
NFC Function Board
SRP.NFC.01

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FCC Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution: The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC RF Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

The device must be professionally installed

The intended use is generally not for the general public. It is generally for industry/commercial use.

The connector is within the transmitter enclosure and can only be accessed by disassembly of the transmitter that is not normally required. The user has no access to the connector.

Installation must be controlled. Installation requires special training

Canada Statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux

CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes :

1) L'appareil ne doit pas produire de brouillage;

2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Please notice that if the ISED certification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains IC: 24728-SRPNFC0101" any similar wording that expresses the same meaning may be used.

l'appareil hôte doit porter une étiquette donnant le numéro de certification du module d'Industrie Canada, précédé des mots « Contient un module d'émission », du mot « IC: 24728-SRPNFC0101 » ou d'une formulation similaire exprimant le même sens, comme suit

The device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS-102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

Le dispositif rencontre l'exemption des limites courantes d'évaluation dans la section 2.5 de RSS 102 et la conformité à l'exposition de RSS-102 rf, utilisateurs peut obtenir l'information canadienne sur l'exposition et la conformité de rf.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Cet émetteur ne doit pas être Co-placé ou ne fonctionnant en même temps qu'aucune autre antenne ou émetteur.

This radio transmitter 2AR82-SRPNFC0101 has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Le présent émetteur radio 2AR82-SRPNFC0101 a été approuvé par Innovation, Sciences et Développement économique Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste, et dont le gain est supérieur au gain maximal indiqué pour tout type figurant sur la liste, sont strictement interdits pour l'exploitation de l'émetteur.

The concrete contents to check are the following three points.

Should be installed so that the end user cannot modify the antenna;

Feed line should be designed in 50ohm

Fine tuning of return loss etc. can be performed using a matching network.

Le contenu concret à vérifier sont les trois points suivants.

1) doivent être installés de façon que l'utilisateur final ne peut pas modifier l'antenne

2) La ligne d'alimentation doit être conçue en 50ohm

Le réglage précis de la perte de rendement, etc. peut être effectué en utilisant un réseau correspondant.

Notice to OEM integrator

The end user manual shall include FCC statement and Canada statement related to the transmitter as show in this manual.

The end user manual shall include FCC Part 15 /ISED RSS GEN compliance statements related to the transmitter as show in this manual.

Host manufacturer is responsible for compliance of the host system with module installed with all other applicable requirements for the system such as Part 15 B, ICES 003.

Host manufacturer is strongly recommended to confirm compliance with FCC/ISED requirements for the transmitter when the module is installed in the host.

Must have on the host device a label showing Contains FCC ID: 2AR82-SRPNFC0101, IC: 24728-SRPNFC0101

le manuel de l'utilisateur final doit inclure la partie 15 / (fac rss gen déclarations de conformité relatives à l'émetteur que de montrer dans ce manuel.

le fabricant est responsable de la conformité de l'hôte, le système d'accueil avec le module installé avec toutes les autres exigences applicables du système comme la partie 15 b, ices - 003.

accueillir le fabricant est fortement recommandé de confirmer la conformité avec les exigences de la fcc / (émetteur lorsque le module est installé dans l'hôte.

le dispositif d'accueil doivent avoir une étiquette indiquant contient FCC ID: 2AR82-SRPNFC0101 , IC: 24728-SRPNFC0101

OEM instructions for Installation of Module FCC KDB 996369 D04

This module is for installation by OEM and system integrator only, it must not be sold for end-user integration. This module complies with CFR 47 FCC PART 15 SUBPART C 15.225 rules as a modular transmitter.

The module may only be installed in host devices that meet the FCC RF exposure category of mobile, which means the device is installed.

The information the host product manufacturer must provide to end users in their end-product manual includes the FCC Part 15 compliance statements related to the transmitter as show in this manual.

The modular transmitter is only FCC authorized for the transmitter-specific rule parts. Host manufacturer is responsible for compliance of the host system with module installed with all other applicable requirements for the system such as Part 15 B

Must have on the host device a label showing Contains FCC ID:2AR82-SRPNFC0101

This module is approved as a stand-alone module. If the end product will include multiple, simultaneously transmitting transmitters or different operational conditions for a stand-alone modular transmitter in a host, host manufacturer must consult with module manufacturer for the installation method in end system.

It is recommended that the host product manufacturer, installing the modular transmitter, perform some investigative measurements to confirm that the resulting composite system does not exceed the spurious emission limits or band edge limit. If the host product manufacturer finds during these investigative measurements that the transmitter emissions from their product are high and likely to exceed the limit, it may be necessary for the host product manufacturer to work with the module manufacturer to consider more thorough investigation and mitigation measures.

If the host product manufacturer does find the composite system (host product and modular transmitter) does exceed the spurious emission or output power limit. It is the responsibility of the host product manufacturer not to market the product in the U.S.

Please check for KDB Publication 996369 D04 Module Integration Guide for detail.

module manufacturer reviews detailed test data or host designs prior to giving the host manufacturer approval. In order to verify that the host meets the necessary requirements to satisfy the module limiting conditions.

Notice: Any deviation(s) from the defined parameters of the antenna trace, as described by the instructions, require that the host product manufacturer must notify the module grantee that they wish to change the antenna trace design. In this case, a Class II permissive change application is required to be filed by the grantee, or the host manufacturer can take responsibility through the change in FCC ID (new application) procedure followed by a Class II permissive change application.

Antenna type is internal antenna

Introduction

This document describes the functionality and electrical specification of the NFC Function Board SRP.NFC.01.

NFC Function Board SRP.NFC.01 is a full NFC controller solution with integrated firmware and NCI interface designed for contactless communication at 13.56 MHz. It is compatible with NFC forum requirements.

SRP.NFC.01 is designed based on learnings from previous NXP NFC device generation. It is the ideal solution for rapidly integrating NFC technology in any application, especially those running O/S environment like Linux and Android, reducing Bill of Material (BOM) size and cost, thanks to:

- Full NFC forum compliancy (see Ref. 1) with small form factor antenna
- Embedded NFC firmware providing all NFC protocols as pre-integrated feature
- Direct connection to the main host or microcontroller, by I2C-bus physical and NCI protocol
- Ultra-low power consumption in polling loop mode
- Highly efficient integrated power management unit (PMU) allowing direct supply from a battery

Applications

All devices requiring NFC functionality especially those running in an Android or Linux environment

- TVs, set-top boxes, Blu-ray decoders, audio devices
- Home automation, gateways, wireless routers
- Home appliances
- Wearables, remote controls, healthcare, fitness
- Printers, IP phones, gaming consoles, accessories

Product Pictures

