

# TouchChip<sup>®</sup> TCET Module



## APPLICATIONS

ID Verification for:

- Civil ID/Voting/Entitlement Services
- Physical Access
- Finance, Healthcare and Point of Sale
- Mobile ID Terminals

## SILICON FINGERPRINT MODULE

The TouchChip<sup>®</sup> TCET module is compact, cost effective and easy to integrate. The on-board processor is used for capture and match, delivering fast and accurate results. It can store up to approximately 100 user templates and supports USB, SPI or UART interfaces. Power consumption is less than 100mA during capture and match.

For easy integration, the TCET module is fully assembled and tested—just connect and interface with simple commands. The Enhanced Image Mode (EIM) optimizes image quality over a broad range of skin types and capture conditions. The TCET module eliminates latent images during capture and offers ingress protection from dust and moisture

penetration to IP65\*. The module supports WSQ and JPEG2000 compression with the appropriate Software Development Kit.

HID Global offers two TouchChip TCET module options:

- TCETC1 (uses the TCS1CT sensor to provide FIPS 201 certification)
- TCETD1 (uses the TCS1ST for enhanced durability)

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

\* Requires customer to add external gasket.

## FEATURES

- FIPS 201 PIV certified
- SteelCoat
- Low power consumption
- Compact size
- High durability silicon surface
- IP65-rated top surface sealed against dust and liquid\*
- High quality fingerprint image
- OS: Windows<sup>®</sup> 7, 8 and 10, Win CE, Linux<sup>®</sup>, Android and embedded systems (with and without OS)

## SPECIFICATIONS

<b>Product Name</b>	<b>TouchChip<sup>®</sup> TCET Module</b>
<b>Part Number</b>	TCS1 FIPS 201 3.3v USB/SPI/UART Silver Bezel - <b>TCETC1FF022</b> TCS1 FIPS 201 5v USB only Silver Bezel - <b>TCETC1FG022</b> TCS1 SteelCoat 3.3v USB/SPI/UART Silver Bezel - <b>TCETD1FF022</b> TCS1 SteelCoat 5v USB only Silver Bezel - <b>TCETD1FG022</b> TCS1 FIPS 201 3.3v USB/SPI/UART Black Bezel - <b>TCETC1PF022</b> TCS1 FIPS 201 3.3v USB/SPI/UART Black Bezel with machine readable label - <b>TCETC1PF023</b> TCS1 FIPS 201 5v USB only Black Bezel - <b>TCETC1PG022</b>
<b>Interface</b>	<ul style="list-style-type: none"> <li>• 12-pin flex: USB, SPI, UART @ 3.3v</li> <li>• 5-solder pads for USB only @ 5v</li> </ul>
<b>Power (typical)</b>	<ul style="list-style-type: none"> <li>• 3.0v to 3.6v</li> <li>• 100mA (capture, match)</li> <li>• Standby (USB): 1350 uA</li> <li>• Standby (UART/SPI): 1150 uA</li> </ul>
<b>Fingerprint Image</b>	<ul style="list-style-type: none"> <li>• 12.8 x 18.0 mm (256 x 360 pixels)</li> <li>• 508 dpi, 8-bit grayscale</li> </ul>
<b>Sensor Coating</b>	<ul style="list-style-type: none"> <li>• FIPS 201 (gold coating)</li> <li>• SteelCoat (black coating)</li> </ul>
<b>Package Size</b>	23 mm x 35 mm x 4.1 mm
<b>ESD</b>	IEC 61000 - 4.2 level 4, +/- 15KV air, +/- 8KV contact
<b>Ingress Protection</b>	IP65 (water/dust protection)*
<b>ENVIRONMENTAL</b>	
<b>Operating temperature</b>	-30 to +70 C
<b>Storage temperature</b>	-30 to +125 C
<b>Humidity</b>	5% - 93% non-condensing

Data subject to change without notice.

\* Requires customer to add external gasket.

