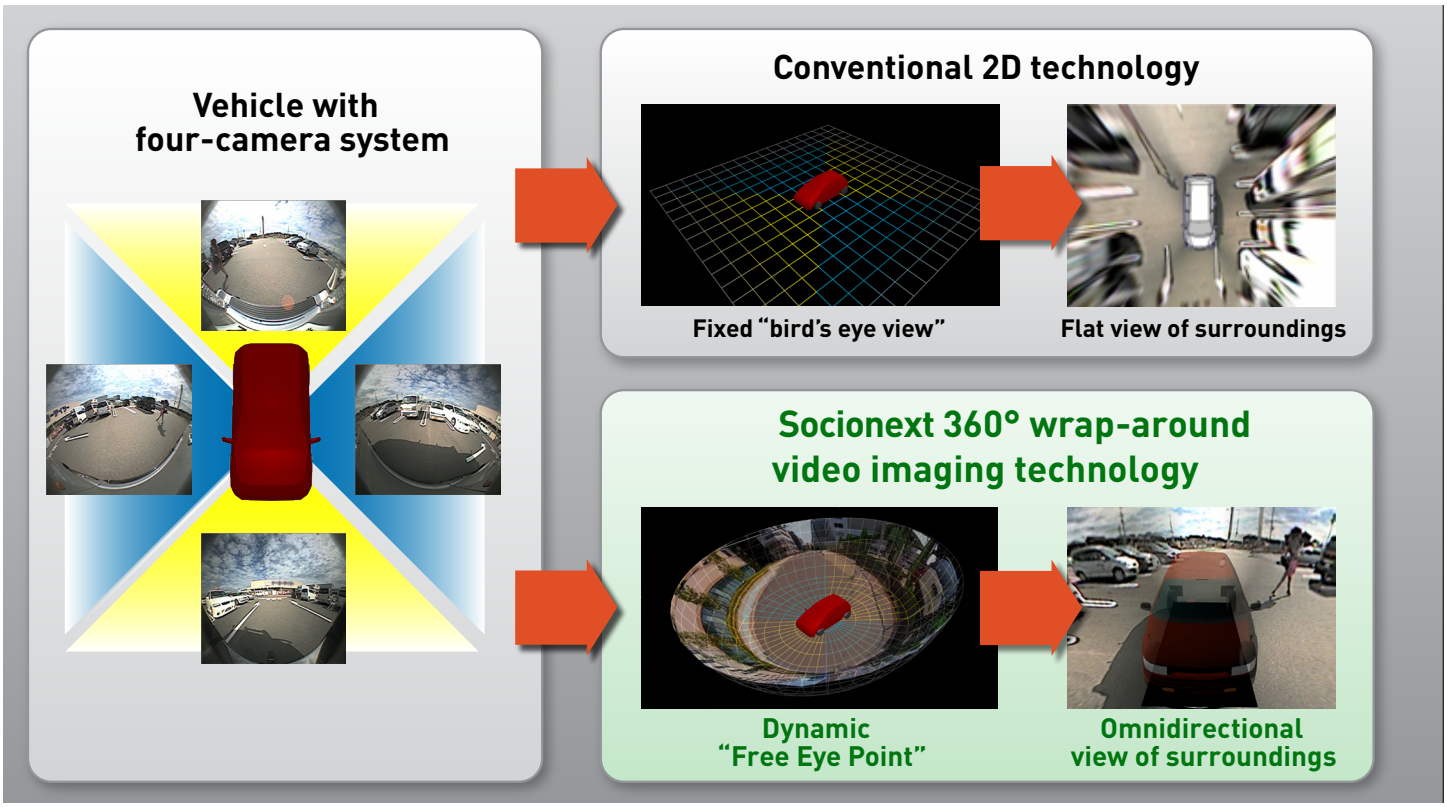
socionext™
for better quality of experience

360° Wrap-Around Video Imaging Technology

Omnidirectional Viewing with "Free EyePoint" Perspective



Description

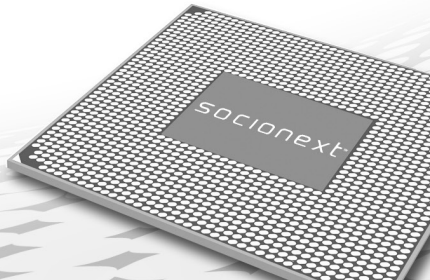
The Socionext 360° Wrap-Around Video Imaging Technology synthesizes images from four cameras to create a true 3-D hemispheric view of an object's surroundings. The technology enables flexible, omnidirectional monitoring around a vehicle from a dynamically definable perspective or "free eye point." Conventional multi-camera "bird's-eye -view" technologies stitch together two-dimensional images, often resulting in distorted images.

Advanced three-dimensional-algorithms smoothly combine images from each camera to offer a seamless and clear 360° view. System designers can dynamically utilize the "free-eye- point" feature to change the displayed perspective, further optimizing the view.

For example, the Socionext 360° Wrap-Around Video imaging technology can improve vehicle safety by providing visual assistance to the driver. The true 360° three-dimensional-view enhance visibility during backing maneuvers or while turning corners. The technology also eliminates "blind spots" to a degree that cannot be matched by two-dimensional technologies.

Features

The Socionext technology provides views from all sides of the vehicle, as well as a virtual "free-eye-point" perspective. This allows the driver to see images not only from the



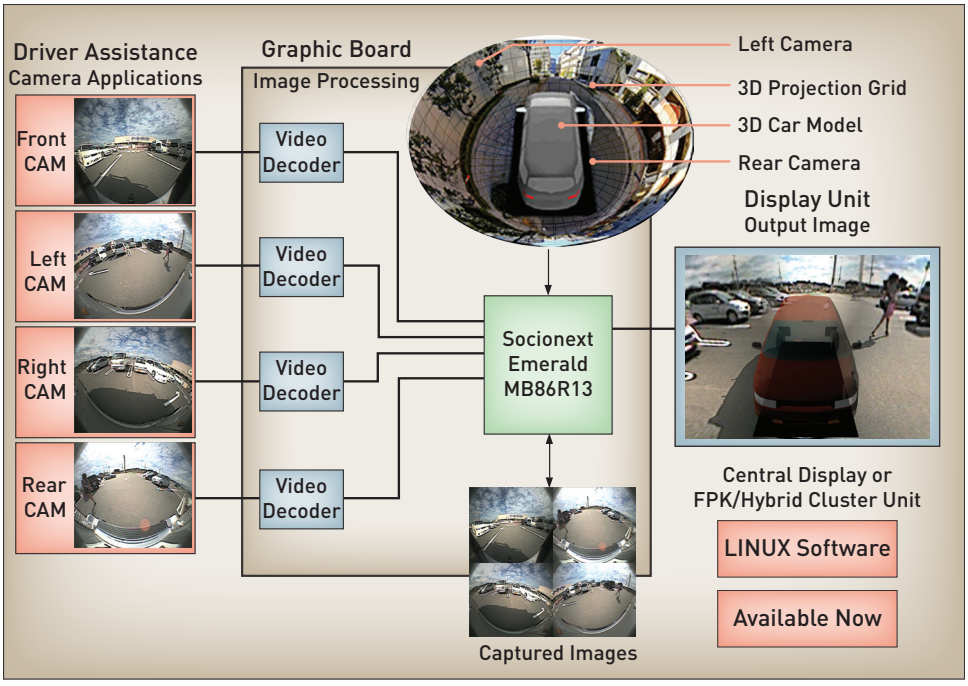
front, rear, and sides, but also to see a virtual view from any direction within the environment.

A full set of tools, libraries, and device drivers is ready for ready integration with the Socionext line of 3D graphics display controller SoCs. For example, system designers can combine 360WAV technology with the MB86R13 "Emerald-M" graphics SoC for a powerful, single-chip, omnidirectional-viewing solution. A 6 camera system based on the Socionext MB86R23 "Triton-C" graphics SoC will be available in 2015.

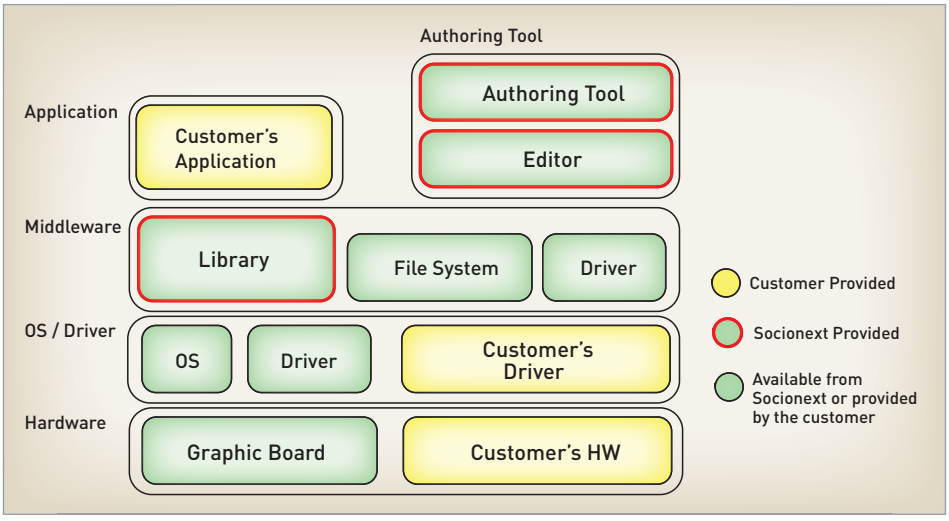
Applications

- Driver Vision Assistance Camera Systems
- Parking Aid or Reverse View
- Vehicle Camera for Passive and Active Safety Systems
- Security Surveillance Camera Systems.

Development H/W



Development S/W



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