

**Quick Start Guide** 

## **OM2NTA5KIT**

Exploring the exclusive features of NTAG 5 switch, NTAG 5 link and NTAG 5 boost



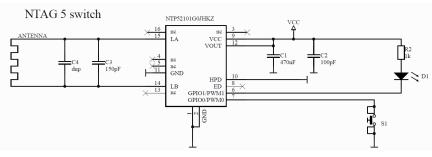
### GET TO KNOW THE NTAG 5 switch board



Front side of NTAG 5 switch demo board

### **Quick Start Guide**

## NTAG 5 switch board schematics

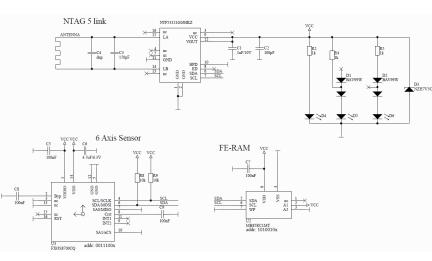


### GET TO KNOW THE NTAG 5 link board

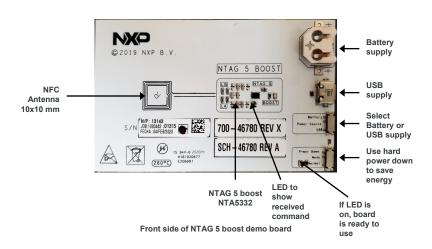


Front side of NTAG 5 link demo board

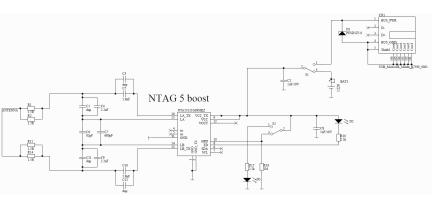
## NTAG 5 link board schematics



## GET TO KNOW THE NTAG 5 boost board



## NTAG 5 boost board schematics



NTAG 5 card info Status activated UID: 0x2DA09D00580104E0 Manufacturer: NXP Semiconductors (DE) Show card info Scan a tag and find out it's UID and manufacturer. Card

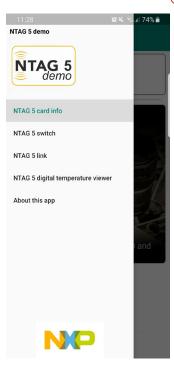
When no

board is

status switches to "polling"

connected,

NTAG 5 show card tab



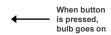
Use side

menu to navigate

NTAG 5 demo navigation

8



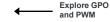




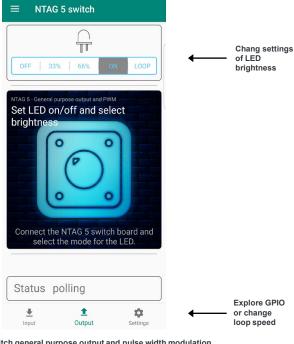
When board is connected, status switches to "activated"

Status polling

Light Light Settings



NTAG 5 switch general purpose input



09:25

When

status

switches to

"activated"

board is connected.

NTAG 5 switch general purpose output and pulse width modulation



Configure how fast brightness changes

Explore GPIO

and PWM
features

NTAG 5 switch settings



X and Y

When

status

switches to

"activated"

board is connected,

orientation of 6 axis sensor



**Explore memory** 

configure output

extension or

voltage

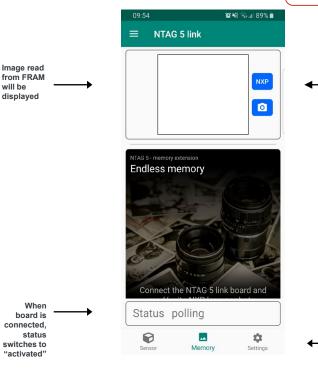
Write NXP

photo from

camera to

logo or

FRAM



NTAG 5 link extend user memory

Explore

configure

sensor tag or

output voltage



Change output voltage. You need to reconnect the board afterwards to make settings



Explore sensor tag or memory extension

When board is connected, status switches to "activated"

Image read

from FRAM

displayed

will be



NTAG 5 link set output voltage

#### **Quick Start Guide**

# NTAG 5 switch FEATURES

- ISO/IEC 15693 compliant
- NFC Forum Type 5 Tag compliant
- General Purpose Input and Output (GPIO)
- · Pulse Width Modulation (PWM)
- · Regulated Energy Harvesting
- 512 byte user memory
- Up to three configurable memory areas
- · 32 or 64-bit password protection
- ECC based reprogrammable originality signature

## On top NTAG 5 link FEATURES

- I<sup>2</sup>C master and slave up to 400 kHz
- 2048 byte user memory
- · 256 byte SRAM
- · AES mutual authentication

## On top NTAG 5 boost FEATURE

· Active Load Modulation

## STEP-BY-STEP INSTRUCTIONS

## Install App



Install NTAG 5 demo app from Google Play Store or Apple App Store

# 2 Switch on NFC on mobile phone

In the settings menu of your NFC enabled mobile phone

### STEP-BY-STEP INSTRUCTIONS (cont.)

# 3 Explore NTAG 5 switch demo board

Make sure status is "activated" Press button on board to explore GPIO functionality

Select ON/PWM/OFF to explore GPIO and PWM functionality

Change brightness of LED in a loop

# 4 Explore NTAG 5 link demo board

Make sure status is "activated"

Move board with phone to see X/Y orientation

Write/read photo to/from the FRAM NOTE: FRAM is not initialized. Writing the NXP logo or a photo to the FRAM should be the first step

Change Energy harvesting voltage

# **5** Explore read range of boards

Status changes from "polling" to "activated" as soon board is detected

# 6 Curios? Order our Development board

On NTAG 5 customer development board web page you will find all documentation, source files and the boards itself

#### **SUPPORT**

Visit www.nxp.com/support for a list of phonenumbers within your region.

### WARRANTY

Visit **www.nxp.com/warranty** for complete warranty information.



Download installation software and documentation

"Jump Start Your Design" at nxp.com/demoboard/OM2NTx5332

#### www.nxp.com

NXP and the NXP logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. © 2016 NXP B.V.

## **Mouser Electronics**

**Authorized Distributor** 

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

NXP:

OM2NTA5KIT