Mobile Fingerprint Scanner: 4-Finger

Features

- Fully integrated biometric scanner system with quad-core 2.5GHz Snapdragon processor
- Highly detailed, consistent image quality using patented solid-state TFT ultrasonic image capture technology
- Ability to read through common contaminants
- Built-in diagnostics ensure the highest image quality and auto-calibration
- Hard coat platen surface resists scratches and abrasion
- Image quality unaffected by environmental conditions (temperature, humidity, ambient light, etc.)
- Onboard battery
- Local matching of fingerprints to a watch list
- Appendix F Certified FAP60

Qualcomm® Fingerprint Scanner
Model M6001

Specifications*

Overview:

Mobile Scanner Size	6.8" x 4.4" x 1.8"
Fingerprint Image Capture Area	3.2" x 3"
Fingerprint Image Capture Format	8-bit grayscale
Fingerprint Capture Mode	Flat (4/2/1 fingers) and Rolled
Scan Resolution	500 dpi
Weight	2.3 lbs.
Interfaces	USB, Wi-Fi, Bluetooth, and Ethernet
Video Projection Support	HDMI
Storage	Onboard Memory and External SD Card Support
Operating System	Android
Biometric Modalities Captured	Fingerprint, Facial and Iris

Operating Environment:

Humidity	10%-90% (non-condensing)
Operating Temperature	-20°C to 45°C
Storage Temperature	-30°C to 70°C

* Specifications reflect anticipated performance. Actual performance may vary.
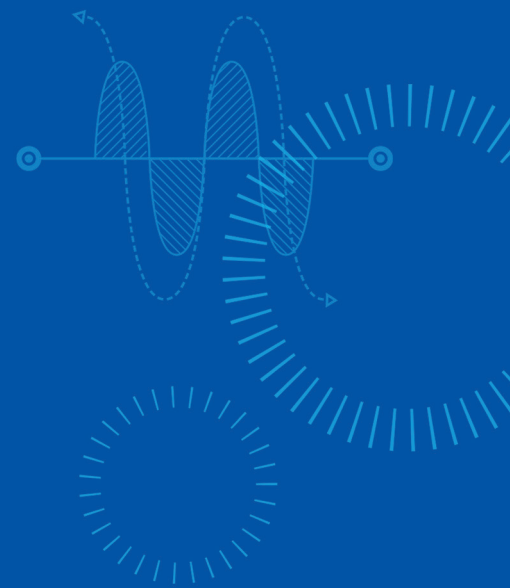
A complete packaged system includes:

- Mobile fingerprint biometric scanner hardware
- Power supply
- USB interface driver
- HDMI cable

Qualcomm Fingerprint Scanner is a product of Qualcomm Technologies, Inc.

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Who is Qualcomm and what do we do?

Inventors. Dreamers. Doers.

We are engineers, scientists and business strategists. We are from many different countries and speak many different languages. We come from diverse cultures and have unique perspectives. Together, we focus on mobile technology breakthroughs and bringing them to market.

- 30+ years of driving the evolution of wireless communications
- Extensive domestic and foreign patent portfolio
- World's largest fabless semiconductor company
- S&P 100 / S&P 500 / Fortune 500
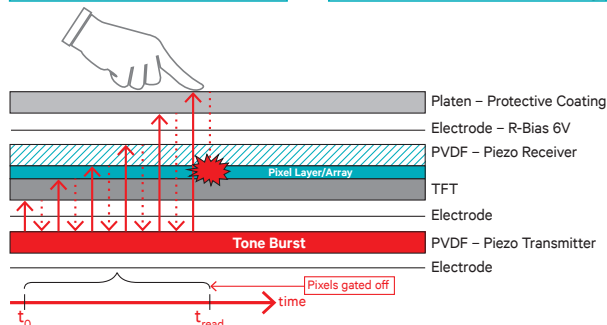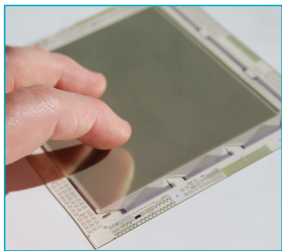
Advancing the Ecosystem

Our innovations have made us a mobile technology leader.

Wearables · Consumer Electronics · Smart Grid · Wireless Charging · Health · Computing · Retail · Automotive · Education · TV & Gaming

Today's most advanced devices are powered by Qualcomm Fingerprint Scanner processors

Who is Ultra-Scan?

In March of 2013, Qualcomm acquired biometric industry veteran Ultra-Scan Corporation.

Founded in 1989, Ultra-Scan pioneered the use of high-frequency ultrasound technology as a superior method for capturing livescan fingerprint imagery. Ultra-Scan's scientific staff developed the first nonoptical 4-finger sensor ever to receive FBI Appendix F certification.

Ultrasonic Thin Film Transistor (TFT)

Platen – Protective Coating
Electrode – R-Bias 6V
PVDF – Piezo Receiver
Pixel Layer/Array
TFT
Electrode
Tone Burst
PVDF – Piezo Transmitter
Electrode
Pixels gated off
time
t_0
t_{read}

For further information please contact:
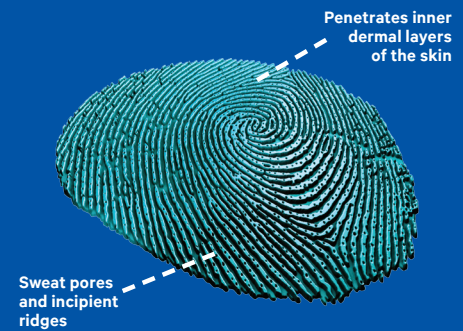QCSS.QFS@qti.qualcomm.com

Image Quality: 3D Details

Qualcomm Fingerprint Scanner (QFS) uses ultrasonic waves to directly penetrate the outer layers of skin, detecting three-dimensional details and unique fingerprint characteristics, including fingerprint ridges and sweat pores, that are not possible to detect with capacitive touch-based and optical options.

Accuracy and Consistency

The QFS ultrasonic sensor provides highly detailed, consistent scan quality, even through common contaminants like sweat, condensation, lotion, oil and more.
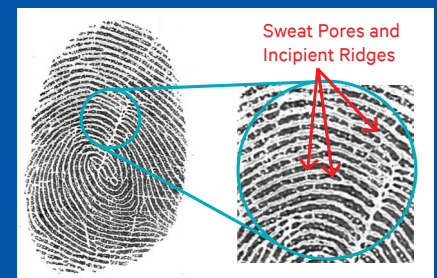
3D Ultrasonic Imaging

Penetrates inner dermal layers of the skin

Sweat pores and incipient ridges

Superior Anti-spoofing

QFS generates a highly detailed surface map of the fingerprint that is much more difficult to imitate or spoof than capacitive touch-based and optical solutions.

Unsurpassed Image Quality and Near-perfect Capture Rate

Sweat Pores and Incipient Ridges

Breaking through the boundaries of what's possible in mobile technologies.