

Distributed Embedded Computing in the Detection of Explosives

Seemeen Karimi, Barry Jackson and Carl Crawford
Analogic Corporation and SKY Computers

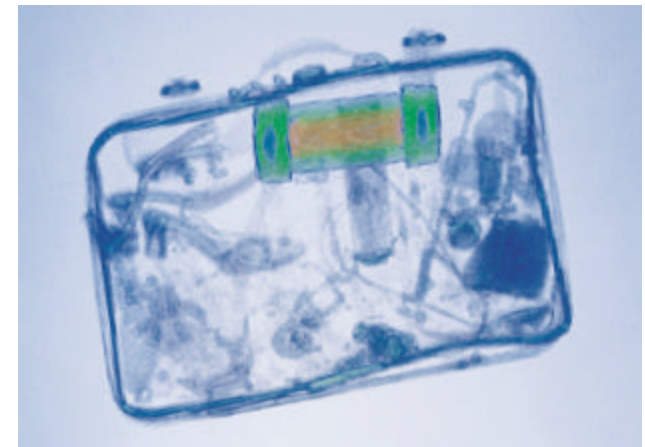
X-ray CT

Automatic Explosives
Detection

450 bags/hour



90 slices/s



The heart of an FAA-certified Explosives Detection Scanner

Image Reconstruction



- **Input: 1080 views/second, 6048 samples/view.**
- **Rotating Slice Reconstruction: 1.5 GOp/s**
- **Output: 90 slices/s**
- **External Communication: RS-232 and SCSI**

