#### Notification about the transfer of the semiconductor business

The semiconductor business of Panasonic Corporation was transferred on September 1, 2020 to Nuvoton Technology Corporation (hereinafter referred to as "Nuvoton"). Accordingly, Panasonic Semiconductor Solutions Co., Ltd. became under the umbrella of the Nuvoton Group, with the new name of Nuvoton Technology Corporation Japan (hereinafter referred to as "NTCJ").

In accordance with this transfer, semiconductor products will be handled as NTCJ-made products after September 1, 2020. However, such products will be continuously sold through Panasonic Corporation.

Publisher of this Document is NTCJ.

If you would find description "Panasonic" or "Panasonic semiconductor solutions", please replace it with NTCJ.

Except below description page
 "Request for your special attention and precautions in using the technical information and semiconductors described in this book"

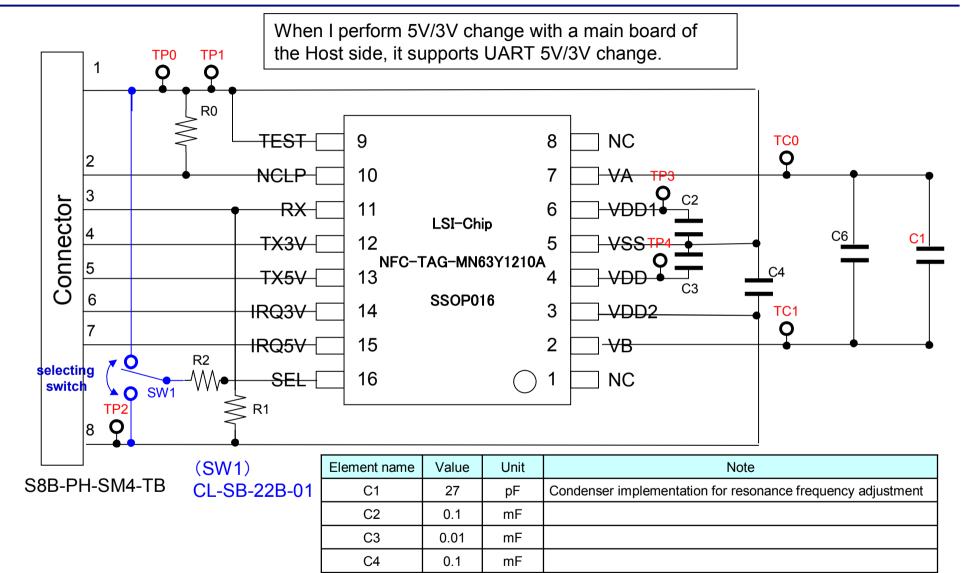
Nuvoton Technology Corporation Japan

# Evaluation board circuit diagram and implementation < MN63Y1210A >

Ver 1.1

2013/10/21

Automotive & Industrial Systems Company Panasonic Corporation



рF

 $k\Omega$ 

Ω

Condenser implementation for resonance frequency adjustment

It is for reference board alone evaluations

330

100

0

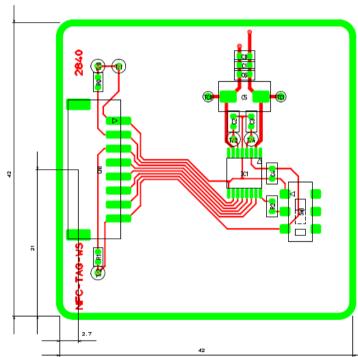
C6

R0, R1

R2

## Pattern drawing and part list of Evaluation board

### Pattern drawing



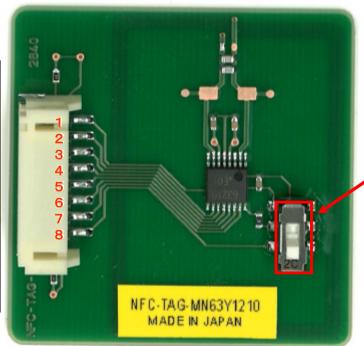
#### Parts list

	No	Part Number	Manufacturer	Parameter	Tolerance	Rated V/ W	LxW [mm]
	IC1	NFC-TAG-MN63Y1210A	Panasonic	_	_	4.6V	6.4×5
	CN1	S8B-PH-SM4-TB	JST	_	_	100V	19.9x8.6
	TP0	Unconnected Pin	_	_	_	_	_
	TP1	Unconnected Pin	-	_	-	_	_
	TP2	Unconnected Pin	_	_	_	_	_
	TP3	Unconnected Pin	_	_	_	-	_
	TP4	Unconnected Pin	_	_	_	-	_
	R0	RK73B1JTTD104J	KOA	100kΩ	±5%	0.1W	1.6x0.8
	R1	RK73B1JTTD104J	KOA	100kΩ	±5%	0.1W	1.6x0.8
R	UART	RK73Z1JTTD	KOA	0∼50mΩ	_	0.1W	1.6x0.8
2	CLK synchronous	Unconnected Pin	_	_	_	_	_
R	UART	Unconnected Pin	_	_	_	_	-
3	CLK synchronous	RK73Z1JTTD	KOA	0~50mΩ	_	0.1W	1.6x0.8
	C0	_	_	-	-	_	-
	C1	_	_	_	_	-	-
	C2	GRM188R71E104KA01D	Murata	0.1 μ F	±10%	25V	1.6×0.8
	C3	GRM188R71H103KA01D	Murata	0.01 μ F	±10%	25V	1.6×0.8
	C4	GRM188R71E104KA01D	Murata	0.1 μ F	±10%	25V	1.6×0.8
	C6	GRM1885C1H331JA01D	Murata	330pF	±5%	50V	1.6x0.8

The change with the expression, please reach with a switch in UART and the CLK same period.

After having changed it, please carry out an initialization of the smartphone side.

minal me SS		
SS		
VSS		
NCLP		
RX		
TX3V TX5V		
Q5V		
VDD2		
֡֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜		



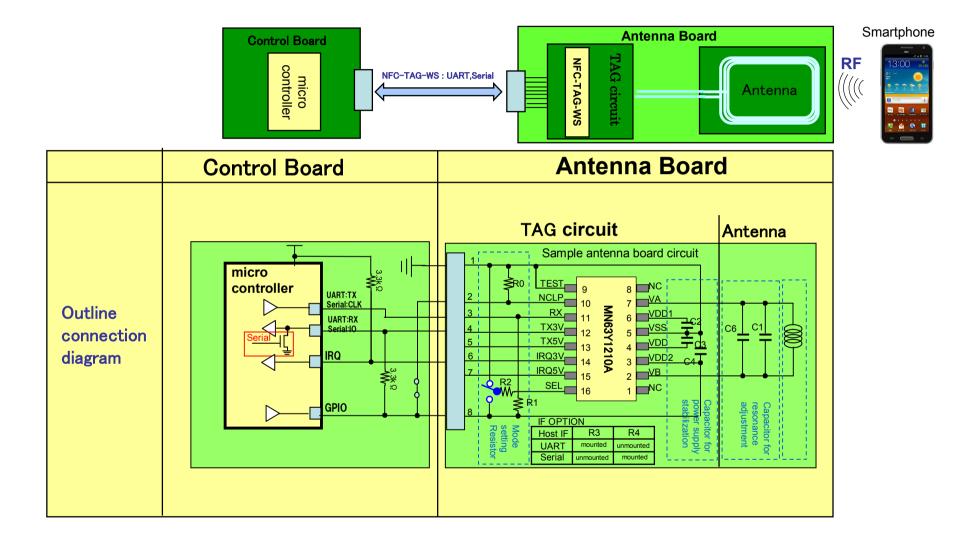
#### selector switch

Upper: UART

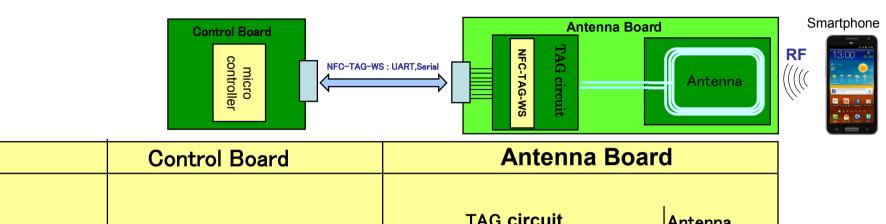
Under : CLK synchronization type

(Default)

## Connection example with MCU board for 3.3V



## Connection example with MCU board for 5V

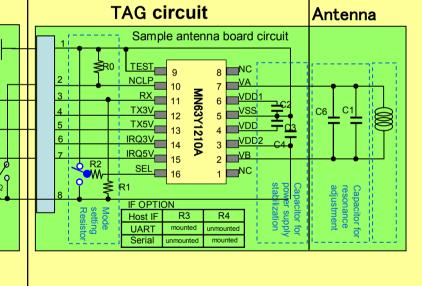


Outline connection diagram micro

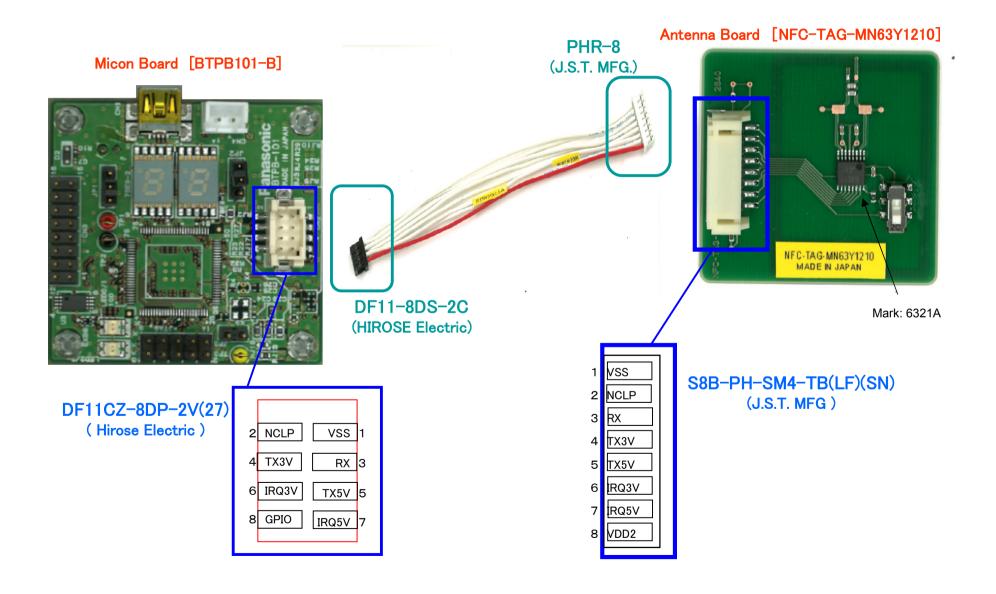
controller

UART:TX Serial:CLK

UART:RX



## Connector specifications



## 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, Nuvoton Technology Corporation Japan 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 de-scribed 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.
  - Please consult with our sales staff in advance for information on the following applications, moreover please exchange documents separately on terms of use etc.: Special applications (such as for in-vehicle equipment, airplanes, aerospace, automotive equipment, traffic signaling equipment, combustion equipment, medical equipment 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.
  - Unless exchanging documents on terms of use etc. in advance, 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.
- (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 upto-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. We do not guarantee quality for disassembled products or the product re-mounted after removing from the mounting board. 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) When reselling products described in this book to other companies without our permission and receiving any claim of request from the resale destination, please understand that customers will bear the burden.
- (8) This book may be not reprinted or reproduced whether wholly or partially, without the prior written permission of our company.

No.070920

#### 单击下面可查看定价,库存,交付和生命周期等信息

>>Panasonic(松下)