

viimagic IP Core overview

Description

viimagic offers IP cores in order to speed-up system integration. viimagic IP cores can be used to build a basic 1080P60 camera in conjunction with viimagic 922x sensors. The IP cores are based on Altera™ Stratix 4 FPGAs. Many IP cores can be easily adapted to other FPGA families like Cyclone 3. The IP cores may contain Altera™ specific IPs, e.g. FIFOs, Rams, etc.

IP cores are provided "as is" without any warranty. Customers are allowed to modify the source code to their needs. Consequently it is possible to adapt the VHDL/Verilog code to other FPGA manufactures.

Features

- 1080p60 streaming data path based on Altera™ Stratix 4 FPGA
- Supports full HD at 60 frames per second
- Easily adaptable to other FPGA families and to customer needs
- Open source RTL code



LVDS synchronizer 4:1 and 6:1 mode. Provides control signals to the LVDS receivers.



Digital Double Sampling for best picture quality using global shutter.



Fixed pattern noise correction: increases the quality of the video signal.



Stretches incoming high-speed frame burst to an equally distributed P60 video frame.



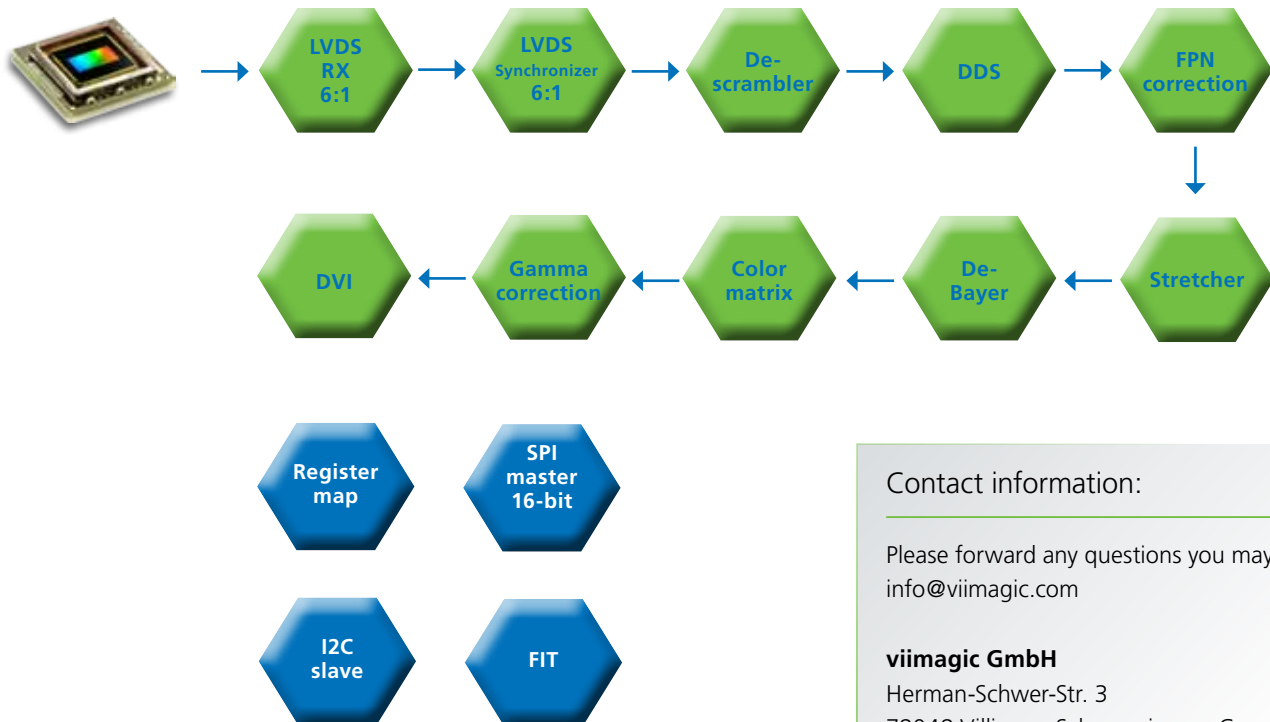
Digital visual interface, 8-bit DVI RGB-interface for 1080P60.



Creates an RGB video signal (12-bit per color stream) out of Bayer pattern video data.



Example configuration



More IP cores are available on demand.

Contact information:

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