

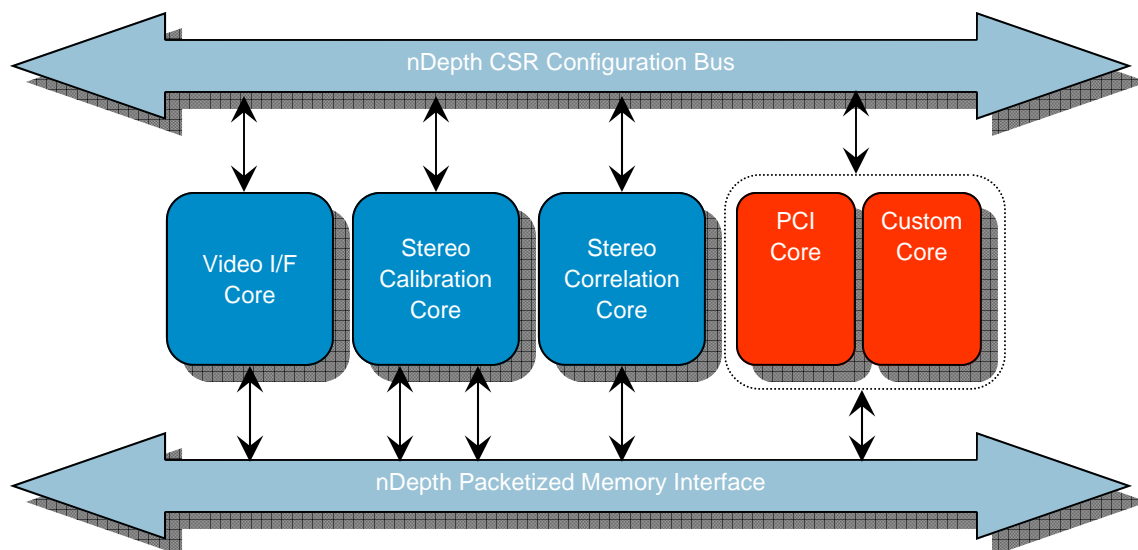
Overview

The Focus Robotics nDepth Stereo Vision Processor is a collection of individual IP Cores that work together to provide real-time depth perception. A Camera IP core interfaces to an external stereo camera and writes raw images to memory. A Calibration IP Core reads the raw images and generates rectified and undistorted images using translation coordinates from the memory. A Correlation IP Core reads the calibrated images, performs the dense stereo matching, and writes the resulting disparity image to memory. A PCI or CUSTOM core is used to DMA the raw, calibrated, or disparity images to a host PC, DSP or embedded system as needed. All cores utilize a simple packet based interface for memory and control access.

Available Cores

- Calibration Core
- Correlation Core
- Video Interface Core
- Custom Correlation Core
- Supporting PCI Controller Core
- Supporting Memory Arbiter Core
- Full PCI nDepth Processor Core
- Custom Interface Core

System Diagram



Ordering Options

Available as an encrypted Verilog core with these licensing options:

- Perpetual license with yearly maintenance.
- Single project license with integration support.
- Royalty based license with yearly maintenance.

Copyright 2006 Focus Robotics. All Rights Reserved.

Focus Robotics

7 Teloian Drive
Hudson, NH 03051

Phone : 603-594-3097
E-mail : info@focusrobotics.com
Web : www.focusrobotics.com