

User Manual

NFC Module

MODEL DRT-W127

The purpose of this manual is to explain correct way how to integrate module DRT-W127 to the end product. It includes procedures that shall assist you to avoid unforeseen problems. This manual presents information that shows how module and OEM product, where module integrated, complies with regulations in certain regions. Any modifications, not expressly approved by the manufacturer could void the authority to operate in these regions.

The NFC Module, model DRT-W127 has to be installed and used in accordance with the technical description/installation instructions provided by the manufacturer.

For detail information concerning type approval of this module (e.g. where this module is already pre-approved) please contact the authorized local distributor or the manufacturer.

The system may only be implemented in the configuration that was authorized. Note that any changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

Regulatory Information

Operational Information

Wireless Interoperability

The end product integrating this module is designed to be interoperable with any NFC Card Reader/Writer product that is based on ISO18092, ISO14443A/B and JIS X 6319-4 for Contactless integrated circuit card technology and to comply with the following standards.

- ISO/IEC 18092 Near Field Communication – Interface and Protocol
- ISO/IEC 14443A/B 13.56MHz Contactless integrated circuit card - Proximity card
- JIS X 6319-4 13.56MHz Contactless integrated circuit card-Proximity card

Safety

The end product integrating this module, like other radio devices, emits radio frequency electromagnetic energy. The level of energy emitted by this device, however, is less than the electromagnetic energy emitted by other wireless devices such as mobile phones. The end product integrating this module operates within the guidelines found in radio frequency safety standards and recommendations. These standards and recommendations reflect the consensus of the scientific community and result from deliberations of panels and committees of scientists who continually review and interpret the extensive research literature. In some situations or environments, the use of the end product integrating this module may be restricted by the proprietor of the building or responsible representatives of the applicable organization. Examples of such situations include the following:

- Using the end product integrating this module onboard airplanes, or
- Using the end product integrating this module in any other environment where the risk of interference with other devices or services is perceived or identified as being harmful.

If uncertain of the policy that applies to the use of wireless devices in a specific organization or environment (an airplane, for example), ask for authorization to use the end product integrated into this module before turning it on.

USA-Federal Communications Commission (FCC)

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

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Labeling

MITSUMI NFC Card Reader/Writer MODULE DRT-W127 labeled as below.

FCC ID: EW4DRTW127

The label with FCC ID is to be placed on the module. If FCC ID is not visible when the module is installed into the system, "Contains FCC ID: EW4DRTW127" shall be placed on the outside of final host system.

Caution: Exposure to Radio Frequency Radiation.

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

Instructions to OEM Integrators

A User manual provided to the end user must indicate the operating requirements and conditions that must be observed to ensure compliance with the above-mentioned FCC RF Exposure guideline.

If this module is intended for use in a portable device, integrators are responsible for separate evaluation and/or approval to satisfy FCC RF Exposure requirements.

Only the antenna (Type: PCB Loop antenna) used during testing can be used with this module.

Canada-Industry Canada (IC)

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie 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, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Labeling

MITSUMI NFC Card Reader/Writer MODULE DRT-W127 labeled as below.

IC: 4250A-DRTW127

The label with IC No. is to be placed on the module. If IC No. is not visible when the module is installed into the system, "Contains IC: 4250A-DRTW127" shall be placed on the outside of final host system.

The term "IC" before the equipment certification number only signifies that the Industry Canada technical specifications were met.

Caution: Exposure to Radio Frequency Radiation.

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

Instructions to OEM Integrators

A User manual provided to the end user must indicate the operating requirements and conditions that must be observed to ensure compliance with the above-mentioned IC RF Exposure guideline.

If this module is intended for use in a portable device, integrators are responsible for separate evaluation and/or approval to satisfy IC RF Exposure requirements.

Only the antenna (Type: PCB Loop antenna) used during testing can be used with this module.

Europe-EU Declaration of Conformity and Restrictions

Hereby, MITSUMI declares that this MITSUMI NFC Card Reader/Writer MODULE DRT-W127 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

This equipment is marked with the  symbol and can be used throughout the European community.

This indicates compliance with the R&TTE Directive 1999/5/EC and meets the relevant parts of following technical specifications:

EN 300 330-2, Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Radio equipment in the frequency range 9 kHz to 25 MHz and inductive loop systems in the frequency range 9 kHz to 30 MHz; Part 2: Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive

EN 301 489-3, Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 40 GHz

EN 60950-1, Information technology equipment - Safety - Part 1: General requirements

EN 50364, Limitation of human exposure to electromagnetic fields from devices operating in the frequency range 0 Hz to 300 GHz, used in Electronic Article Surveillance (EAS), Radio Frequency Identification (RFID) and similar applications

Remark:

This module is fore a fixed application only. The OEM integrator will need to conduct full EMS testing in accordance with EN301 489-3 in the final use configuration.

Caution: Exposure to Radio Frequency Radiation.

This device must not be co-located or operating in conjunction with any other antenna or transmitter, without further RF Exposure evaluation.