OCR310e
Miniature OEM OCR Reading Engine

Ultra-compact, low-power OCR reader designed for integration into third-party portable reading devices

Description
The OCR310e is an optical character recognition (OCR) swipe reader module. Combining ultra-compact size and low-power consumption, the OCR310e is designed to be integrated into third-party, hand-held devices for applications such as portable identification verification devices.

An OCR decoder is integrated within the device using an advanced recognition engine to provide highly accurate and very fast document reading.

The OCR reading engine captures code lines from machine readable passports (MRP), visas (MRV), US and international resident permits as well as European and other national ID cards conforming to ICAO 9303 & ISO/IEC 7501-1 (2 and 3-line MRZ). It will also read the new ISO/IEC 18013-1 driving licences (1-line MRZ), so is future-proofed.

Optionally, APACS debit and credit documents (APACS standards 3.1 and 3.2, respectively) can be read together with E13B, OCRB and mixed E13B and OCRB fonts.

Features
- Miniature package with low power consumption and sleep mode
- Compact footprint
- Rapid and accurate decoding using Access’ established OCR decoding technology
- Bidirectional OCR read
- Reads machine readable passports, visas and travel cards conforming to ICAO Document 9303

Applications
Integration into portable devices requiring low-power OCR reading such as:
- Police identification checking
- Queue-busting at airport check-in
- Security checks at airport boarding gates
- AQQ and APIIS generation.

Examples of OCR310e integration applications
Developer’s Kit

A developer’s kit is available to assist in the integration of the OCR310e into OEM equipment.

The kit comprises one OCR310e device, two development boards (one USB and one RS-232), all cables, utilities and documentation.

Dimensions

The OCR310e integrates reading and decoding technologies

Specifications

Read capabilities

- Standard OCR fonts: OCR-B and E13B
- Machine readable passports (MRP): 2 lines of 44 characters
- Machine readable visas (MRV): 2 lines of 44 characters, 2 lines of 36 characters
- ID documents: 1 line of 30 characters, 2 lines of 36 characters, 3 lines of 30 characters
- MRZ swipe speed: up to 100cm/sec
- OCR decoding: up to 0.3 second
- Field of view object height: 19.6 mm nominal
- Depth of field: 1.5 mm maximum from imager window

Interfaces

- Host interface: 3.3V serial, USB HID or USB keyboard output

Connection

- Connector: 12-way, 0.5 mm pitch flat flexible ribbon (FFC); mating connector and cable available on request

Electrical specifications

- Input voltage: 3.3V +/-5%
- Current consumption:
  - Max: <120mA
  - Idle: <50mA
  - Sleep: <30mA
  - Suspend: <10mA

Environmental

- Operating temperature: 0°C to 50°C
- Storage temperature: -20°C to 60°C

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