

# EMBEDDED FINGERPRINT MODULE / GTM-5110C SERIES



TrueSecure™ 3D

## FEATURES

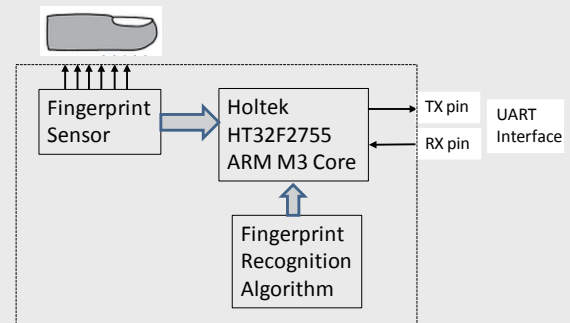
- » Single chip fingerprint recognition module
- » Complete integrated algorithms for learn, login and erase functions
- » Advanced optical technology
- » High accuracy and high recognition speed
- » Ultra-thin optical sensor
- » 1:1 verification and 1:N identification
- » Downloadable sensor fingerprint image
- » Fingerprint templates can be read/written to module
- » UART communication protocol for interfacing to external master MCU
- » Easy fingerprint recognition product integration

## APPLICATIONS

- » Notebook computer login
- » Household security products
- » Vehicle entry systems
- » Biometric identification products

Fingerprint recognition technology provides a secure and accurate means of biometric identification. This range of device offers users a quick and easy implementation method for biometric fingerprint recognition. The integration of an optical fingerprint sensor, Holtek 32-bit ARM core microcontroller and fully programmed algorithm into a single module together combine to form complete fingerprint recognition module. A number of fingerprint images or templates are stored within the device's internal Flash Memory and therefore retain storage when power is removed. The storage capacity varies according to the module type selected. With easy commands such as learn, login and erase, this range of device offers a convenient and easy-to-use solution for users wishing to implement fingerprint biometric security into their products.

## BLOCKSCHALTBIELD



Vereinfachte Darstellung des Funktionsprinzips

## SELECTION TABLE

| PART NO.    | EFFECTIVE AREA [mm <sup>2</sup> ] | RESOLUTION [dpi] | IMAGE PIXELS | NO. OF FINGERPRINTS | ROTATION [deg.] | TEMPLATE BYTE SIZE | COMPARE TIME [s] | DIMENSION W×D×H [mm <sup>3</sup> ] |
|-------------|-----------------------------------|------------------|--------------|---------------------|-----------------|--------------------|------------------|------------------------------------|
| GTM-5110C2  | 14×12.5                           | 450              | 240×216      | 20                  | 360             | 506                | 1.5              | 17×37.0×7.74                       |
| GTM-5110C21 | 14×12.5                           | 450              | 240×216      | 20                  | 360             | 506                | 1.5              | 21×36.1×7.74                       |
| GTM-5110C3  | 14×12.5                           | 450              | 258×202      | 200                 | 360             | 498                | 1.0              | 17×37.0×7.74                       |
| GTM-5110C31 | 14×12.5                           | 450              | 258×202      | 200                 | 360             | 498                | 1.0              | 21×36.1×7.74                       |
| GTM-5110C5  | 14×12.5                           | 450              | 258×202      | 2000                | 360             | 498                | 1.5              | 17×37.0×7.74                       |
| GTM-5110C51 | 14×12.5                           | 450              | 258×202      | 2000                | 360             | 498                | 1.5              | 21×36.1×7.74                       |

The range of devices shown in the selection table are similar in function, but differ mainly in their fingerprint storage capacity, mechanical construction, pixel count, rotation range etc.