

# UniFinger SFU300

**Datasheet**

Ver. 1.1.1



## Revision History

| Rev No. | Issued date  | Description       |
|---------|--------------|-------------------|
| 1.0     | Feb 5, 2005  | Initial Release   |
| 1.1     | Nov. 15,2005 | H/W, F/W revision |
| 1.1.1   | Nov. 25,2005 | Fix typos         |

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## 1. Overview

UniFinger SFU300 is an OEM fingerprint scanner suitable for integration into fingerprint authentication devices or systems.

It includes a reliable optical fingerprint sensor enabling robust and accurate acquisition of fingerprint image. Also, it supports standard USB interface used for efficient transfer of captured fingerprint image data to host system. Since it is provided as OEM module, it can be easily and cost-effectively used as a part of various application devices and authentication systems.

SFU300 is supported by UniFinger Engine SDK containing world's leading fingerprint authentication algorithm (ranked No. 1 in FVC2004). Owing to excellent performance of the algorithm and reliable fingerprint imaging, it provides outstanding authentication results when used together with the UniFinger Engine SDK.

## 2. Features

- Reliable image quality
- Cost effective OEM module
- Standard USB interface support
- Supported by UniFinger Engine SDK (world's leading fingerprint authentication algorithm)
- Windows 98 SE, Me, 2000, XP support

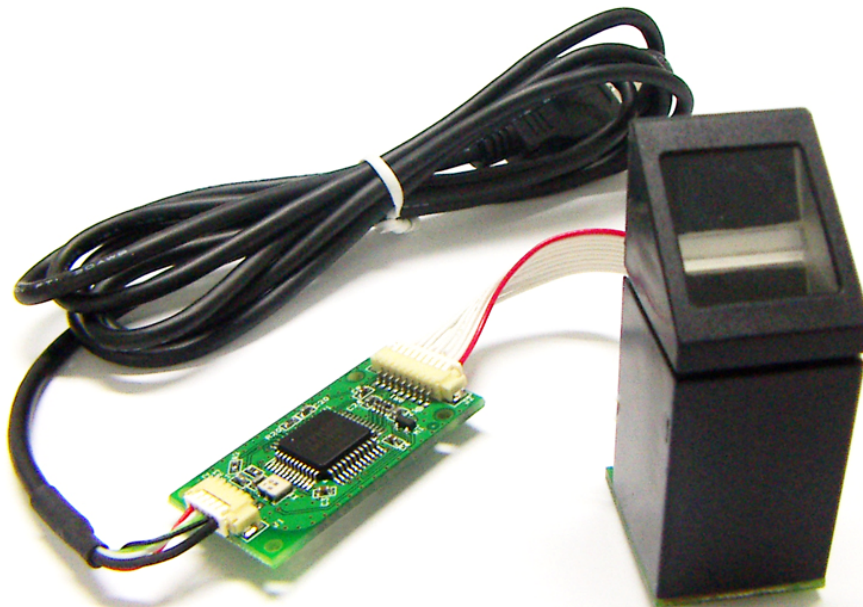
## 3. Applications

- PC Peripherals( fingerprint reader, mouse )
- Keyboards
- Kiosks, POS terminals
- Time and attendance systems
- Government and law enforcement applications

## 4. System Specifications

|                       |                            |
|-----------------------|----------------------------|
| Sensor technology     | Optical                    |
| Sensing area          | 16mm x 18mm                |
| Image size(pixels)    | 280 x 320                  |
| Image resolution      | 500 dpi, 8 bit gray scale  |
| Interface             | USB 1.1 Full Speed         |
| Operating temperature | 0 °C ~ 40 °C               |
| Supported OS          | MS Windows 98SE/ME/2000/XP |

## 5. Hardware Specifications



## 5.1. Components

| <b>Component</b>       | <b>Description</b>  |
|------------------------|---|
| Main board             | Main board controlling fingerprint sensor and interfacing with USB host |
| Fingerprint Sensor     | Optical Fingerprint sensor  |
| Sensor interface cable | 9 pin wired cable connecting sensor and main board                      |
| USB interface cable    | Standard USB cable connecting main board and host USB port              |

## 5.2. Physical Dimensions

| <b>Parameter</b>       | <b>Values</b>               |
|------------------------|-----------------------------|
| Main Board             | 40mm x 22mm x 1.6mm (WxLxH) |
| Fingerprint sensor     | 21mm x 23mm x 52mm (WxLxH)  |
| Sensor interface cable | 80 ± 5 mm                   |
| USB interface cable    | 1600 ± 50 mm                |

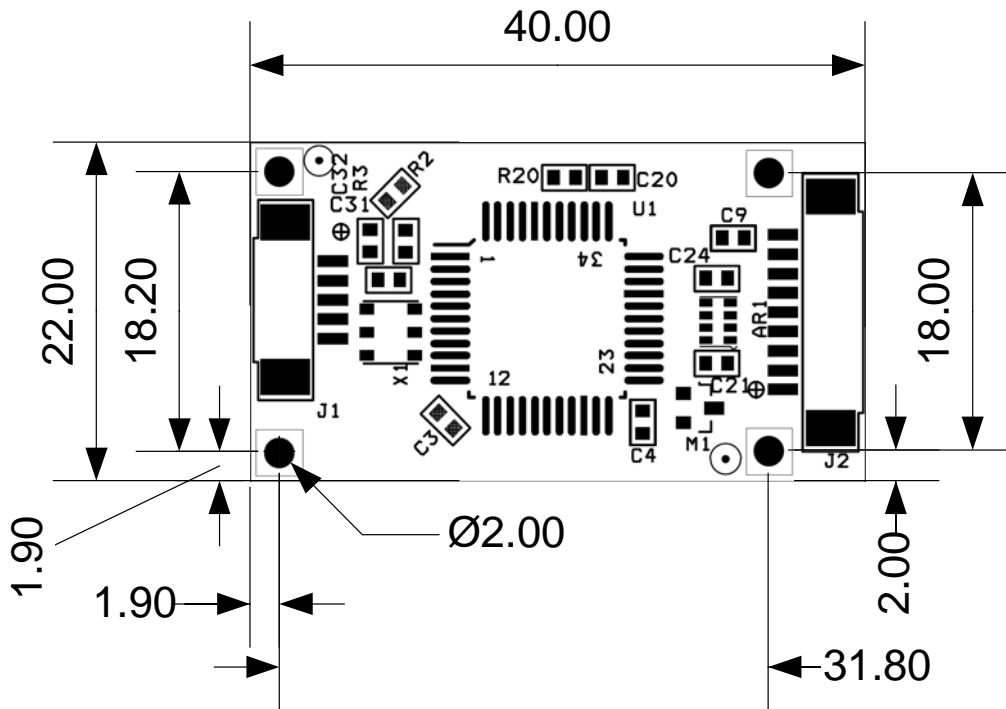


Figure 1 Main Board dimensions

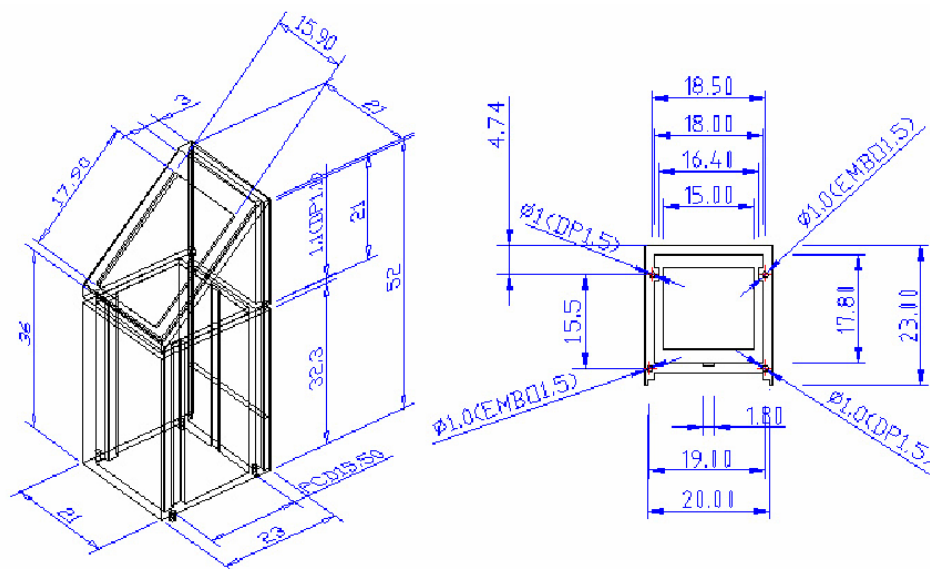


Figure 2 Sensor dimensions

### 5.3. Connector Specifications

| Connector | Usage  |
|-----------|--|
| J1        | Connector for USB interface on main board    |
| J2        | Connector for sensor interface on main board |

- **J1 pin assignment**

| Name   | Pin number | Functions       |
|--------|------------|-----------------|
| VCC    | 1          | Power pin. 5Vdc |
| USB D- | 2          | USB Data -      |
| USB D+ | 3          | USB Data +      |
| GND    | 4          | Power Ground    |
| FGND   | 5          | Frame Ground    |



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