Facial Thermogram Identification

Challenge
A company specializing in human recognition technology needed to develop a fool-proof, non-intrusive system to verify the precise identity of individuals. These systems are used in a variety of applications including law enforcement surveillance and credit card security.

Solution
The company developed a system using the DT3152 PCI frame grabber and the Frame Grabber SDK™ (Software Development Kit). In what is known as a facial thermogram, a process in which the facial heat patterns that are unique to every human being are detected, an image of a person's face was captured using a high-resolution, infrared camera and the DT3152. A monochrome signal was then sent down a single-channel, RS-170 cable into a 100 MHz Pentium PC, at which time a LUT (look up table) was applied to the grayscale image. The image was then processed through a facial pattern matching application developed with the SDK in C++, at which time the person's unique facial heat pattern was then distinguished.

Conclusion
Using the DT3152, the company was able to develop a new ID verification technology that delivered greater accuracy, speed and reliability than alternative identification methods.

For more information, click on DT3152 or call (800) 525-8528.