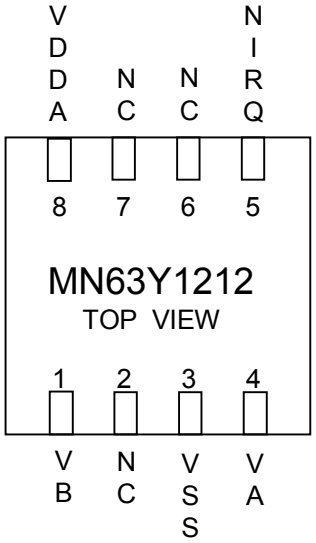
Evaluation board circuit diagram and implementation MN63Y1212/1213

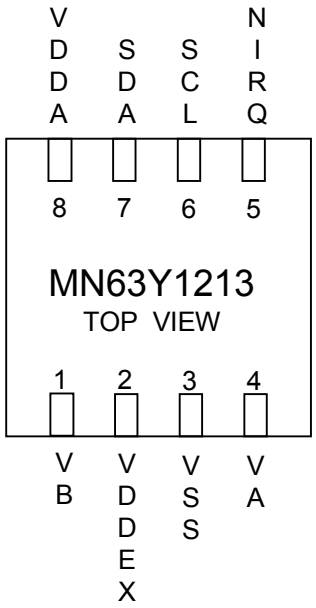
Ver. 1.0

Sep.5th,2013

Semiconductor Business Group
Industrial Devices Company
Panasonic Corporation

MN63Y1212/1213 Pin layout





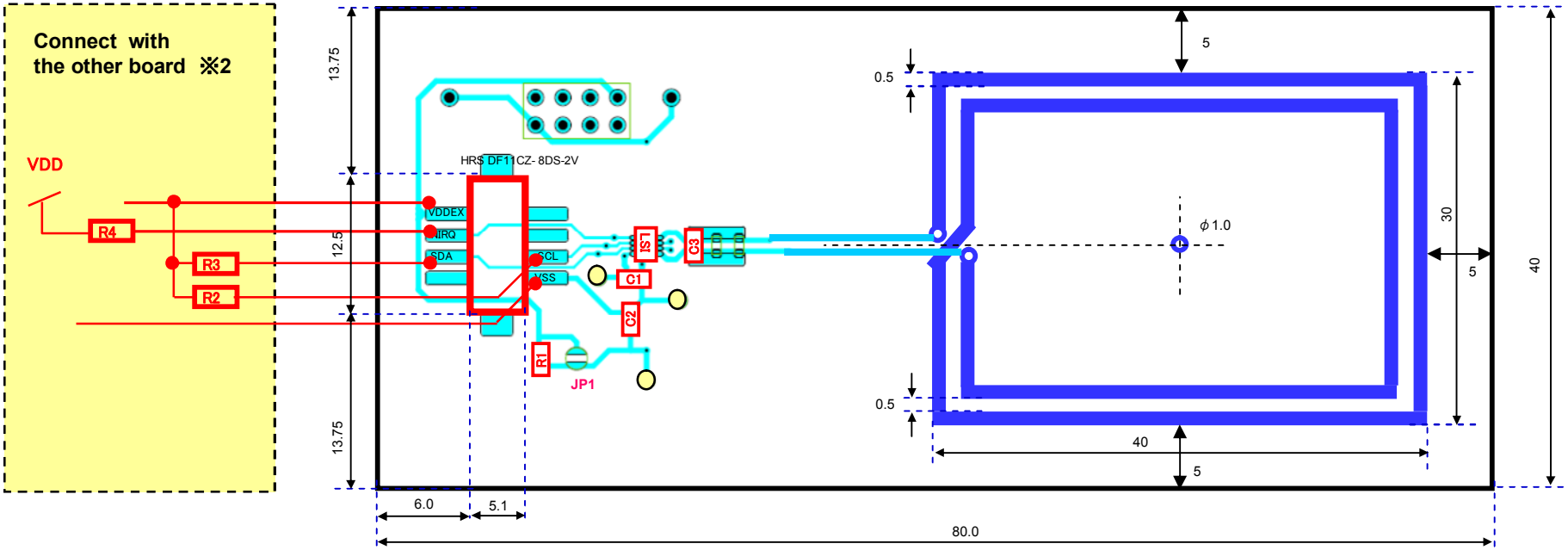
Pin No.	Name		Input/Output	IO type	Function
	MN63Y1212	MN63Y1213			
1	VB	VB	I/O	---	Coil terminal
2	N.C.	VDDEX	---	--- / Power	MN63Y1212: Open or Connect to Ground MN63Y1213: External Power Supply
3	VSS	VSS	---	GND	Ground
4	VA	VA	I/O	---	Coil terminal
5	NIRQ	NIRQ	Output	Open Drain	USE : Pull up to VDD NOT USE : Open or Connect to Ground (same as Pin No.2)
6	N.C.	SCL	--- / Input	--- / Open Drain	MN63Y1212: Open or Connect to Ground (same as Pin No.2) MN63Y1213: I2C Clock input
7	N.C.	SDA	--- / I/O	--- / Open Drain	MN63Y1212: Open or Connect to Ground (same as Pin No.2) MN63Y1213: I2C Data input/output
8	VDDA	VDDA	---	Power	Internal analog power supply (Connect a capacitor between this pin and VSS shortest as possible.)

3 Pattern of the evaluation board (40mm x 30mm Antenna)

Sep.5th,2013

■ ANT4030_02_0505_B0_L_1213_V0

Unit : mm



※ Substrate size may differ from the substrate which exists to a visitor.
※ I connect pulling up resistance (R,R2,R3) to the microcomputer board of our offer.

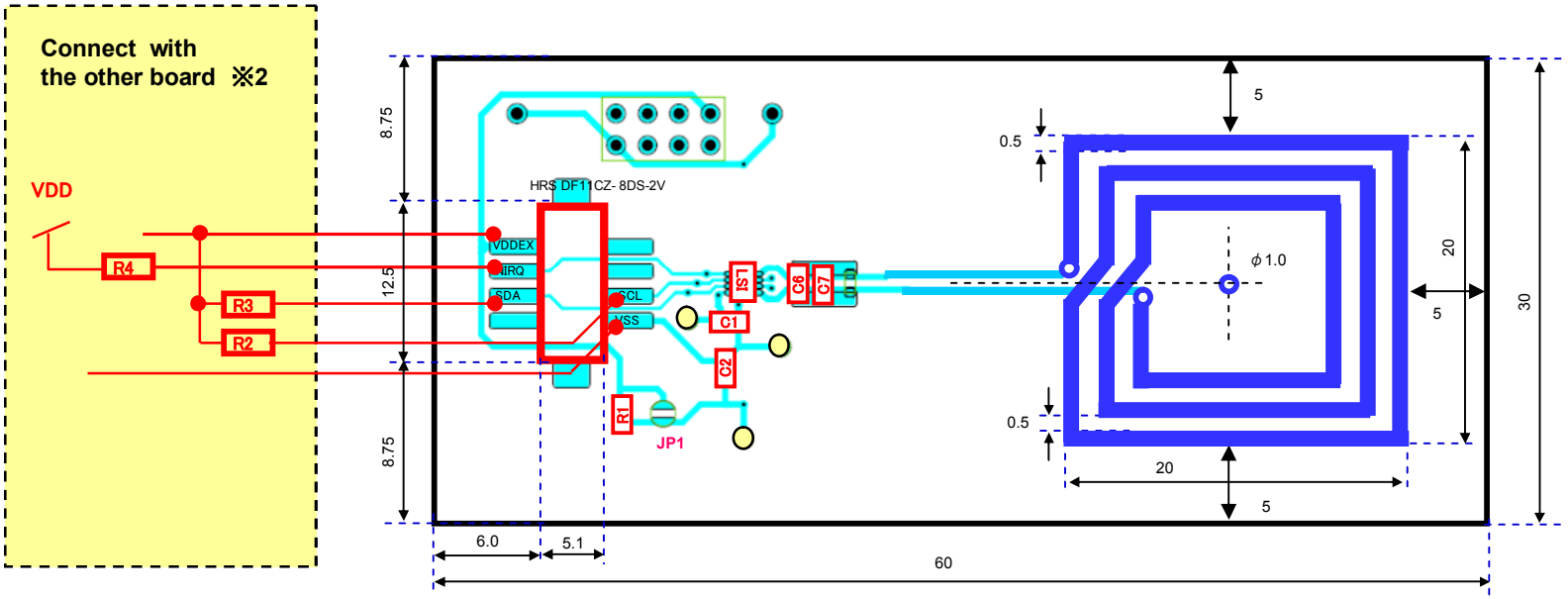
External parts	Recommended Value	Detail explanation
R2,R3	3.3kΩ	These are pull up resistor for I2C signal lines. Please choose the value considering data speed, parasitic capacitance of signal lines, and current drive performance. In our NFC tag board "ANT4030_02_0505_B0_L ," it is not implemented.
R4	3.3kΩ	This is pull up resistor for interrupt signal lines. Please choose the value considering data speed, parasitic capacitance of signal lines, and current drive performance. In our NFC tag board "ANT4030_02_0505_B0_L ," it is not implemented.
C1、C2	2.2μF	It is a fixed value at the capacity between the power supply for operation stabilization of the tag LSI. C2 is connected to VDDD, and C3 is connected to VDDA and C4 is connected to VDDEX.
R1	200Ω	Please set 200 ohm when use VDEEX between 2.5 to 3.6 V (Default value) Please set 0 ohm when use VDEEX between 1.7V to 2.5V (Short JP1)

4 Pattern of the evaluation board (20mm x 20mm Antenna)

Sep.5th,2013

■ ANT2020_02_0505_B0_L_1213_V0

Unit: mm



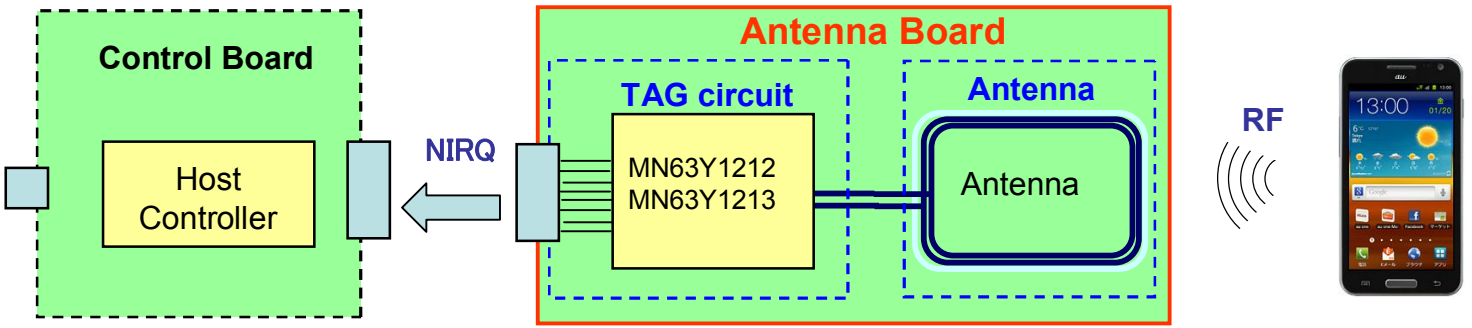
※ Substrate size may differ from the substrate which exists to a visitor.
※ I connect pulling up resistance (R,R2,R3) to the microcomputer board of our offer.

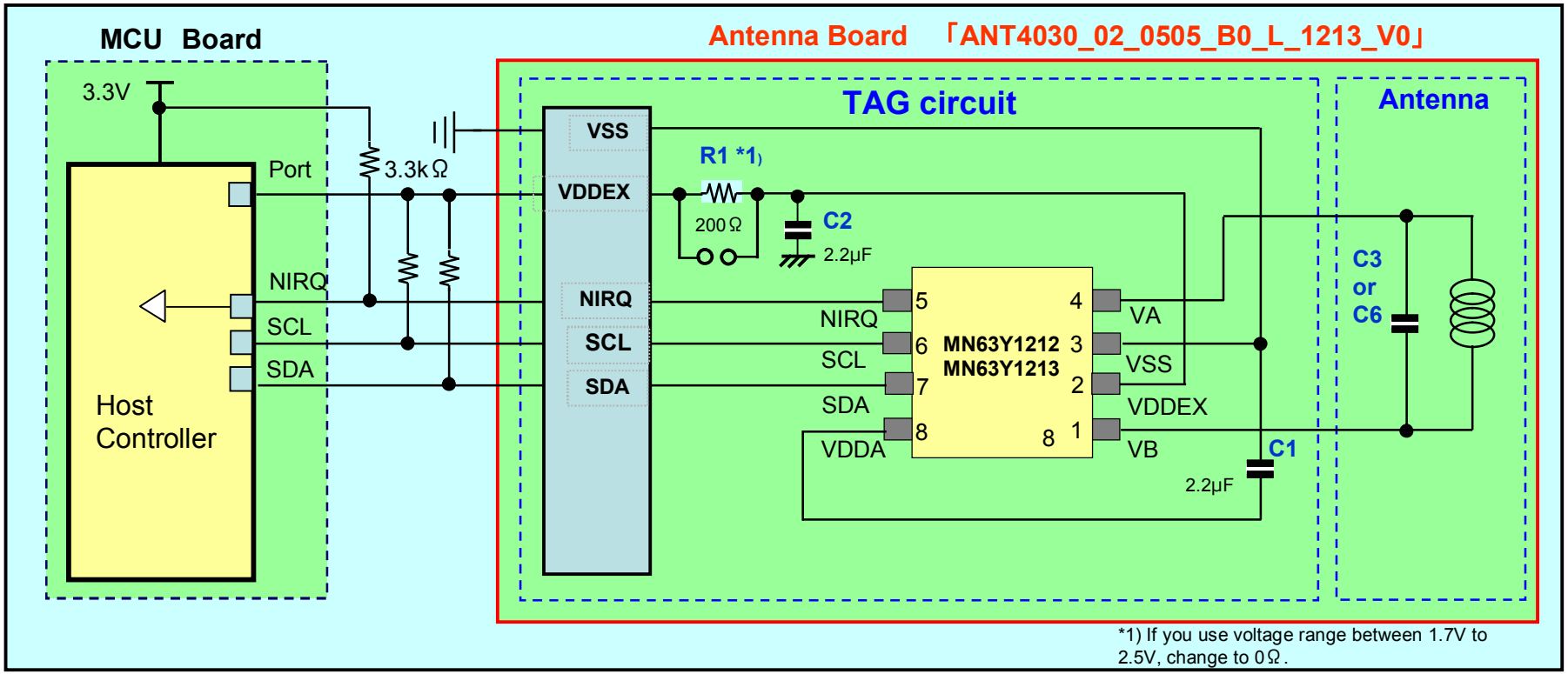
External parts	Recommended Value	Detail explanation
R2,R3	3.3kΩ	These are pull up resistor for I2C signal lines. Please choose the value considering data speed, parasitic capacitance of signal lines, and current drive performance. In our NFC tag board "ANT4030_02_0505_B0_L ," it is not implemented.
R4	3.3kΩ	This is pull up resistor for interrupt signal lines. Please choose the value considering data speed, parasitic capacitance of signal lines, and current drive performance. In our NFC tag board "ANT4030_02_0505_B0_L ," it is not implemented.
C1、C2	2.2μF	It is a fixed value at the capacity between the power supply for operation stabilization of the tag LSI. C2 is connected to VDDD, and C3 is connected to VDDA and C4 is connected to VDDEX.
R1	200Ω	Please set 200 ohm when use VDEEX between 2.5 to 3.6 V (Default value) Please set 0 ohm when use VDEEX between 1.7V to 2.5V (Short JP1)

Connection with host micon

Sep.5th,2013

NFC tag system constitution

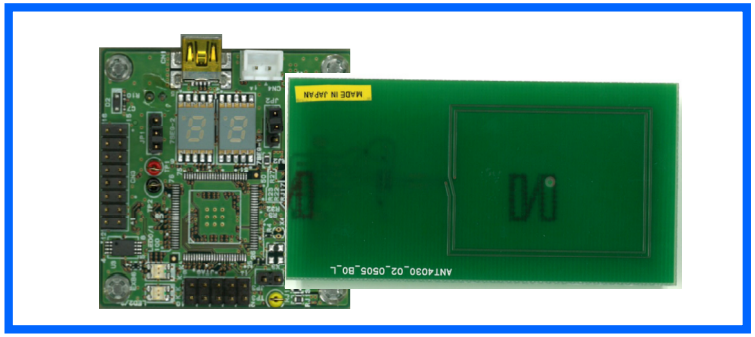




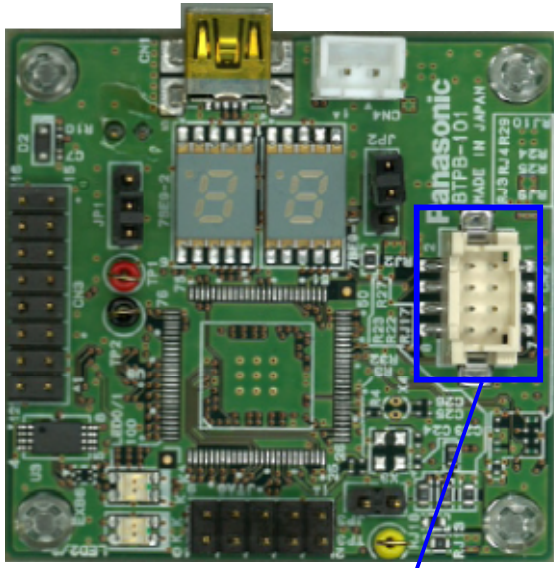
Connecter specification(1)

Sep.5th,2013

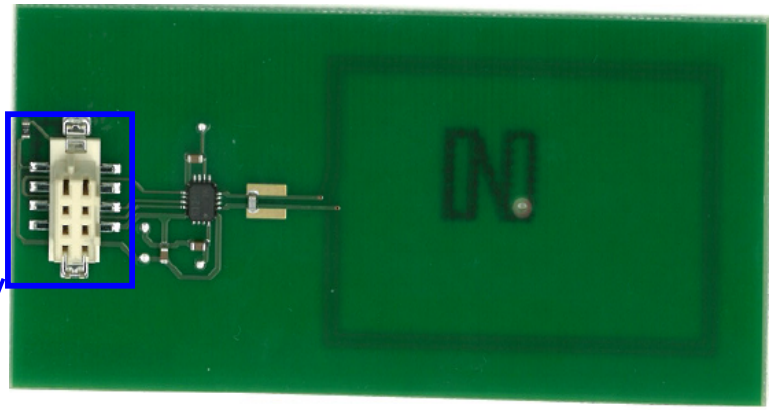
Connection image （Top view ）



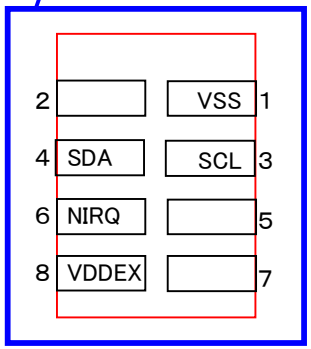
Micon board [BTPB101-B]

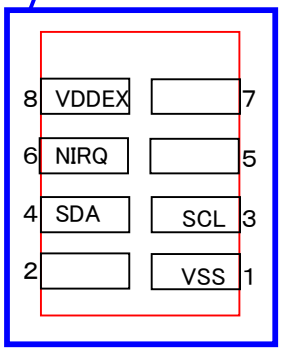


Antenna board [ANT4030_02_0505_B0_L_1213_V0]



DF11CZ-8DP-2V(27)
(Hirose Electric)



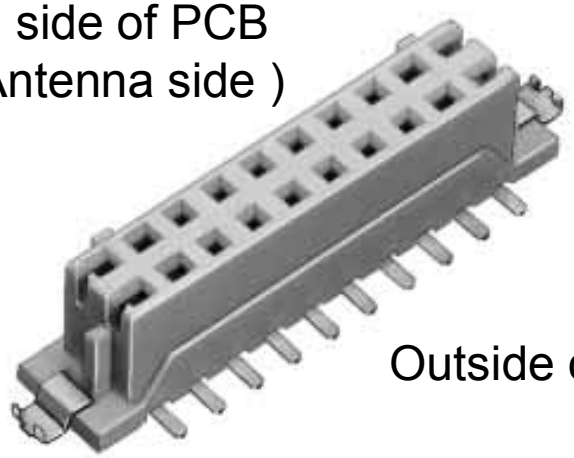


HRS DF11CZ- 8DS-2V
(Hirose Electric)

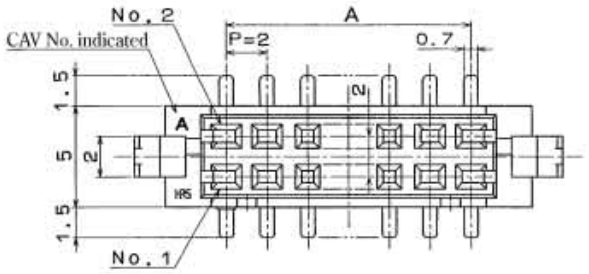
Connecter specification(2)

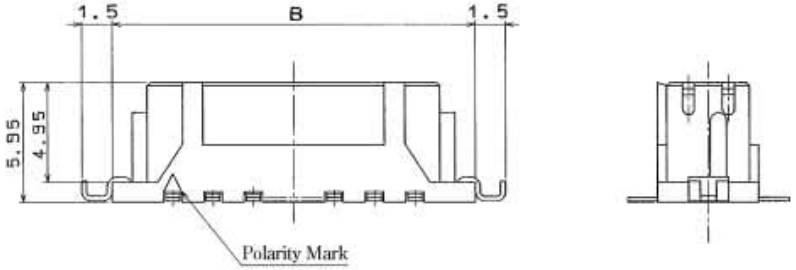
Sep.5th,2013

In side of PCB
(Antenna side)



Outside of PCB





Request for your special attention and precautions in using the technical information and semiconductors described in this book

(1) If any of the products or technical information described in this book is to be exported or provided to non-residents, the laws and regulations of the exporting country, especially, those with regard to security export control, must be observed.

(2) The technical information described in this book is intended only to show the main characteristics and application circuit examples of the products. No license is granted in and to any intellectual property right or other right owned by Panasonic Corporation or any other company. Therefore, no responsibility is assumed by our company as to the infringement upon any such right owned by any other company which may arise as a result of the use of technical information described in this book.

(3) The products described in this book are intended to be used for general applications (such as office equipment, communications equipment, measuring instruments and household appliances), or for specific applications as expressly stated in this book.
Consult our sales staff in advance for information on the following applications:
- Special applications (such as for airplanes, aerospace, automotive equipment, traffic signaling equipment, combustion equipment, life support systems and safety devices) in which exceptional quality and reliability are required, or if the failure or malfunction of the products may directly jeopardize life or harm the human body.

It is to be understood that our company shall not be held responsible for any damage incurred as a result of or in connection with your using the products described in this book for any special application, unless our company agrees to your using the products in this book for any special application.

(4) The products and product specifications described in this book are subject to change without notice for modification and/or improvement. At the final stage of your design, purchasing, or use of the products, therefore, ask for the most up-to-date Product Standards in advance to make sure that the latest specifications satisfy your requirements.

(5) When designing your equipment, comply with the range of absolute maximum rating and the guaranteed operating conditions (operating power supply voltage and operating environment etc.). Especially, please be careful not to exceed the range of absolute maximum rating on the transient state, such as power-on, power-off and mode-switching. Otherwise, we will not be liable for any defect which may arise later in your equipment.
Even when the products are used within the guaranteed values, take into the consideration of incidence of break down and failure mode, possible to occur to semiconductor products. Measures on the systems such as redundant design, arresting the spread of fire or preventing glitch are recommended in order to prevent physical injury, fire, social damages, for example, by using the products.

(6) Comply with the instructions for use in order to prevent breakdown and characteristics change due to external factors (ESD, EOS, thermal stress and mechanical stress) at the time of handling, mounting or at customer's process. When using products for which damp-proof packing is required, satisfy the conditions, such as shelf life and the elapsed time since first opening the packages.

(7) This book may be not reprinted or reproduced whether wholly or partially, without the prior written permission of our company.

20100202

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Panasonic:

NFC-TAG-MN63Y1213-2020 NFC-TAG-MN63Y1213-4030

Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001
Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:
moschip.ru
moschip.ru_4
moschip.ru_6
moschip.ru_9