SONY

Embedded NFC Reader Module

UART Interface

RC-S620/S



The RC-S620/S is a compact NFC reader module. Available with UART interface and suitable for incorporating into various devices, such as consumer devices, embedded system devices, and so on.

NFC

Compact and easily embedded

FEATURES

NFC functionality

Reader/writer function for ISO/IEC 14443 Type A / Type B cards and FeliCa™ cards.

Compact design with integrated antenna

The antenna and control parts are mounted on a single printed-circuit board with dimensions of 43 mm x 70 mm. This design is less prone to the impact of the installation environment when embedded, and can therefore be embedded in various devices.

High-speed communication (424 kbps)

In addition to 212 Kbps, high-speed communication of 424 kbps is available to communicate with the mobile FeliCa IC chip or FeliCa cards with 424 kbps capability.

Application development environment

SDK for NFC <Reference Implementation> (optional) supporting FeliCa and ISO/IEC 14443 Type A / Type B communication is available as application software development tool for the host controller.

MAIN TARGET DEVICES

- · PC · PC peripheral devices · AV devices · Access control readers
- · Loyalty point / membership card terminals

PRODUCT SPECIFICATIONS

	RC-S620/S
Regulation requirements	[Japan] No.: AC-09001 [USA] FCC ID : AK8RCS620S [Europe] CE RE (2014/53/EU) For details of other regulation requirements, please contact us.
Communication distance *1	Approx.20 mm
Communication method	Conforms to ISO/IEC 18092 (212 kbps / 424 kbps Passive communication mode) Conforms to ISO/IEC 14443 Type A / Type B
Communication speed (per card and device)	106 kbps*2, 212 kbps, 424 kbps*3
Carrier frequency	13.56 MHz
Operating temperature / humidity*4 (no condensation)	-10 °C to +40 °C / 20%RH to 90%RH 40 °C to 60 °C / 50%RH or lower
Storage temperature / humidity (no condensation)	-30 °C to +70 °C / 60%RH or lower
External interface	UART 9.6 kbps to 460 kbps (Initial speed at power-on is 115 kbps: speed can be changed on command)
Mass	Approx.17 g
External dimensions (W × H × D)	70 mm × 3.1 mm × 43 mm
Operating voltage / Consumption current (during operation)	DC3.3 V / Max.100 mA or DC5.0 V / Max.100 mA

- *1 The communication distance depends on peripheral environment. Under ideal conditions, this value is unaffected by electromagnetic waves or metallic substances.
- *2 When using ISO/IEC 14443 Type A / Type B cards.
 *3 Available only when the card or device to be used is compatible with the 424 kbps transfer mode.
- *4 Function assurance temperature.

 While this product does not contain any encryption processing functions, access to a secure area on a card may be realized via communication with an encryption server.

 Please lake any measures necessary to comply with the laws and regulations of each country and region where the product is to be marketed.

Sony Corporation

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