



# CREDENCE ID

TRIDENT™

## The Ultimate Multi-Modal Mobile Biometric Platform



**Trident™** is the ultimate combination of face, finger and iris biometrics on a mobile platform. For the first time, binocular-type capture is available on a mobile platform, making simultaneous dual iris capture quick and easy. Complementing this state-of-the-art iris capture is the industry leading FAP 45 fingerprint sensor, capable of both rolled fingerprint and dual-fingerprint capture. Additionally, a high resolution auto-focus camera produces professional quality images, making **Trident** the most full-featured multi-modal mobile device in the market today.

**Trident** combines these features with a powerful Qualcomm Snapdragon™ mobile chipset running Android™. Designed to support multiple applications concurrently, **Trident** can empower a diverse group of agencies to build and deploy multiple targeted applications for their desired objectives, work-flows and environments.

Because Everyone Counts

# The Ultimate Open Platform



**Trident** is a completely integrated multi-modal mobile biometrics device that employs the world's smallest and fastest FAP 45 fingerprint scanner, the first binocular-type iris capture on a mobile device and a stunning 5 MP auto-focus camera with flash.

**Trident** runs on the latest Android 4.1.2 OS – a widely deployed and proven mobile operating system.

**Trident's** mobile chipset includes a Qualcomm Snapdragon Quad-core 1.7GHz Cortex-A9 ARM processor with an integrated 4-in-1 connectivity combo capable of 3G cellular, 802.11n Wi-Fi, Bluetooth 4.0 and GPS communications.

The elegant and ergonomic design provides limitless applications for the diverse needs of end-users while a truly open platform enables developers to build their own customized applications that can integrate with both current and legacy environments.

## One Platform, Many Applications

- Benefit delivery, unemployment claims, support for poor/under privileged, natural & other disaster victims, voter ID, etc.
- Medical services (hospitals, medications, etc.) and insurance processing & claims.
- Durable transactions; e.g. property & automobile renting, purchase, etc.
- Banking, microfinance and commercial transactions.

## Open

Our partners control the objective they want to achieve. By providing a sensible and easy to program platform, the device offers limitless applications.

## Simple

As easy to use as your mobile phone, users can intuitively grasp the features of the **Trident** – without reviewing documentation or receiving training. Workflows are simple to follow and any novice user can learn how to use application in minutes.

## Ergonomic

**Trident** is designed from the 'ground up' with a thoughtful understanding of user requirements. Modern design features (similar to mobile phones) appeal to both novice and experienced users. A large touch screen, a forward-facing fingerprint scanner and a binocular-style iris capture all encourage natural and intuitive interaction, while the side panel shape and texture creates a secure grip in your hand.

## Functionality

## Technology

## Customer Benefit

High Performance System	Processor: Snapdragon S4 Pro Quad-Core 1.7GHz ARM-A9.	Quad-core application processor boosts application performance up to 80% compared to single-core, making demanding applications responsive & intuitive.
OPEN Operating System and Multi-Application Architecture	OS: Android OS 4.1.2 SDK: Java SDK for biometric functionality Algorithm: agnostic platform for onboard quality and matching.	Android's open source development platform reduces risk, obsolescence and application development is exponentially accelerated because basic features are built into the OS.
High-Speed and Secure Memory	RAM: 2GB DDR3 FLASH: 16GB eMMC, upgradeable to 64GB	DDR3 provides PC grade memory I/O speeds, ideal for quickly running through gallery of templates. eMMC memory built into the main board provides unparalleled combinations of high speed data I/O and security.
Multiple Connectivity	Cellular: UMTS/HSDPA/HSUPA at 850/900/1,900/2100 MHz, Wi-Fi : 802.11 a/b/g/n Bluetooth 4.0	Quad-Band cellular support ensures the Trident can support world-wide networks. Latest generation Wi-Fi and Bluetooth capability open up abundant communication options.
State-of-the-art touch screen display and work area	Size: 5.0" diagonal Resolution: 1280x720 HD Touch panel: Capacitive 5-point multi-touch panel	Large display area and user interface is part of a highly mobile and ergonomically designed package that guarantees a pleasant, intuitive and efficient operator experience.
Largest fingerprint sensor on mobile platform capable of capturing rolled prints	Type: LES Image Capture Size: 41 x 38 mm DPI: 500dpi Classification: FAP 45 Certification: FBI Appendix F, PIV	Non-optical (LES) technology based FAP 45 sensor offers high quality imaging in dirty environments and direct sunlight. It can be used for both enrollment and verification in single, dual or roll fingerprint applications.
Binocular-Type Dual Iris Capture	Type: Simultaneous Dual Eye Focus depth of field: 30 mm Inter-pupillary distance: 40-90 mm	Binocular-type iris capture devices are proven to have the easiest and fastest iris capture experience, even in strong external sunlight. The expanded depth of field ensured and high inter-pupillary distance tolerance ensures ease of capture across full range of eye socket depth and age.
Integrated Camera	Resolution: 5 MP Autofocus: Yes Flash: Yes	An Android integrated camera gives users an intuitive and familiar experience when capturing images.
Easy to Expand	Interface: Micro USB OTG	A plethora of peripherals and cases can be connected via Bluetooth or MicroUSB.
Ergonomic and Lightweight Form Factor	Dimensions: 10.4" X 6.6" x 3.5" Weight: 2.75 lbs	The Trident's unique design allows both the operator and subject to intuitively capture all biometrics.
Full Day Battery Life	10,000 mAH Li-Ion battery	With one of the highest capacity batteries in the industry, Trident ensures full day performance.
Environmental	Operating conditions: Temperature: 0°C to 50°C Humidity: 10 % < RH < 90 % (non-condensing) Scratch Resistant Glass: Yes Water Proofing: designed for IP54 performance. Critical components like fingerprint sensor and iris camera meet IP64 standards.	Trident can be operated in a wide reange of environmental conditions, allowing for global deployment.

# A Revolution in Mobile Biometric Transactions

## The Global National eID Industry Report

indicates that by 2015, the number of countries issuing eIdentities will exceed those issuing traditional IDs by more than 4-to-1. As National eID programs around the world continue to grow, the role of biometrics is evolving to become the enabler for civil programs such as; social benefits distribution, financial inclusion and voter ID. Biometrics offers robust and secure identity verification to the governing agencies while simplifying and easing the transaction experience for end users.



As the use of biometric technology has evolved, legacy identity management products have failed to keep pace with modern trends. In place of a ground up product design, most products in the current market were originally created for military use and are now inefficiently repurposed for civil applications. **Trident** converges the rapid evolution in mobile smart phone technology with state-of-the-art biometrics.

**Trident** is based on the premise that, in order to bring wide-scale adoption of biometrics to every day transactions, it is essential that the user experience mirrors today's modern consumer electronic devices – such as smart phones and tablets. Advances in mobile technology have changed the way people interact and relate to these devices. By aligning the experience of biometric devices with the familiarity of modern smart devices, we can ensure that technology will be widely adopted and benefits realized.

**Trident** is designed, engineered and assembled in California, USA.