FPC1010

FEATURES
- Internal A/D
- SPI interface
- 3.3 Volt operation
- Robust surface coating
- >1 000 000 wear cycles
- >15kV ESD protection

APPLICATION EXAMPLES
- Mobile phones
- Portable computers
- Security systems
- Smart cards

GENERAL DESCRIPTION
The FPC1010 is a second-generation extremely compact, versatile monolithic fingertip pattern sensor implemented in a 0.5µm triple metal CMOS process. The sensor works by sensing the small variations in surface-capacitance when a fingertip is placed on the sensor surface.

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Parameter</th>
<th>Conditions</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>VDD</td>
<td>Digital supply voltage</td>
<td></td>
<td>3.15</td>
<td>3.3</td>
<td>3.45</td>
<td>V</td>
</tr>
<tr>
<td>VDDA</td>
<td>Analog supply voltage</td>
<td></td>
<td>3.15</td>
<td>3.3</td>
<td>3.45</td>
<td>V</td>
</tr>
<tr>
<td>IDD</td>
<td>Supply current, total</td>
<td>Active drivers</td>
<td>8</td>
<td></td>
<td></td>
<td>mA</td>
</tr>
<tr>
<td>IDDQ</td>
<td>Supply current, total</td>
<td>Power down</td>
<td>2</td>
<td></td>
<td></td>
<td>mA</td>
</tr>
</tbody>
</table>

Table 1. Quick reference data.

Pixel cell size: 70x70 µm
Number of pixels: 152x200 pixels
Active sensing area: 10.64x14.00 mm
Resolution: 363 dpi
Pixel resolution: 8 bits