels, Active Width - 2048 pixels

DE-INTERLACING

2:2 and 2:3 pull down sequence detection
 3D noise reduction/MPEG noise reduction (mosquito/block)
 3D motion-adaptive filter
 Diagonal line interpolation
 Combing filter for caption

IMAGE SCALING

8x6 (6x6 scaling down) interpolation with FIR filter
 Independent H and V scaling ratios
 3D motion-adaptive filter
 Non-linear scaling (aspect ratio correction)

ON-SCREEN DISPLAY

Bitmap OSD featuring 256 colors
 Supports for blinking and semi-transparent OSD

OTHER FEATURES

90-degree image rotation
 Horizontal and vertical edge enhancement
 Input image format automatic detection
 Brightness & luminance adjustment in RGB/YUV
 Color management function
 12-bit color Gamma correction tables (7 LUTs available)
 Dithering for 10, 8 or 6-bit output

EXTERNAL MEMORY

2 DDR-SDRAM 64-bit memory bus

CPU INTERFACE

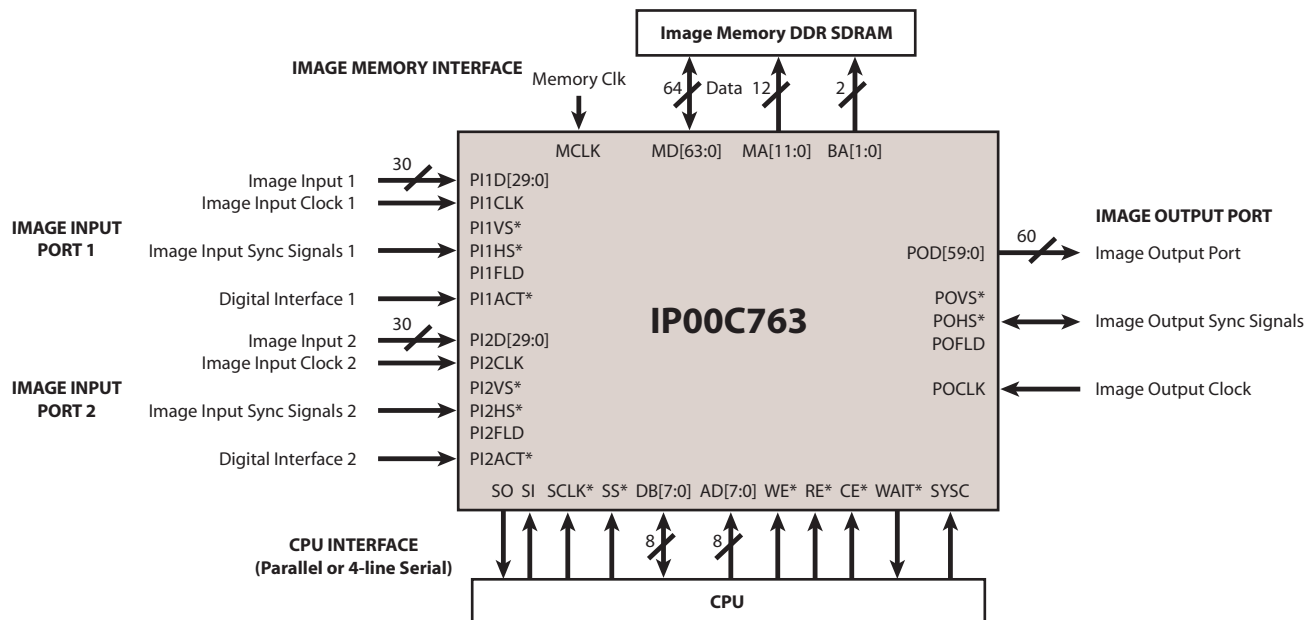
4-line serial/8-bit parallel

POWER SUPPLY

3.3V, 2.5V, and 1.2V

PACKAGE

544-pin PBGA; mold: 27mm (1.00mm pitch)
 Pin compatible with IP00C762



For more information please visit:
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IMAGE PROCESSORS

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