

# Release Note NCI Unified Proximity driver

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## Document information

Info	Release Note
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Author Role	Developer

NXP

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**Revision History**

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Revision	Date	Description	Author
V10.0.1.0	2015/10/30	Unified Proximity Driver 1 <sup>st</sup> Production Release	Hariom Kesh

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## 1. Document purpose

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This document is the release note of NCI Unified Proximity driver. This document will describe content of the delivery and how to use installer.

## 2. Installation instructions

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If the driver is provided as a silent installer, simply launch the setup.exe and the driver installation process should start. If the installer is not silent, a GUI should appear and let user proceed the installation. The installer can take several command line parameters:

**/S** : The installer will be silent if it's a non silent installer.

The installer may support additional switches, please have look in the related chapter in this document.

## 3. Material list

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This package contains the following files:

- **NXP\_ProximityDriver\_Release\_note.pdf** : this document
- **setup.exe** : installer for Unified Proximity Driver.
- **driver\_binaries/** : Binaries for Proximity Driver x86 & x64 for Windows10
- **pdb/** : All pdb files for Proximity Driver for Windows10

## 4. Scope

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- This package is Win10 (x64 & x86) HLK certified and targeted for Win10 OS on both HECI & SPB based platforms.

## 5. Binaries details

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- Proximity driver binaries are built with WDK 10.
- Proximity Driver Version : 10.0.1.0
- Firmware version
  - NPC 100 : 8.2.3
  - NPC 300 : 10.1.11
- PCSC Driver : 1.0.4.40
- GPIO Driver : 1.0.3.0

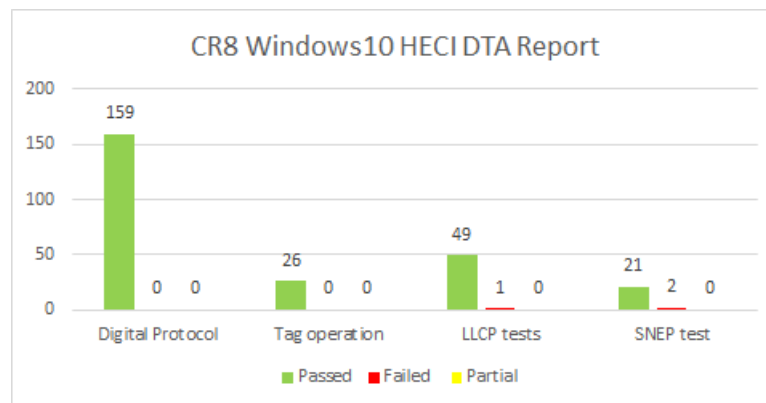
## 6. Test Information

### 6.1 Proximity Functional Validation on HECI & SPB

- Platform : Intel SKL , Intel BSW
- OS : Win10 EEAP build : 10240
- NFC module : NPC100/NPC300

### 6.2 DTA CR8 NFC Forum compliance

- Platform : Intel SKL
- OS : Win10 EEAP build : 10240
- NFC module : NPC300
- Lower Tester used : KEYSIGHT (AT4)
- TCCL version : 2.10
- Test Summary ( 1 tool failure, 2 driver failure)



## 7. Known issues and restrictions

- Cannot test secure key on HECI .

## 8. PR/CR/IR Details

- PR/CR/IR Solved in this release
  - [NCIS103] [Modified] FW values change for analog test on Skylake SDS
  - [NCIS94] Proximity driver Yellow Bangs on Skylake SDS
  - [SC54077] NPC3xx New HWIDs support in Proximity driver
  - [SC49472] PCSC driver installation fail on virgin Win7 machine
  - [SC53158] Certification error with Type 4B HID card
  - [SC54116] Abnormal behavior of NFC radio manager on turn on/off special sequence of NFC/Airplane button

## 9. Appendix

### 9.1 Installer's switches

The driver installer support the following switches:

```
setup.exe [/SD] [/LOG=path] [/X=path] /RFOFF /WIZARD /ACCEPTLICENSE
```

Note : A valid path is an absolute path with the following format :

- PATH\_WITH\_NO\_SPACES
- "PATH\_WITH\_NO\_SPACES"
- "PATH WITH SPACES"

#### Options :

**/SD** : Completely silent mode.

This option disables all the message boxes, no notification will appear, even on error.

**/LOG** : Log file.

By default, a log file named "install\_log.txt" is created in the installation directory.

If this option is used, the log file name used is the complete path. The log file contains the following information :

- The time when the application has been launched
- The state of the silent mode (ON or OFF)
- The confirmation of extraction of the driver in the path precise, if /X option has been used
- If an error occurs, a description of this error
- The final status of the installation, and the time when the application stopped.

**/X** : Extract driver binaries to specified path without installing anything else.

**/DX** : Extract driver following MUP specification.

**/RFOFF** : The radio does not polling after installing the driver.

**/WIZARD** : Enable Installer WIZARD for silent installer. /SD override this switch.

**/S** : Enable silent mode. Popup are still displayed if an error occurs.

**/ACCEPTLICENSE** : When using /S or /SD, this switch silently accept license.

**/CONFIGXTAL** : Force FW clock configuration to XTAL.

**/PCSC** : Installs PCSC driver along with Proximity

**/ANTCONFIG** : Applies required antenna configuration needed to pass analog test on SKL SDS(ONLY for NPC100)

### 9.2 Radio and Power status.

This table indicates the Radio status, Power status (Ven) and libnfc status depending on platform state.

Transition	Ven status	Radio status	LibNfc status
Boot	Toggled OFF/ON	Polling ON	initialized
SX/CS/BOOT => S0	Toggled OFF/ON	Polling ON	initialized
S0 => S1 (Screen Off)	Ven OFF	Polling OFF	deinitialized
S0 => S3	Ven OFF	Polling OFF	deinitialized
S0 => S4	Ven OFF	Polling OFF	deinitialized
S0 => S5	Ven OFF	Polling OFF	deinitialized
S0 => CS	Ven OFF	Polling OFF	deinitialized
Driver enabled	Toggled OFF/ON	Polling ON	initialized
Driver disabled	Ven OFF	Polling OFF	deinitialized
Air plane mode ON / NFC Off	Ven OFF	Polling OFF	deinitialized
Air plane mode OFF / NFC On	Toggled OFF/ON	Polling ON	initialized