

# FPC1025 Touch Fingerprint Sensor

#### **Product Sheet**

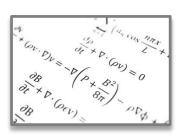
- Squared form factor recommended for front or rear-mounted integration for mobile devices
- Optimal combination of sensor size and performance method
- Compact and easy to integrate
- Intelligent programmable wake-up functionality
- Outstanding system performance
- Robust protective coating capable of more than 10 million finger placements
- Ultra-low power consumption
- Customization of sensor module and LGA possible
- Flexible design with different outlines
- Customizable designs including colour options



#### FPC1025 customized algorithm

The most advanced algorithm to date including:

- Feature-space augmentation and statistical representation
- Hybrid and multi-template matching
- Impairment correction
- Improved sampling and combining
- Intelligent enrolment and enrolment combining
- Resolution enhancement







#### General description

FPC1025 is an evolution of FPC1021, providing increased performance and flexibility, which is suited for front or rear-mounted button integration on mobile devices with navigation. Maintaining the industry's lowest power consumption and user flexibility, its small-squared form allows 360-degree rotation, unrivaled sensitivity that enables maximum performance without compromising on design

aesthetics. FPC1025 offers excellent 3D pixel sensing technology that reads virtually any finger: dry or wet. Touch sensor technology combined with the small size of FPC1025 offers secure and convenient user verification, while a Guided Enrolment software increases the accuracy of captured images for an improved user experience.

Recommended host system spec for Android integration:

- Android version: 4.4, support for future Android versions will be added continuously
- CPU: Cortex A15 or equivalent @2.3GHz with floating-point and NEON extensions enabled
- CPU (minimum): CortexA7 or equivalent @ 1.3GHz with floating-point extensions enabled
- RAM: 8MB during enroll and fingerprint verification

#### Quick reference data —Fingerprint Touch Sensor FPC1025

PARAMETER	DESCRIPTION	VALUE	UNIT
Interface	SPI	4+1	pin
Supply voltage	VDD voltage, typical	1.8	V
Supply current	Image capture, typical	6	mA
Supply current Sleep Mode	Typical (with finger detection)	6	μΑ
Pixel matrix	508dpi resolution	160 x 160	pixels
ESD protection	IEC61000-4-2, level X , air	±30	kV
Wear-and-tear	No of wear cycles at 0.6N	>10 million	times
Operating temperature		- 40 to +85	°C

## **Asia**

### 联系方式

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