



CredenceTWO™: Product Overview & Technical Specifications

This new and innovative technology platform places the power of mobile identification and authentication into the hands of developers and users for critical identity applications.

CredenceTWO™ features the most advanced enrollment quality fingerprint sensor combined with state of the art smart card reading, paired with a 5-inch HD display running Android 7.1 (Nougat).

The platform features the award-winning Credence single board computer (SBC), an integrated FAP 30 FBI PIV certified fingerprint sensor, a 5 MP optical camera with dual LED illumination for barcode and QR code reading.

Advanced security is enhanced with a custom Android™ 7.1.1 OS (Nougat), creating unlimited possibilities for application developers to build trusted solutions for virtually all identification projects.

CredenceTWO™ is proudly designed, engineered and assembled in California, USA.



Functionality

Technology

Customer Benefit

High Performance, industrial grade computational system

Freescale, i.MX6 (1GHz), ARM Cortex-A9, DUAL core processor

i.MX6 is an industrial grade ARM application processor that ensures demanding applications can be served responsively & intuitively.

OPEN yet Secure Operating System and Multi-Application Architecture

- Custom built secure Android Nougat 7.1.1 OS
- Java SDK for biometric and credential (SmartCard) functionality
- The most exhaustive collection of third-party apps for a variety of biometric algorithms, multiple credential authenticators, 1D and 2D barcode reading, device management, etc.

Our latest Android OS unlocks unlimited development options, reduces risk, obsolescence and vendor lock-in. Application development is exponentially accelerated because of the OS's rich features. A dedicated OS version available for developers and a secure version for deployments.

High-Speed and Secure Memory

- Onboard storage: 8GB eMMC
- External SD Card slot: up to 64 GB SD Card (purchased separately) supported
- RAM: 2GB LPDDR3

2GB of DDR3 RAM and internal eMMC memory built into the main board provide unparalleled combinations of high speed data I/O and security.

Multiple Connectivity

- Wi-Fi: 8.11a/b/g/n/ac 2.4 + 5GHz
- Bluetooth: 4.1 BR/EDR/LE (Compatible with Bluetooth 1.x, 2.x, 3.x & 4.0)
- Worldwide GSM Cellular:
 - Technology Supported: HSPA, EDGE, GSM, GPRS
 - Frequency Bands: B1, B2, B5, B6, B8, B19, 850/900/1800/1900 MHz
- Upgrade to 4G/LTE for AT&T or Verizon available in North America
- GPS: Standalone multi-GNSS (GPS, GLONASS, Galileo, QZSS and SBAS) engine with active antenna

Penta-Band LTE and WCDMA cellular support ensures the CredenceTWO can support world-wide networks. Latest generation Wi-Fi and Bluetooth capability provide most updated communication protocols. A dedicated GPS engine paired with an active antenna provides best in class location accuracy and speed.

Touchscreen Display

- 5-inch (diagonal)
- Resolution: 720x1280 Pixels
- Type: Capacitive 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.

Integrated enrollment grade FAP 30 FBI and FIPS 201 PIV certified LES technology fingerprint sensor

- Type: light emitting sensor (LES)
- Image Capture Size: 0.8 x 1.0 inch
- DPI: min 500dpi
- Classification: FAP 30
- Certification: FBI and FIPS 201 PIV

LES sensors provide many operational benefits compared to optical scanners on mobile devices, like outdoor operations. The image quality is very resilient to various environmental conditions commonly encountered in the field such as sunlight, dust, dirt, residual latent prints, etc.

Contact and Contactless Smart Card Reader

- Contactless Interface:**
- Read/write mode supporting ISO/IEC 14443A/B MIFARE
 - Read/write mode supporting MIFARE
 - Read/write mode supporting JIS X 6319-4 (FeliCa1)
 - Passive initiator mode according to ISO/IEC 18092
 - Read/write mode supporting ISO/IEC 15693

Contact or contactless, this reader is compatible with most card standards. The reader provides reliable support for wide range of card formats and card types.

- Contact Interface:**
- Acceptor: Friction
 - Insert/remove cycles: 100,000
 - Cards supported: ISO 7816 T=0, T=1

Integrated Rear Camera

- Resolution: 5 MP
- Autofocus: Continuous focus and Touch-to-focus
- Flash: DUAL LED

An integrated camera gives users an intuitive and familiar experience when capturing still images. The camera enables additional high value applications such as facial recognition, 1D & 2D barcode reading capabilities, such as PDF-417.

Easy to Expand

Micro-USB port with USB-On-The-Go (USB-OTG) support.

Many industry standard peripherals such as printers or magnetic strip readers may be connected via OTG Micro-USB port.

Fast Charge and Full Day Battery Life

- 6,400 mAH Li-Ion battery
- Capable of fast charging (3A)
- Certified worldwide 3.2A charger included

One of the highest capacity batteries for devices in its class, the CredenceTWO allows a full day of operation.

Accessories

Protective Case with or without belt clip

An optional leather case provides protection from the elements and drops.