



FINGERPRINT SENSOR

Data Sheet

TouchChip[®] TCS1 Sensor

Silicon Fingerprint Sensor



APPLICATIONS

ID Verification for:

- Civil ID/Voting/Entitlement
- Micro Finance and Healthcare
- Mobile ID terminals

PRODUCT DESCRIPTION

The TouchChip TCS1 sensor is designed for applications that need image-out functionality. It offers silicon touch technology in a small form factor with low power. The Enhanced Image Mode (EIM) optimizes image quality over a broad range of skin types and capture conditions. It eliminates latent images during capture. The TCS1 sensor offers ingress protection from dust and moisture penetration to IP65*.

Crossmatch[®] offers two TouchChip TCS1 sensor options:

- TCS1CT is the only FIPS 201* certified silicon fingerprint sensor
- TCS1ST includes a SteelCoat for enhanced durability

The TouchChip TCS1 sensor includes broad software support from leading algorithm providers, ISV's and system integrators. Whether you are an OEM or system integrator, Crossmatch's biometric identity verification solutions provide a natural extension to your applications.

* Requires customer to add external gasket.

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

*FIPS 201 (Federal Information Processing Standard Publication 201) is a United States federal government standard that specifies Personal Identity Verification (PIV) requirements for Federal employees and contractors.

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SPECIFICATIONS

Interface	<ul style="list-style-type: none">• 8 bit parallel interface• 20-pin flex connector
Power (typical)	<ul style="list-style-type: none">• 4.5 - 4.6v supply• 20 mA during capture
Fingerprint Image	<ul style="list-style-type: none">• 12.8 x 18.0 mm (256 x 360 pixels)• 508 dpi, 8-bit grayscale
Sensor Coating	<ul style="list-style-type: none">• FIPS 201 (gold coating)• SteelCoat (black coating)
Package Size	<ul style="list-style-type: none">• 23 mm x 35 mm x 4.1 mm
ESD	<ul style="list-style-type: none">• IEC 61000 - 4.2 level 4, +/- 15KV air, +/- 8IKV contact
Ingress Protection	<ul style="list-style-type: none">• IP65 (water/dust protection)*
Environmental	<ul style="list-style-type: none">• Operating temp: -30 to +70 C• Storage temp: -30 to + 125 C• Humidity: 5% - 93% non-condensing• ROHS, low halogen
TCS1 FIPS 201 (gold coating)	<ul style="list-style-type: none">• TCS1CT6A2
TCS1 SteelCoat (black coating)	<ul style="list-style-type: none">• TCS1ST6A2

Data subject to change without notice

* Requires customer to add external gasket.

FEATURES

- Low power consumption
- Compact size
- High durability silicon surface
- High quality fingerprint image
- OS: Windows® 7, 8 and 10, Win CE, Linux®, Android and embedded systems (with and without OS)

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