New Smart Series

CN3XX(S)(T)-X 13.56MHz Reader Module

- ISO18092 NFC, ISO14443A/B, ISO15693, ISO7816
- Mifare®, DesFire EV1, Mifare Plus, Sony Felica

CN3XX(S)(T)-X Plug & Play OEM reader module supports 13.56MHz technology, including ISO14443A/B, Mifare, DESFire EV1, Mifare Plus,ISO15693 and read Sony Felica. It is compliant with ISO/IEC18092 NFC for peer to peer communication. It is as well with build-in SAM socket compliant to ISO7816(T=0,T=1) to enhance security.

The Mini size module with multi-interface is flexible to do integration and compatible to Comprehensive Operation System as Window, WinCE and Linux.

▸ Advantages

Support ISO/IEC18092 NFC Peer-to-Peer mode
One build-in ISO7816(T=0 T=1) SAM socket for enhanced security, expandable on request
Multi-interface: RS232, RS485, USB 2.0, TTL
SPI, Clock & Data / ABA1,2 / Wiegand26-58
Compliant with CCID to eliminate the need for driver Installation [CN3XX(S)(T)-XC]
Support High Speed of ISO14443 up to 848kbps
Selective card polling capability (useful when several cards are presented)
Hardware Watchdog enhance the system reliability
Comprehensive platform to provide flexibility by customer side: Windows XP/7/8/Vista; Android; Linux; MAC; WinCE / CE.net
Firmware upgradable
Firmware customized design to meet various requirement

▸ Applications

Embedded device, such as Handheld Terminal, Parking Meters, Vending Machines, Banking Terminal
Application for Desktop Terminal and Reader Device
Physical / Logical access control & time attendance
Personal Identification
E-payment
Electronic ticketing for public transportation
Loyalty System
Car Parking

▸ Family Member

	CN313(S)(T)	CN360(S)(T)	CN370(S)(T)
ISO15693	•		
ISO14443A	•	•	•
ISO14443B	•		•
Mifare	•	•	•
Mifare Plus	•		•
DESFire EV1	•		•
NFC			•
Read Felica			•

▸ Order Code

CN3XX(S)(T)-X(C)

CCID Compliant option
C = with CCID Compliant
Default = without CCID Compliant

Interface
2 = RS232 + USB + TTL+ Wiegand / Clock & Data / ABA1, 2 + SPI
4 = RS485 + USB + TTL+ Wiegand / Clock & Data / ABA1, 2 + SPI

Antenna option
T = with integrated antenna
Default = external Standard antenna

SAM Socket option
S = with build-in SAM socket
Default = without SAM socket

▸ External antenna on request

Three kinds of external antenna with different dimension are for selection, with tuner to adjust reading distance as optional.

Customized service on module and antenna (size, position, etc) is available on request to meet customer's individual requirement.

55*50*2.6mm   40*20*2.6mm   30*30*2.6mm

* With tuner on request

▸ Product Images

Integrated Antenna
100*50*10mm

External Antenna
55*50*2.6mm

Module
50*46*10mm

▶ Specifications

Model	CN313(S)(T)-X(C)	CN360(S)(T)-X(C)	CN370(S)(T)-X(C)
Operating Frequency	13.56MHz; APDU command		
Contactless Standard	ISO14443A 4(part 1-4), Mifare, Mifare Plus, DESFire EV1, ISO14443 B, ISO15693	ISO14443A , Mifare	ISO14443A 4(part 1-4), Mifare, Mifare Plus, DESFire EV1, ISO14443B, Felica
NFC	----------------		ISO18092 NFC peer to peer
Contact Standard	ISO 7816 1/2/3, ClassB,C (3V,1.8V), T=0 and T=1		
Contactless Card Interface	Mifare Ultralight, Mifare 1K/4K, Mifare Pro/Prox, SLE55Rxx, SLE66CL 160S and other ISO14443A compatible cards		
	TagIT, MY-D, I-Code II; Mifare Plus, DESFire EV1; SR176, SRIX512, SRIX4K and other ISO14443B compatible cards	-----------	Mifare Plus, DESFire EV1; Sony Felica; ISO14443B compatible cards
Reader Dimensions	100mm*50mm*10mm (with Build-in Antenna) 50mm*46mm*10mm (with External Antenna)		
Power Supply	5V DC (± 5%) or 3.3V (option)		
Power Down	Sleep Mode: <30mA (power down function)		
Communication Rate	106-848kbps High speed transaction		
Baud rate	9600-115200 Kbit/s (default 115200)		
Operating distance	30 -100mm (depending on antenna, transponder)		
Interface	RS232, RS485, USB 2.0 (12 Mbps) TTL, SPI, Clock & Data / ABA1,2 / Wiegand26,30,32,40,42,50,56,58 as optional		
SAM Slot	One build-in SAM slot, expandable on request		
Extended I/O port	3 I/O ports (Bi-directional USER pin); the I/O ports provide TTL level interface for general-purpose use; 2 LEDs drivers; Module enable / Module reset pins; MFOUT & MFIN		
Indication	Controllable 2 LED (Red and Green) and 1 Buzzer to observe working status		
Reader driver	USB 2.0 Win 7,Win8, XP, Vista; Linux [CN3XX(S)(T)-XC]		
Operating System	Windows 98/2000/XP/7/8/Vista; Server2003&2008,ME98; Linux; Android; MAC; WinCE6.0/CE.net		
EMI	Antenna with a ferrite shield (as optional)		
Operating temperature	-20° C ~ +60° C		
Storage temperature	-20° C ~ +70° C		
Humidity	5 ~ 90% relative humidity non-condensing		
Special Feature	USB/RS232 for Easy firmware update. The Customized firmware could be implemented to meet the user's special requirement.		

Specifications are subject to change without notice.

▶ Further Application Development

■ **CNReader SDK** is software development kit worked with CN3XX and CN6XX product series for second development. It includes API, Host Demo, user manual, USB driver and program example. It′s developed by C++builder developing tool on Windows Operating system and GCC developing tool on Linux OS, compatible to VC,VB/VB.NET, C++,C#.NET, DELPHI etc. It also offers special Host Demo and API for Mifare Plus and DESFireEV1, NFC and SAM.

Features

SDK is available with some special benefits for customer′s development
Stronger and powerful informative API to save your time and cost for development
Examples for good reference and understanding, using developing tools like Delphi,
C++ Builder, C#, .NET, VC, VB/VB.NET etc.
APDU channel packaged into API to operate all commands of smart card.
Comprehensive platform to provide flexibility by customer side:
Operating System: Linux and Windows. Support Win 98,Win ME, Win 2000, Win 2003, Win 2003 x64, Win XP, Win XP x64, Win Vista, Win Vista x64, Win 2008, Win 2008 x64, Win 2008 R2 x64, Win 7, Win 7 x64, Win8
Host Demo, a software testing tool to ease and simply development

■ **Hardware Testing Package (HTP)**

A plug & play HTP establishes full testing environment used with SDK to ease your fast testing and evaluation.

Package list:
(1) Testing board   (5) Wires
(2) Power supply (9V)   (6) Testing cards
(3) Serial communication cable   (7) Testing tags
(4) USB communication cable   (8) RS232-RS485 converter module

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