Advanced Card Systems Ltd.
Card & Reader Technologies

CONTACTLESS READER MODULE

ACM1552U-Z2
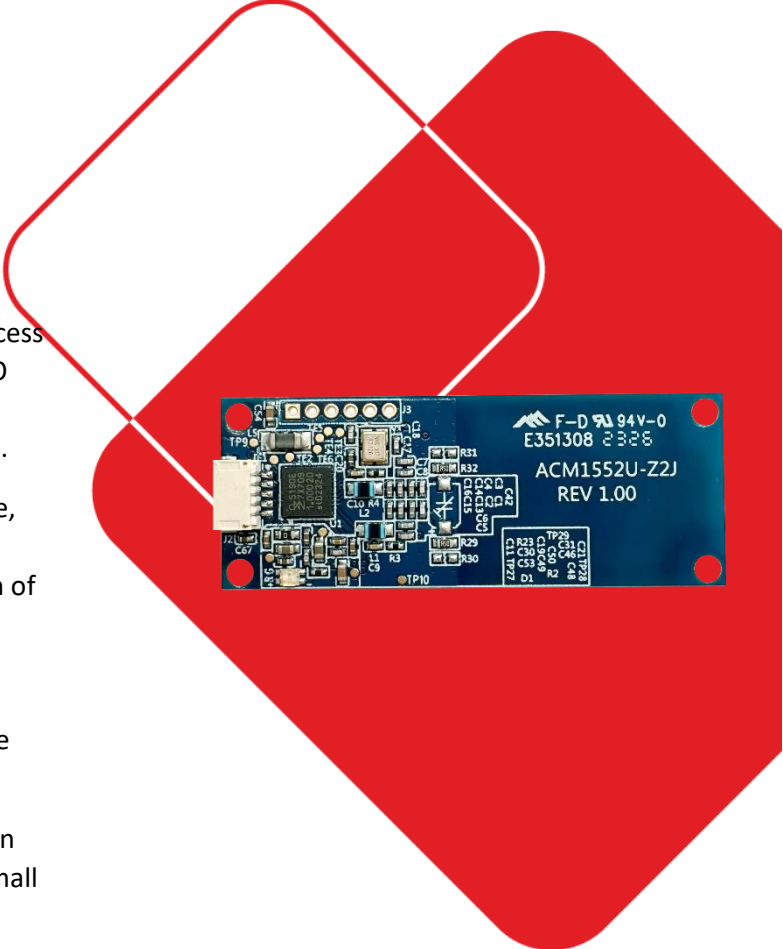
Small NFC Reader Module

ACM1552U-Z2 Small NFC Reader Module was developed based on the 13.56 MHz contactless technology. It can access contactless cards and devices following the ISO 14443, ISO 15693 and ISO 18092 standards. This smart card reader module is designed to easily integrate embedded systems.

ACM1552U-Z2 is a CCID & PC/SC compliant reader module, this plug-and-play NFC reader module makes use of high-speed communication for contactless cards at a maximum of 848 kbps, which makes it suitable for highly demanding applications. It also supports three modes: card reader/writer, keyboard emulation and card emulation, making it a powerful all-in-one device that is cost-effective and flexible for many smart card applications.

The compact size of the ACM1552U-Z2 module makes it an excellent choice for integration into small machines. Its small form factor offers flexibility and seamless integration into various applications, such as handheld devices and kiosks without compromising their functionality or usability.

KEY FEATURES

- ☑ Support various types of contactless card
  - o ISO 14443 Type A & B
  - o ISO 15693
  - o ISO 18092-compliant NFC tags
  - o MIFARE Classic®, MIFARE DESFire®, MIFARE Ultralight®, MIFARE Plus®, FeliCa and Topaz
- ☑ Support various NFC modes
  - o Smart Card Reader/Writer
  - o Keyboard Emulation
  - o Card Emulation
- ☑ Flexible
  - o Read/write speed, LED can be programmable
- ☑ Compact Size
- ☑ Support USB Firmware Upgrade
- ☑ Reliable
  - o Certified for international regulations
  - o Mean time between failures (MTBF) up to 500k Hours
- ☑ High Compatibility
  - o Support for all major operating systems
    - ▪ Windows®, Linux®, Mac OS®, Android™

Common Applications

E-Government
E-Banking and e-Payment
E-Healthcare
Transportation
Network Security
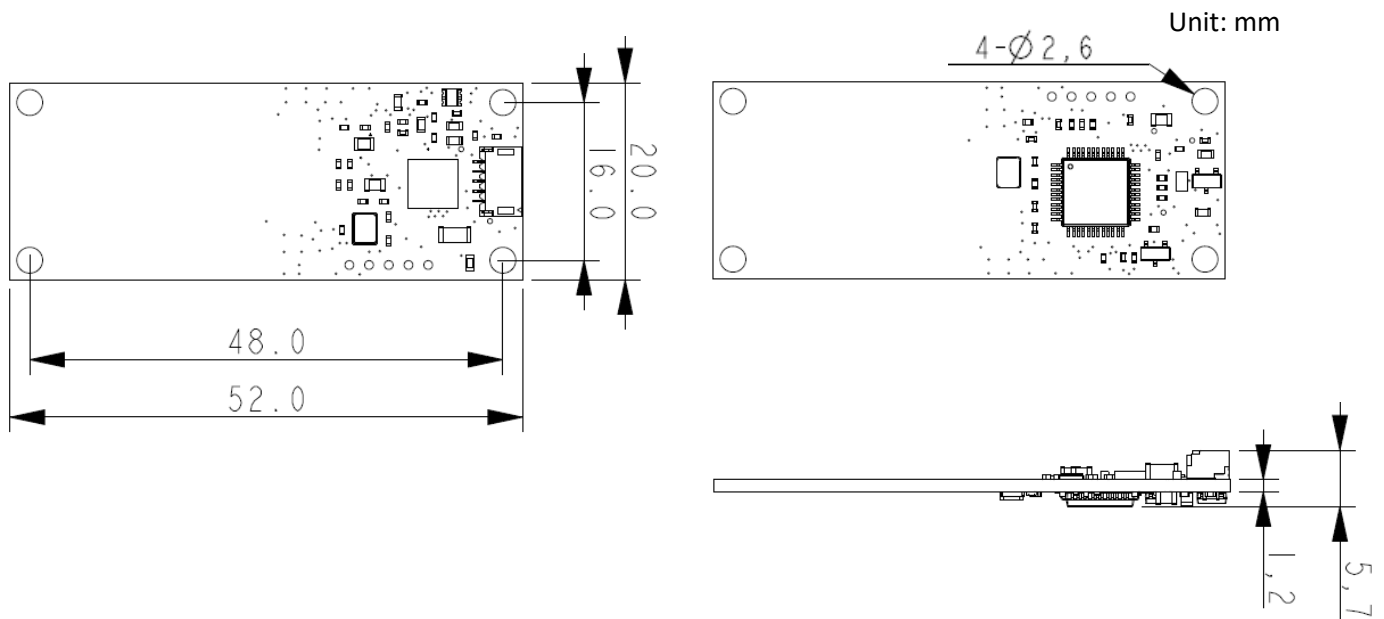Access Control
Loyalty Program
Smart Poster/URL Marketing

www.acs.com.hk
info@acs.com.hk

TECHNICAL SPECIFICATION

Contactless Smart Card Interface	
Supported Card Types	ISO 14443 Type A & B Parts 1-4, ISO 15693, ISO 18092 NFC, MIFARE Classic®, MIFARE® DESFire®, MIFARE Ultralight®, MIFARE Plus®, FeliCa and Topaz
Operating Frequency	13.56 MHz
Reading Distance	Up to 70 mm (Depending on tag type)
Read/Write Speed	106/212/424/848 kbps (ISO 14443) 26 kbps (ISO 15693)
Anti-Collision	Yes
Supported NFC Mode	Card Reader/Writer, Keyboard Emulation, Card Emulation,

Host Interface	
Protocol	USB CCID
Connector Type	5pin, 1mm pitch, JST SH series compatible
Speed	USB 2.0 Full Speed (12 Mbps) compatible with USB3.0
Supply Voltage	5VDC
Current Consumption	Max. 200mA
USB Firmware Upgrade	Supported

Physical Characteristics	
Dimension (L x W x H)	52.0 x 20.0 x 5.7 mm
Weight (±0.2 g)	3.4 g
USB Cable Length	1.0 m, Detachable (Upon Request)

Peripherals	
LED	1 x Programmable LED (Blue & Green)

Operating Condition	
Temperature	0 - 60°C
Humidity	Max. 90% (Non-condensing)
MTBF	500,000 Hours

Certifications/ Compliances	
Standards	USB CCID, PC/SC, Microsoft® WHQL, J-LIS
Regulatory / Environmental	CE, UKCA, FCC, VCCI, KC, RoHS, REACH, WEEE

Libraries & Tools	
Libraries	CT-API
Tools	Software Development Kit

Drivers & Support	
Driver Supported OS	Windows®, Linux®, macOS, Android™
Warranty	1 Year

MECHANICAL SPECIFICATION

Unit: mm

About ACS

Advanced Card Systems Ltd. (ACS), founded in 1995, is Asia Pacific's top supplier and one of the world's top 3 suppliers of PC-linked smart card readers. ACS is the winner of the Product Quality Leadership Award for Smart Card Readers from Frost & Sullivan. ACS was listed in Forbes Asia's "Best Under a Billion" list for several years, an inter-industry list comprised of 200 top-performing publicly listed companies in the Asia-Pacific, with sales between US$5 million and US$1 billion. ACS develops a wide range of high-quality smart card reading/writing devices, smart cards and related products and distributes them to over 100 countries worldwide.

Click here for Sales Enquiry
Tel: +852-2796-7873
Fax: +852-2796-1286

www.acs.com.hk

info@acs.com.hk