Many of your customers are demanding greater security from their laptops, PCs, PDAs, cell phones, etc. TactileSense T-FPM Fingerprint Sensor Module provides manufacturers and system integrators with a superior fingerprint biometric solution that secures access from unauthorized use and data theft. Increase value of your product solutions by offering customers high level protection of sensitive data and personal information.

- Small X-Y Foot Print
- Thin Z-height Form Factor
- Design Flexibility
- Low Power Consumption
- Durable and Reliable
- Simple to Integrate
- Cost Effective

SECURE FINGERPRINT SENSOR MODULE
TactileSense T-FPM is a carefully designed OEM module combining all of the components required to generate and capture a fingerprint image, convert it to a digital image, and then output the image for post processing by the host computer.

WORKS IN A VARIETY OF ENVIRONMENTS
To an OEM manufacturer or system integrator, TactileSense T-FPM offers ease of integration into a wide variety of products, including, but not limited to, mobile and handheld computers, PC peripherals (i.e. LCDs, keyboards, mice, joysticks, etc.), Internet appliances, set-top TV/Internet boxes, as well as access control systems.

GAIN COMPETITIVE ADVANTAGE
As consumers look to manufacturers to increase security of their computers and communications devices, be at the forefront with the latest fingerprint verification technology. Add value to product solutions by increasing the level of security while improving end user convenience.

EASY TO INTEGRATE AND SUPPORT
TactileSense T-FPM is supported by a complete set of documented hardware and software tools enabling the OEM manufacturer and system integrator to easily and successfully integrate the module into their product offering.

PATENTED TACTILESENSE TECHNOLOGY
TactileSense is a proprietary fingerprint verification technology that uses a unique polymer-based sensor to transform your finger’s electrical field into a supremely secure and convenient gateway to your notebook and your data. By using your fingers electrical field, it senses a live finger so it is not possible to use a replica of a fingerprint or a latent image left on the sensor as verification.
**PRODUCT SPECIFICATIONS** For the TactileSense T-FPM Fingerprint Sensor Module:

<table>
<thead>
<tr>
<th>Hardware – Physical / Imaging Performance / Electrical / Environmental</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Touch Surface</strong></td>
</tr>
<tr>
<td><strong>Size (L x W x H)</strong></td>
</tr>
<tr>
<td><strong>Weight</strong></td>
</tr>
<tr>
<td><strong>Fingerprint Imaging Area</strong></td>
</tr>
<tr>
<td><strong>Imaging Resolution</strong></td>
</tr>
<tr>
<td><strong>Image Capture Time</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Power Management/Current Consumption</th>
<th>Mode</th>
<th>Nominal Current (Typical)</th>
<th>Maximum</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sleep Mode</td>
<td>1.5mA</td>
<td>5.0mA</td>
<td>All circuits in lowest power mode</td>
<td></td>
</tr>
<tr>
<td>Snooze Mode</td>
<td>12mA</td>
<td>25mA</td>
<td>Finger detect on</td>
<td></td>
</tr>
<tr>
<td>Ready Mode</td>
<td>76mA</td>
<td>82mA</td>
<td>Ready to acquire image, no finger</td>
<td></td>
</tr>
<tr>
<td>Active Mode</td>
<td>230mA</td>
<td>260mA</td>
<td>Acquire fingerprint image (&lt; 0.60 seconds)</td>
<td></td>
</tr>
</tbody>
</table>

| Environmental Conditions | 0°C to +50°C |
| Storage Conditions | -20°C to +65°C |
| Humidity | maximum 95% RH, non condensing at 40°C |
| Touch Surface Life | 1 million + touches (estimated life >5Yrs) |
| ESD | 8kV |

**INTEGRATION DEVELOPMENT TOOLS**

**TactileSense T-FPM Development Kit (TDK100-001)**

Ethentica provides all tools necessary to successfully integrate the module into a wide range of products.

- 2 TactileSense T-FPM modules and flat flex cables
- 1 Development Printed Circuit Board with USB interface
- 1 USB cable (6 feet)
- 1 CD, including:
  - **Electrical Specifications**
    - General Specifications
    - Functional Descriptions
    - Functional Block Diagrams
    - Fingerprint Image Details
    - Register Definitions
    - Signal Definitions
    - Timing Diagrams
    - Connector/Cable Pin Descriptions
  - **Mechanical Specifications**
    - Dimensions
    - Mounting Guidelines
    - Enclosure Guidelines
    - ESD Guidelines

**Software Tools**

- Ethentica Fingerprint Matching Algorithm
- Ethentica APIs
- USB Driver (with source)
- Sample Interface Code (with source)
- Image Acquisition/Enrollment/Verification Utility (with source)