Introduction

NBK-100 Dongle KIT is a product to evaluate characteristic of Bridge-N Module and System (TNB131M).

It can read and write NFC data for user and check data written through PC. It can be applied to another system with reference of Bridge-N as well as help user to understand NFC Bridge System by providing SDK.

[NBK-100 Dongle KIT Component]
- NBK-100 Dongle Board 1 EA
  : Main Board – SDK
- TNB131M IC 5 EA
- NBK-100EH Board 1 EA
  : Energy Harvesting Application Board
- NBK-100DL Board 1 EA
  : Data logger Application Board
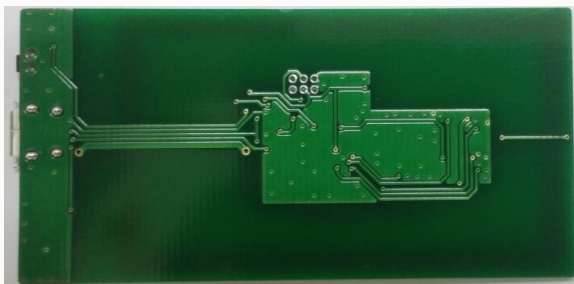   (with Temperature sensor)

Exterior

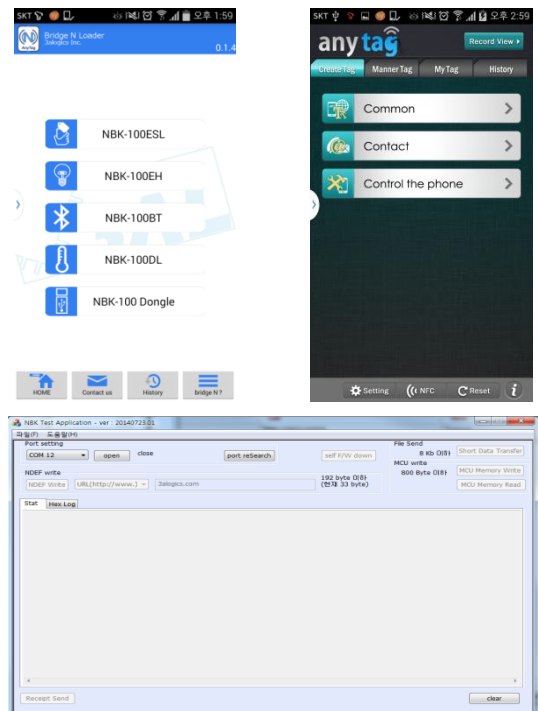Appearance of NBK-100 Dongle is as follows;
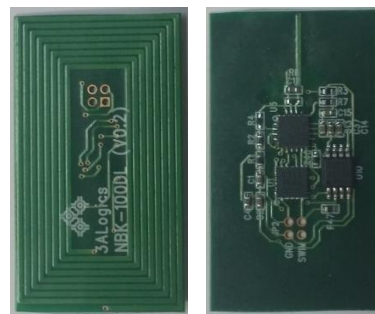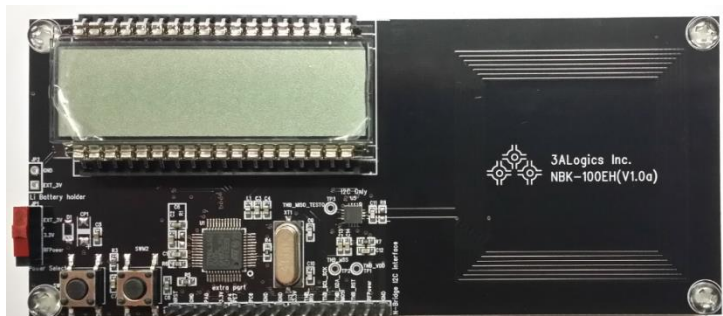
TOP

Bottom

Feature (NBK-100 Dongle)

Frequency	13.56MHz
Protocol	ISO/IEC 18092 (JIS 6319-4)
Operating Temp.	-40 ~ 85°C
Power	1.65 ~ 3.6V
Host interface	USB 2.0 full speed interface *Virtual COM (Serial communication)
Host interface Protocol	N-Bridge Command / Protocol (proprietary)
Board	PCB - FR4, 1.0T 32mm X 65mm X 4mm
Antenna Size	5 turn, 30mm X 52.5mm L = 2.9μH
NFC mode	Type 3 tag emulation *NFCIP-1 passive target
Modulation	Load modulation
Data rate	212 / 424kbps (Selective data rate)
Microcontroller	STM32F103C8 (ARM-based 32bit MCU)
Memory	Type	Flash/RAM
	Size	64Kbyte/20Kbyte

Program (App/Software)

Application Board/KIT

NBK-100EH : Energy Harvesting Application

NBK-100DL : Data Logger Application (Temp. sensor)

Document Control

Revision History

Date	Version	CR	HW version	Description
2014.08.08	1.0	01	1.0	1.0 version

Technical Support

- Protocol information
  - Datasheet TNB131M
  - User Manual NBK100dongle_FW_WinLib
  - User Manual N-Bridge IC
  - User Manual NBK-100 Dongle
- Firmware code design (Case by Case)
  - Support Firmware example source code
- Android Application design (Case by Case)
  * Demonstration Android Application
    - AnyRead NFC Tag Writer   – TNB131M N-Bridge loader
- Customization Business
  - H/W, F/W & S/W, Android App. Modification & Development

Legal Disclaimer

Contact

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