

The 2011 VISION 2020 Award Winners were presented on June 21 at the 6Sight Future of Imaging Summit in San Jose, California. The VISION 2020 panel of expert judges selected three companies' innovative technologies from a pool of submissions.

### **Gold: InVisage Technologies, Inc.**

InVisage Technologies, Inc. (<http://www.invisageinc.com/>) of Menlo Park, Calif., for its QuantumFilm image sensors, which are semiconductors with unique light-capture properties — the world's first commercial quantum-dot-based image sensors. QuantumFilm works by capturing an imprint of a light image and then employing the silicon beneath it to read out the image and turn it into versatile digital signals. The technology makes it possible to obtain high-fidelity, high-resolution images from handheld devices such as camera phones and PDAs in even the most challenging lighting conditions. The use of QuantumFilm will enable high pixel count and high performance in tiny form factors, breaking silicon's inherent performance-resolution tradeoff, so that camera users will no longer have to choose between the convenience of a mobile phone or portable camera and the quality images captured by a large digital camera.

### **Silver: 36Pix**

36Pix (<http://www.36pix.com/>) of Montreal, for its ChromaStar chroma keying engine technology, which solves the most challenging "green screen" problems and provides maximum image rendering flexibility in the fastest turnaround times, especially valuable with large volumes, such as the school and sports photography markets. Photographers take their photos using a green background and send them online to 36Pix, which uses the ChromaStar® engine to remove the green backgrounds. The photos go back over the web to the photographers (or photo labs) so that they can then insert their own backgrounds. The ChromaStar® engine's advanced algorithms quickly produce high definition images so that customers get their orders back within one or two days.

### **Bronze: Aptina Imaging Corporation**

Aptina Imaging Corporation (<http://www.aplina.com/>) of San Jose, Calif., for its High Dynamic Range (HDR) technology, including the first system-on-a-chip HDR product, which enables camera phones to capture high quality images and video in diverse illumination conditions. Though the dynamic range of camera phones has actually been decreasing as smaller pixels are utilized to achieve higher resolutions, Aptina's HDR technology reverses this trend. Through a combination of advanced pixel technologies, an innovative sensor architecture, and on-chip signal processing, Aptina has engineered a completely self-contained HDR solution to capture the brightest and darkest parts of a scene at the same time.

### **VISION 2020 Awards Criteria**

VISION 2020 Imaging Innovation Awards are given to those individuals, teams, organizations or companies whose product or service innovations enable a future of intelligent imaging where images are increasingly used to enhance communication and quality of life. All entries must be imaging-related; a broad view of imaging is used. An innovation may be drawn from the areas of capturing, storing, sharing, managing, processing or printing, among others.