Pinnacle Imaging Systems is a developer of IP solutions for intelligent vision systems and producer of Ultra HDR™ video and simultaneous still capture solutions along with numerous other Algorithms-in-Logic™ IP blocks and cores.

Pinnacle’s Ultra HDR™ video solutions currently capture 120 dB, 1080/30 with a four-frame variable offset merge, a two-frame merge at 90 dB, 1080/60 and provides these solutions combined with de-ghosting and moving objects correction algorithms, transition noise suppression and optimization of the HDR merge for little or no visible merging artifacts. Pinnacle’s HDR solutions are provided by utilizing any variable frame set output or exposure offset sensors and are supported by FPGA, SoC, DSP/ISP or ASIC.

Pinnacle Imaging Systems also provides Ultra HDR LATM™ (Local Adaptive Tone Mapping) that has a theoretical upper limit of 276dB. Ultra HDR LATM™ applies the maximum DR range to the tone map, completely preserves color and automatically optimizes the tone mapping parameters based on the shadow and highlight areas of each individual video frame to ensure a more natural look to the output video. In many cases, Pinnacle’s LATM™ provides enhancements to existing in-pixel HDR sensors and because it preserves all color data, it can provide higher DR to be displayed compared to other tone map solutions.

Pinnacle’s IP blocks and cores can be utilized in numerous applications including:

- Intelligent surveillance
- Intelligent traffic systems
- Commercial UAV/drone
- Automotive ADAS and autonomous driving systems
- Side mirror replacement
- Body-worn
- Machine vision
- Endoscopy
- Scientific camera systems

Pinnacle’s HDR advanced algorithm-in-Logic IP’s in development can provide enhanced data for detection and recognition engines including deep learning neural networks, CNN and shallow networks.

Pinnacle’s Ongoing IP Core Development

Pinnacle’s imaging scientists and engineering teams in Moscow and California produce imaging and video IP that goes well beyond high dynamic range solutions, solving problems with unique IP that can only be addressed by applying advanced embedded algorithms into logic.

For more information please go to: www.ultrahdrvideo.com
Tel: 650-631-5737 or contact ron@pinnacleimagingsystems.com

www.ultrahdrvideo.com