

**Product Bulletin**

# Fingerprint Authentication Development Tools

**Key Benefits**

- **Flexible** – Choice of multiple sensor daughter cards and DSP development boards allow configuration of tool to meet the needs of the end application
- **Low cost** – Affordable for evaluation as well as development of state-of-the-art fingerprint biometric-based products
- **Easy-to-use** – Configured for use by both entry level and expert DSP developers with support from an extensive list of third-party partners

The Fingerprint Authentication Development Tool (FADT) series provides developers an easy-to-use, cost-effective way to evaluate and develop fingerprint authentication systems and products based on TI digital signal processors (DSPs). Currently four different FADT products are available from TI. Each FADT supports a different fingerprint sensor and has associated software and drivers from one of many third parties. In addition, each FADT requires users to have a DSP Starter Kit (DSK) to plug in the fingerprint sensor daughter board (the DSK is not part of the FADT).

Applications that can be developed using the FADT include:

- Physical access/door locks
- Time and attendance
- Computer access
- Point-of-sale (POS) terminals
- Automotive and home security
- Safety deposit boxes/safes
- Cash access machines/ATMs
- Mobile phones and PDAs

And many more



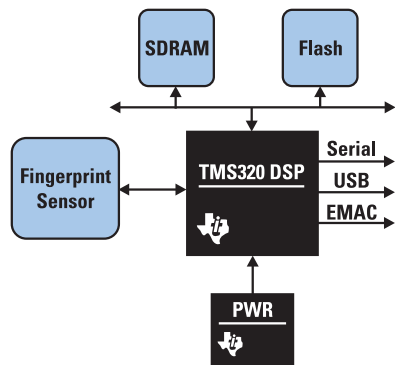
Each FADT includes a sensor daughter card, as well as all the software and documentation to get started. DSP Starter Kits (DSKs) are sold separately.

**DSP Starter Kit (DSK) Availability for FADTs**

<b>Fingerprint Sensor on FADT</b>	<b>FADT Part Number</b>	<b>TMS320C5510 DSK Software</b>	<b>TMS320C6713 DSK Software</b>
Fingerprint Cards FPC1031 sensor	TMDSFDCFPC31	Fingerprint Cards verification software	Fingerprint Cards verification software
Authentec sensor	TMDSFDCAFS86	TBD – Contact Bioscrypt	Bioscrypt verification software
Atmel FingerChip™ sensor	TMDSFDCATM31	TBD – Contact Bioscrypt	Bioscrypt verification software

\* For users of C6713 DSK, a vector matrix-based fingerprint verification software for the FPC1010 sensor is available from TI Third Party member 123id, Inc. Additional information can be obtained via e-mail at [sales@123id.us](mailto:sales@123id.us) or by visiting [www.123id.us/](http://www.123id.us/)

## Example Fingerprint Authentication System Block Diagram



Example block diagram of a fingerprint system based on FADT development environment.

### FADT Features

The FADT enables flexibility in product design. Customers can choose among multiple hardware and software offerings and configure the development kit to match their system requirements.

### Hardware Features

- Fingerprint daughter card with sensor (compatible with TMS320C5510 and TMS320C6713 DSKs)
- LEDs to display enrollment and verification function status
- Sensor guide to help in correct fingerprint placement on the sensor

### Software Features

- Evaluation software for specific DSP
- FADT demo for host interface (GUI for PC)
- Sensor-specific image capture drivers

Additional software for image enhancement, verification and recognition algorithms is available for use with the daughter card from other third party members. For additional information, please visit [www.ti.com/biometrics3p](http://www.ti.com/biometrics3p)

### Documentation/User Guides

- Daughter card schematics
- Hardware setup guide
- Software user guide
- License agreements

### Get Started Today

Purchase the FADTs and DSKs at the DSP eStore –

[www.dspestore.com](http://www.dspestore.com) – or through any authorized TI distributor.

- FADTs for \$245 U.S.
- DSKs starting at \$395 U.S.

Register your purchase of the FADT for support and updates of new features by e-mail. Send your e-mail to [biometrics@list.ti.com](mailto:biometrics@list.ti.com) with the following information:

- Company name
- Contact information
- DSK used
- Application description

For additional information and updates on biometrics-specific development tools, please visit TI's biometrics solutions at [www.ti.com/biometrics](http://www.ti.com/biometrics)

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