

# Datastrip

## Biometric & Wireless SIG

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*Get Mobile*

*Get Verified*

*Get Datastrip*

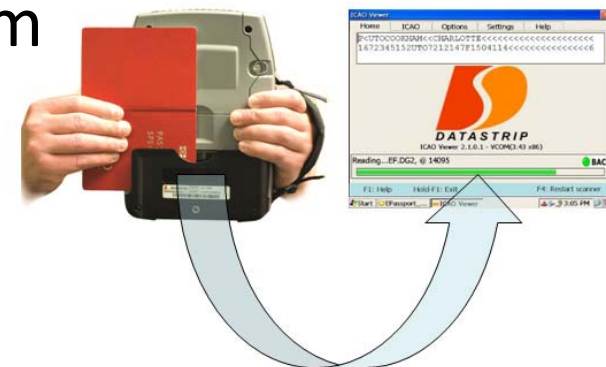
# Datastrip Overview

- **Established in 1994, privately owned**
- **Mission:**
  - Develop mobile, secure ID technologies that integrate seamlessly with existing security applications to effectively reduce system implementation costs.
- **Market leader in providing handheld personal identification and verification products for:**
  - Government
  - Military
  - Law Enforcement
  - Travel
  - Security
  - Fortune 500 commercial markets








# Product Focus

- **Mobile handheld systems designed to identify individuals in mission critical situations**
  - Using common credentials
  - Using biometrics
- **Product Strategy & Architecture**
  - Use industry standards
  - Provide an open and flexible platform



# Mobile Terminal Timeline

<u>2003</u>	<u>2005</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
<p><b>DSVerify</b></p> 	<p><b>DSVII-SC</b> <b>DSVII-PA</b> <b>DSVII-SW</b></p> 	 <p><b>DSV2+<sup>Turbo</sup>-SC</b> <b>DSV2+<sup>Turbo</sup>-PA</b> <b>DSV2-iClass</b></p>	 <p><b>DSV2 Multi-Modal</b></p>	 <p><b>DSV3</b> <b>EasyRead</b> <b>EasyVerify</b></p>

# Partners / Alliances

Provide high quality products and services through a worldwide business network of System Integrators & VARs.

- Northrop Grumman
- SAIC
- Siemens
- Motorola
- MorphoTrak
- APD Communications
- Smart Media Innovations
- NEC
- Software House
- Accenture
- Unisys
- 3M
- Logica
- Hewlett Packard
- Sagem Securite

# Deployed Solutions in Over 50 Countries

## Government

Slovakia	Passport, ID card, Drivers License
Serbia	Passport, ID card, Drivers License
Slovenia	Immigration Control
USA	Common Access Card
USA	Mobile ID in Middle East
USA	TWIC Development
Sri Lanka	Army ID Cards

## Police

USA, Harris County	Mobile AFIS
USA, Fairfax County	Mobile AFIS
Cyprus	Mobile AFIS
UK	Passport, ID cards
Middle East	Military Police
Indonesia	Mobile AFIS, ID Verification

# Sample Deployments (cont.)

## Financial

Africa

Savings Card

## Education

Saudi Arabia

Student Cards

UK

Student Access

## Transportation

Sri Lanka

Airport Employee Cards

USA: Coast Guard

TWIC & PIV Verification

USA : Georgia Ports

ID Cards

## Commercial

UK

Nuclear Power Station

Middle East

Gas & Oil

USA

Search engine company

USA

Theme Park

# Winning Attributes

*“Deliver products that work, and that provide the flexibility to meet the changing requirements of dynamic markets!”*

- **Field-Proven**

- Successful deployment & operation in harsh environments

- **Product Architecture**

- Flexible and Extendable
- Mechanical, Hardware, Software
- Feature Rich

- **Industry standard interfaces and protocols**

- **Flexible and customizable to interoperate with existing systems**

- **Partner with the “Best of Breed” technology providers**

- **Powerful Software Development Kit / Programming Interfaces**

- **Long Battery Life: > 8 hours**

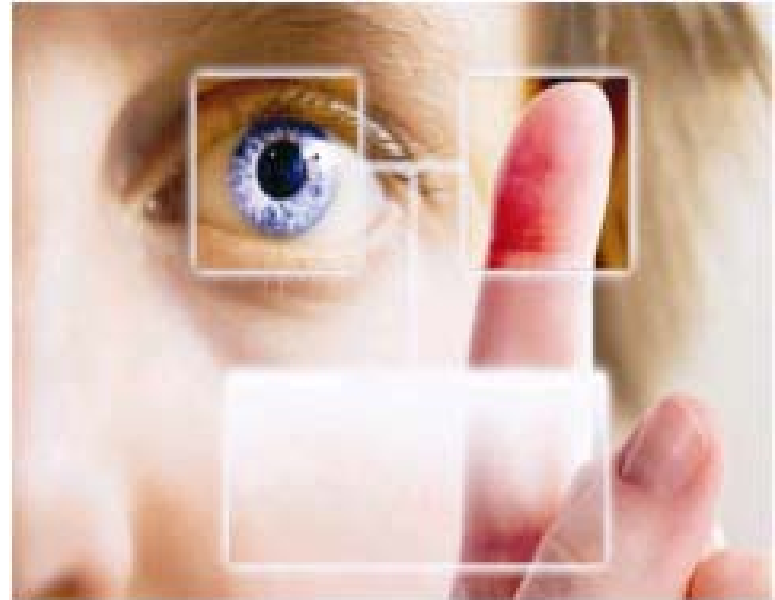
- **Mechanical Design**

- Rugged
- Good balance between aesthetics and ergonomics

- **Tenacious Customer Support!!!!**

# Biometric Functionality

- **ID Verification or Identification**
- **Recognition Engine Modes**
  - **Mobile Terminal**
    - ★ 1-to-1 Matching (ID Verification)
    - ★ 1-to-n Matching (Identification)  
(n = 2000 to 20,000)
  - **Backend Server**
    - ★ Wired or Wireless connectivity
    - ★ 1-to-1 Matching (ID Verification)
    - ★ 1-to-N Matching (Identification)  
(N = millions)
- **Support Multiple Biometrics**
  - Iris, Fingerprint, Face
- **Support Multiple Matching Algorithms**
  - Vendor Independent

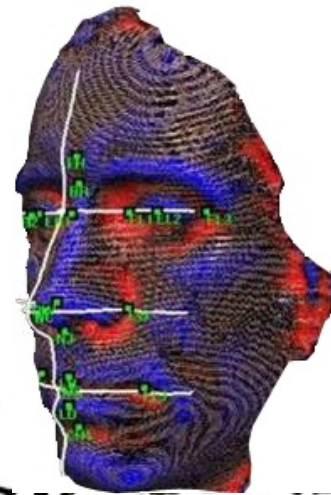


# Credentials Supported

- PIV Cards
- TWIC Cards
- Military ID Cards
- Passports, ePassports, Travel Visas
- Drivers Licenses
- National ID Cards
- Customer Specific Formatted Smart Cards

# Software Development Productivity

- **Readily Customizable**
  - Powerful Software SDK
  - Efficient Custom Application Development
- **Industry Standard Operating System & Development Tools**
  - WinCE or Embedded XP
- **Software Development Kit**
  - Familiar Microsoft development tools and utilities
  - Visual Studio .NET 2008 with Compact Framework 3.5
    - ★ Compiles Runtime Code
    - ★ Uses Standard Programming tools and IDE
  - Embedded Visual C++ 4.0
    - ★ Compiles Native Code
    - ★ Uses Proprietary IDE
  - Real-time Debugging Capabilities

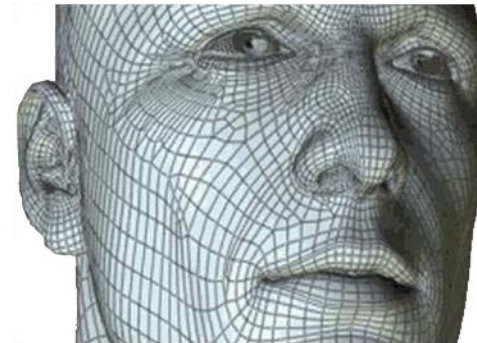
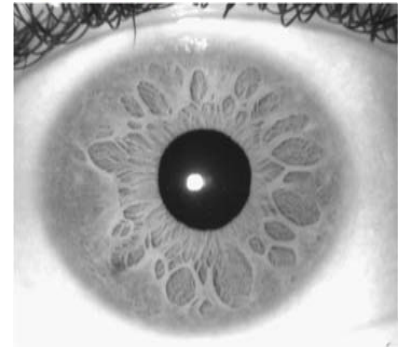


# Software (cont.)

- **Standard Software Interfaces**
  - WinAPI, PC/SC, CryptoAPI, Audio, Video, Communications, etc.
- **API / SDK for Managing the Biometric Sensors**
  - Sensor Settings and Modes
  - Image Capture and Storage
  - Image Quality Assessment
  - Feature Extraction & Template Generation
  - 1-to-1 and 1-to-n Recognition and Matching
- **Source Code for Example Applications (C, C++, C#)**

# Mobile Terminal Checklist

- **Optimized for Multi-Biometrics & Imaging**
  - Fingerprint: 500 dpi
  - Face: 3.2M pixel
  - Iris: 1.3M pixel
- **Optical Document Scanner**
  - Camera-based
  - 600 dpi
- **Optimized for CPU Intensive Applications**
  - Fast processor
  - Memory
    - ★ Expandable to 1 GB
    - ★ Expandable to more than 4 GB
- **Flexible & Extendable Architecture**
  - Hardware, Software, Mechanical
- **Small size**
- **Weight**



# Mobile Terminal Checklist (cont.)

- **Fully Integrated Peripherals**

- Iris camera
- Face and digital still camera
- Point & shoot document scanner
  - ★ OCR, 1D & 2D bar codes

- **Flexible Peripheral Interfaces**

- Smart Card Reader
- Wireless Communications
- GPS
- Mag Stripe



# Mobile Terminal Checklist (cont.)

- Fully Integrated / Rugged and Ergonomic
- Enhanced Human Interface
  - Large LCD
  - QWERTY keypad
  - Navigation Button
- Rugged and Ergonomic
  - IP54 Ingress Protection
  - MIL-STD 810F: Shock and Vibration
- Audio
  - Speaker and Microphone



# Mobile Terminal Checklist (cont.)

- **Wired and Wireless Communications**

- USB host, USB client
- CFIO, SDIO
- Ethernet, RS232
- Mobile Cellular
- 802.11, Bluetooth
- Secure 2 Way Radio

- **Long Battery Life**

- 8 to 12 hours
- Hot Swappable

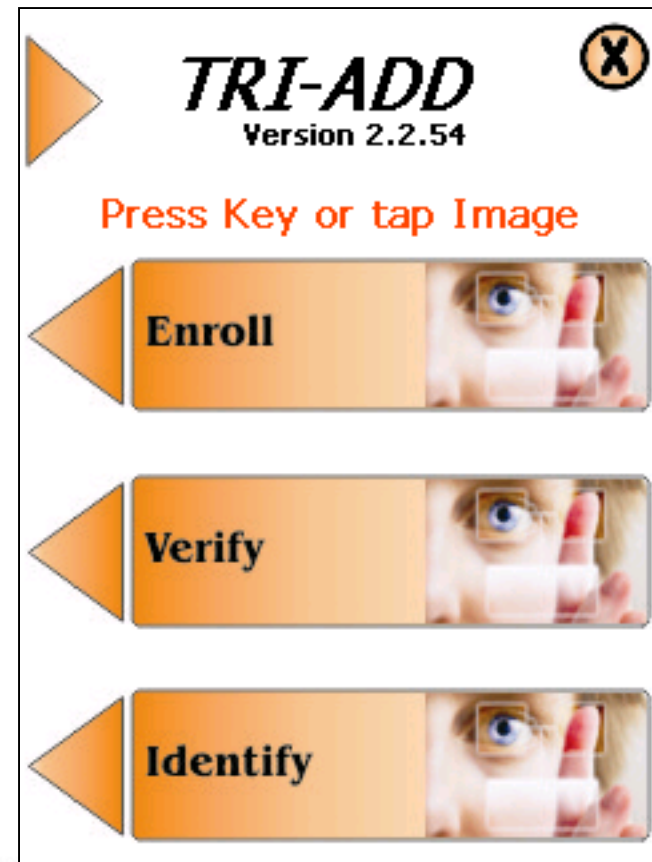
- **Low Cost**

- **Field Upgradable Software and Firmware**



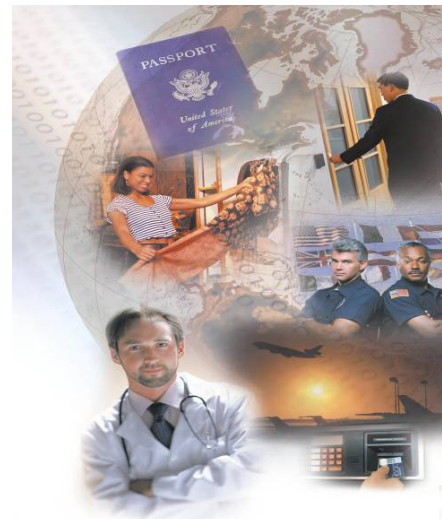
# Reader Subsystems

- **Contact Smart Cards**
  - ISO 7816
- **Contactless Smart Cards (13.56 MHz)**
  - ISO 14443
  - ISO 15693 / iClass
- **Proximity Cards (125 KHz)**
- **RFID Tags**
  - ISO 18000-6 (860-930 MHz)
- **Optical Symbology Readers**
  - 1D barcodes
  - 2D barcodes
  - OCR text
- **Mag Strip**
  - ISO 7810 / 7811



# Target Markets

- Mobile Biometric ID Verification and Identification
- Law Enforcement
- Government / Military
- Immigration Control
- Travel
- Access Control
- Security
- First Responder
- Coast Guard / Border Protection
- Fraud Prevention
  - Medical Insurance
  - Aid Entitlements
  - Disaster Material Tracking



# Law Enforcement Applications

- **Mobile AFIS**
  - Fingerprint & Facial Recognition
- **Mobile Booking**
  - Fingerprint, Iris, Face, Scars, Marks, Tattoos
- **eCitation**
  - Data Capture
  - Proof of Issuance
- **Emergency Responder Management**
- **ER Materials Tracking**
- **Situational Awareness**
- **Chain of Custody**
  - Evidence Tracking
- **Parolee Management**



# **DOD and Military Applications**

- **Perimeter Access Control**

- Safe Zone Access
- Building Access
- Base Access

- **Hasty Enrollment**

- Field Collection of Biometric and Demographic Data

- **Civil Worker ID and Tracking**

- **Humanitarian Support Missions**

- Checkpoint Logging
- Refugee & Civilian Movement and Tracking



# Maritime Security Applications

- **Seaport Applications**

- Seaport Access Control
  - ★ TWIC: Access Control
- Container Security
  - ★ Chain of Custody
  - ★ RFID tracking

- **Coast Guard**

- Migrant Interdiction Programs
  - ★ Hasty Enrollment / Data Collection
  - ★ AFIS Identification
- Cruise Ship ePassport Validation



# Commercial Applications

- Insurance - Fraud Control
- Access Control
- Mustering
- Employee / Student Tracking



# Access Control Solutions

## Mobile Solutions for PIV and TWIC

- Cardholder verification
- Registration into physical access control systems
- Supports FIPS-201 compliant credentials
  - ✓ Department of Defence (PIV-II and NG CAC)
  - ✓ Transportation Worker Identification Card (TWIC)
  - ✓ First Responder Authentication Credential (FRAC)



## Mobile Access Control

- Integrates with many Enterprise Access Control systems
  - ✓ Lenel, AMAG, Software House, etc.
- Multiple Credential Support
  - ✓ Mifare, Prox, iClass, Barcode, and Mag Stripe
- Simple drag and drop GUI



## Mobile Mustering

- Supports up to 10 Mustering Stations
- Ad-Hoc Network (no infrastructure required)
- Easy to setup and use



# Thank You