

# TempChaser

## NFC (Smartphone), Cold Chain

### 1. Product description

TempChaser is the most reasonable solution to track temperature during transfers of the product. TempChaser can be applied to versatile industries, including temperature-sensitive electronic materials, pharmaceuticals and cosmetics, and fresh food etc..

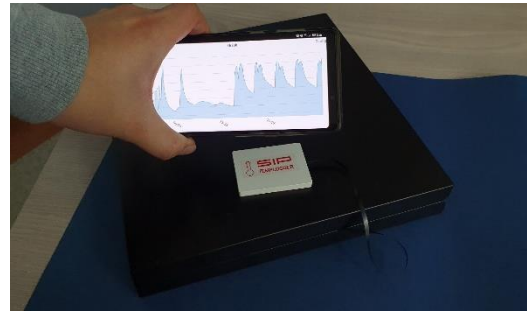
### 2. Benefits

Reasonable price to use wide industries  
Reliable temperature data  
Sensor parts are placed in the temperature measurement position and antenna parts are placed in the atmosphere to check the real-time temperature.



### 3. Processing

TempChaser can be used in a temperature range of -40 to 85 °C with  $\pm 0.3$  accuracy for 0~40 °C and  $\pm 0.5$  for -40~85 °C.  
Easy to program with NFC tagging on smartphone, data check, and share data to others.  
Easy to download application from app market;



<https://play.google.com/store/apps/details?id=com.nxp.nhs31xx.demo.tlogger>

### 4. Power and Memory

3.0 V external voltages using coin cell CR-1225 battery.  
Templogger has  
32 kB on-chip flash programming memory,  
4 kB on-chip EEPROM of which 256 byte can be write protected,  
8 kB SRAM  
(Size of a temperature data=1 Byte, it means ca. 4,000 temperature data can be stored on memory IC.

### 5. Communication interfaces

NFC/RFID ISO 14443 Type A (13.56MHz)  
I<sup>2</sup>C -bus interface supporting full I<sup>2</sup>C-bus specification and fast mode with a data rate of 400 kbit/s, with multiple address recognition and monitor mode. (Sensor can be extended to humidity, illumination, and UV etc.. in parallel).

### 6. Clock generation

8MHz internal RF oscillator, trimmed to 2% accuracy.  
Timer oscillator operating at 32 kHz linked to the RTC timer unit.

### 7. Contact

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