TRIDENT ®

CREDENCE ID

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 has been made available on a mobile platform, making simultaneous dual iris capture quick and easy. Complementing the state-of-the-art iris capture is the industry leading FAP 45 fingerprint sensor, capable of both rolled fingerprint and dual-fingerprint capture. In addition, a high resolution, auto-focus face camera produces extremely high quality images, making Trident THE premier multi-modal, mobile device in the market.

Trident brings together all of these features with a powerful QUALCOMM snapdragon mobile chipset running the Android 4.1 operating system. Designed to support multiple intensive 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.

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Trident is a completely integrated multi modal mobile biometrics device that combines the world's smallest and fastest FAP 45 fingerprint scanner, the world's first binocular-type iris capture on a mobile device and a stunning five MP auto-focus camera with flash. Trident runs on the latest Android 6.0 OS, widely deployed and proven mobile operating system.

The mobile chipset boasts a 1 GHz Quad Core (IMX-6) processor and an integrated 4-in-1 connectivity combo that is capable of 3G/4G/LTE (Band 28) cellular, 802.11n Wi-Fi, Bluetooth 4.0 and GPS communications.

The elegant and ergonomic design enables virtually limitless applications for diverse end-users needs and the truly open platform enables developers to build their own customized applications that can even integrate with legacy environments.

One Platform. Many Applications.
• Benefit delivery, unemployment, claims, support for poor/under privileged, nature & other disaster victims, voter ID, etc.
• Medical services (hospitals, medications, etc.) and insurance processing & claims
• Banking, microfinance & commercial transactions
• Durable transactions; e.g. property & automotive renting, purchase.

OPEN

The user controls what objective they want to achieve. By providing a sensible and easy to program platform the device opens up an unlimited number of applications.

SIMPLE

Users intuitively grasp the features of Trident, possibly without the need to review documentation or receive training because the Android OS makes it as easy to use as your mobile phone. Workflows are easy to follow and any novice user can learn to use the application in matter of minutes, and help is always available at the touch of a button.

ERGONOMIC

Trident is designed from ground up with a thoughtful understanding of user requirements. Modern design features, similar to your mobile phone, appeal to both novice and experienced users. The large touch screen, forward-facing and binocular style iris capture encourages natural and intuitive interaction with Trident and the side panel shape and texture creates a secure grip in your hand.

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FUNCTIONALITY	TECHNOLOGY	CUSTOMER BENEFIT
High Performance, Industrial grade computational system	Freescale, i.MX6 QUAD core 1GHz, ARM Cortex-A9, processor	i.MX6 is an industrial grade ARM application processors that ensures demanding applications can be served responsively & intuitively.
OPEN yet Secure Operating System and Multi-Application Architecture	Custom built secure Android OS 6.0 Java SDK for biometric and credential (SmartCard, MRZ) functionality Exhaustive collection of apps for a variety of Biometric Algorithms, multiple credential authenticators, 1D and 2D barcode reading, device management, etc.	Our Android based platform unlocks worldwide development resources, reduces risk, obsolescence and vendor lock-in. Application development is exponentially accelerated because of the features rich OS. Additionvally, Credence ID provides the OS in two versions: a dedicated version for developers and a secure version for deployments.
High-Speed and Secure Memory	RAM: 2GB DDR3 528MHz Internal Memory: 16GB (up to 64GB) eMMC	2GB of DDR3 RAM allows memory intensive applications, like 1:N biometric identification. eMMC memory built into the main board provides unparalleled combinations of high speed data I/O and security.
Multiple Connectivity	Wi-Fi: 802.11 b/g/n 2.4GHz Bluetooth 4.0 Cellular: HSPA+/UMTS quad-band 850/900/1900/2100 MHz GSM/GPRS quad-band 850/900/1800/1900 MHz Downlink:14.4 Mbps, Uplink: 5.76 Mbps	Quad-Band cellular support ensures the Trident can support worldwide networks. Latest generation Wi-Fi and Bluetooth capability opens abundant communication options.
GPS and A-GPS	An industry proven Global Navigation Satellite System (GNSS) module for GPS/QZSS, GLONASS, optimized with active antennas Integrated Assistance GPS (A-GSP) support	A dedicated and standalone GNSS module integrated into the compact form factor of the Trident ensures exceptional accuracy and minimal acquisition times even when there is no network (Wi-Fi or cellular) connectivity. Sophisticated RF-architecture and interference suppression ensure maximum performance even in GNSS-hostile environments.
Touch Display	Diagonal Size: 5 inch Resolution: 480 x 800 pixels 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.
Enrollment grade LES technology FAP 45 fingerprint sensor	Type: Sunlight invariant LES Technology Capture Dimension : 41 x 38 mm (WxH) DPI: min 500dpi Classification: FAP 45 Certification: FIPS 201 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	Back Camera Resolution: 5 MP Autofocus: Yes Flash: Back Camera with Flash	Integrated rear cameras give users an intuitive and familiar experience when capturing still images. The camera enables additional high value applications such as barcode reading, QR code reading.
Easy to Expand	USB On-The-Go (OTG) support	Many industry standard peripherals such as printers or magnetic strip readers may be connected via OTG Micro-USB port.
Full Day Battery Life	10000 mAH Li-Ion battery Fast Charging: 100% charged in less than 4 hours	With one of the highest capacity batteries for devices in its class, Trident ensures full day performance. Fast charging technology gets the device back to full capacity in under 4 hours
Ergonomic and Lightweight Form Factor	Dimensions: 10.4" X 6.6" x 3.5" Weight: 2.75 lbs IP 54 and RoHS Compliant	The Trident's unique design allows both the operator and subject to intuitively capture all biometrics.
Environmental	Operating conditions • Temperature: 0°C to 50°C • Humidity: 10 % < RH < 90% (non- condensing) Storage Conditions • Temperature: -10°C to 60°C Humidity: 5 % < RH < 95% (non- condensing)	Trident can be operated in a wide range of environmental conditions, allowing for global deployment.
Physical Security	Integrated Kensington Lock Port	Kensington Security Slot™ with Security Anchor is built into the device which provides one-step security using a commercially available ClickSafe® Lock.

TRIDENT®

A REVOLUTION IN MOBILE BIOMETRIC TRANSACTIONS

The Global National eID Industry Report indicates that by 2015, the number of countries issuing e-Identities will exceed those issuing traditional IDs by more than 4 to 1. As National e-ID programs around the world continue to grow, the role biometrics plays is changing to become the enabler for public safety and entitlement programs such as internal policing, border control and criminal investigation. Biometrics not only offers robust & secure identity and verification to the governing agency but also secures and eases the everyday transactions of residents.

As the use of biometrics is evolving, legacy identity management products have not kept pace with the times. Today, most mobile biometrics products are far behind in design and technology to the consumer mobile products like mobile phones and tablets. This results in poor user experience and in turn low adoption.

Trident is based on the premise that in order to bring wide-scale adoption of biometrics to everyday transactions, it is essential that the user experience is similar to the latest consumer electronic devices, such as smartphones and tablets. Mobile technology advances have changed the way people interact and relate to these devices.

By aligning the experience of biometrics devices with the user friendly and intuitive experience of a modern mobile devices and applications, one can ensure that the technology will be widely used and benefits are achieved.

Trident® is designed & engineered in California, USA.