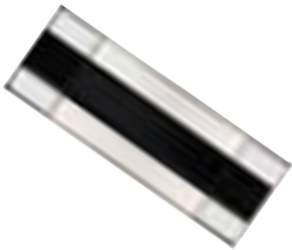


TouchChip® TCS4H Sensor

SPI Silicon Fingerprint Sensor



FEATURES

- Standard SPI slave interface with 8KByte FIFO buffer
- Highly durable black SteelCoat coating
- Highly integrated design enables low bill of materials cost
- Internal current limiter and voltage regulator
- Multiple battery-friendly operating modes
- BGA package

SUPERIOR TECHNOLOGY

- Advanced technology provides the most accurate fingerprint image
- Anti-spoofing protection
- User navigation features

EASY TO USE

- Able to read a wide range of fingerprints
- Fast swipe speeds up to 38 cm/s
- Rapid response from sleep/suspend states

PRODUCT DESCRIPTION

The TCS4H is an enterprise-friendly solution for device makers looking to add fingerprint authentication via a SPI interface. The TCS4H delivers a wide imaging area in a power efficient implementation.

The TCS4H's wide form factor supports applications requiring excellent usability and accuracy in a cost-effective solution. The solution also supports additional security features including image data signing, encryption and anti-spoofing.

ABOUT CROSSMATCH®

Crossmatch helps organizations solve their identity management challenges through biometrics. Our enrollment and authentication solutions are trusted to create, validate and manage identities for a wide range of government, law enforcement, financial institution, retail and commercial applications. Our solutions are designed using proven biometric technologies, flexible enrollment and strong multi-factor authentication software, and deep industry expertise. We offer an experienced professional services capability to assess, design, implement and optimize our identity management solutions for a customer's individual challenges. Our products and solutions are utilized by over 200 million people in more than 80 countries.

Learn more at www.crossmatch.com

SPECIFICATIONS

Operating Power	<ul style="list-style-type: none">• Imaging @ up to 38 cm/s 11 mA typical• Navigation 11 mA typical• Sleep ~80 μA (finger detect active)• 2.4V to 3.6V single supply voltage
Advanced BGA Package	<ul style="list-style-type: none">• 33 Ball Grid Array (BGA) package• 13.8 mm X 5 mm X 1.7 mm• Integrated drive bezel• RoHS compliant & low halogen
High Definition Pixel Array	<ul style="list-style-type: none">• 192 pixel (9.6 mm) sensing array width• 508 pixels per inch horizontal resolution• 381 pixels per inch vertical resolution
Environmental	<ul style="list-style-type: none">• Operating temperature: -30°C to +70°C• Storage temperature: -40°C to +125°C• Humidity (operate and storage): 5% to 93% RH without condensation
ESD Resistance	<ul style="list-style-type: none">• Up to \pm 30 kV air discharge (Exceeds IEC 61000-4-2 Level 4)
Rugged Sensor Surface	<ul style="list-style-type: none">• Scratch & impact resistant• Withstands >10 million rubs• Advanced 6-H hardness durability coating

FEATURES

Superior Technology Offering	<ul style="list-style-type: none">• Uses combination of three sub-surface imaging technologies• Advanced anti-spoofing technology• Responsive cursor and menu navigation• Standard SPI slave interface• Menu, list and document navigation
Memory Interfaces	<ul style="list-style-type: none">• Supports EEPROM memory
Security Functions	<ul style="list-style-type: none">• Image data encryption• Image data signing
Enhanced Usability	<ul style="list-style-type: none">• Supports fast swiping – up to 38 cm/sec.• Rapid wake-up time for reliable authentication - imaging within 20 ms of wake-up

Corporate Headquarters:

Crossmatch

3950 RCA Boulevard, Suite 5001
Palm Beach Gardens, FL 33410 USA

www.crossmatch.com