

TESSERA



FotoNation Red Image Enhancement Solution

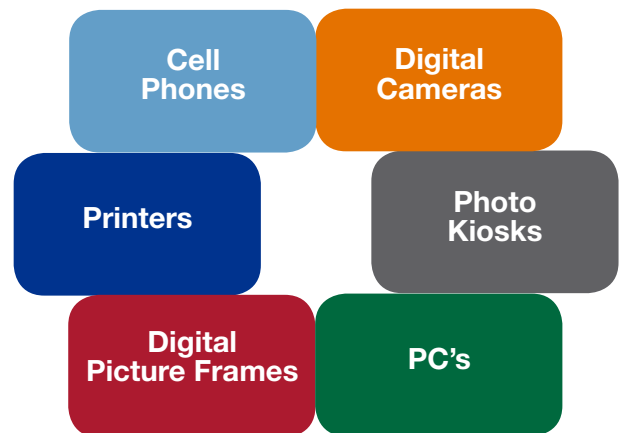
**With FotoNation® image enhancement solutions from Tessera,
picture-perfect images are available at the touch of a button!**

The powerful flash mechanisms on today's digital still cameras make the detection and correction of red- and golden-eye related defects crucial for all photography. As people increasingly reach for their cell phones to capture spur-of-the moment photos, demand for enhanced image capture capabilities in mobile devices has grown.

The FotoNation Red solution from Tessera addresses the common problem of red- and golden-eye related defects by automatically detecting and correcting these defects without the need for a computer. With this embedded solution, photos are enhanced instantly, providing consumers with the high-quality images they want, when they want them.

Deployed in more than 100 million camera-enabled devices to date, the FotoNation Red solution

provides the highest red- and golden-eye detection rate, with the lowest published false positive rate, for a wide range of applications.



The FotoNation Red solution from Tessera is transforming image capture, automatically correcting red- and golden-eye defects for picture-perfect images.

Tessera - Transforming the Future™

The FotoNation Red solution detects and corrects an unlimited number of red- and golden-eyes in an image, including both single eyes and pairs of eyes, even on turned or obscured faces, in as little as 0.3 seconds. It features a detection rate of up to 90% and a false positive rate of less than 2%. Red- and golden-eye correction is possible in eyes as small as eight pixels.

The FotoNation Red solution is considered one of the best in the industry. It has been tested against an image database of more than 20,000 images, including subjects of all ages, iris colors and skin types. Test images also cover a wide range of different mobile devices, different resolutions, different illumination conditions and varying distances between subject and camera.

The FotoNation Red solution offers a flexible application programming interface (API), and contains its own memory management for high performance and easy integration.

Key Features

- Small code size (typically 100KB)
- Fast red-eye detection and correction: as low as 0.3 seconds
- Corrects an unlimited number of red- and golden-eyes, as small as 8 pixels
- Optimized for embedded use: integer-only algorithm, no embedded FPU required
- Supports wide range of input image formats, including RGB and YUV
- Minimal incremental memory and execution time cost with increased image size

Platform Support

The FotoNation Red solution is available on the following platforms running various operating systems:

- Platforms: x86, ARM, MIPS, RISC-based
- Operating Systems: Windows, WinCE, Linux, MacOS X, Symbian, MontaVista, µltron, Thredex, Nucleus and other custom operating systems



Before FotoNation Red



After FotoNation Red

Transforming the Future

By investing in technologies that drive new levels of innovation in electronics, optics and imaging, and delivering scalable solutions that enable manufacturers to get the right product to market, at the right time, Tessera's transformational technologies are enabling the next generation of advanced electronics products.

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