PRODUCT CHANGE NOTIFICATION
THE PCN AFFECTS THE PRODUCT SERIES LISTED BELOW:

TWN4 MULTITECH NANO M SERIES, TWN4 MULTITECH NANO LEGIC 42 M SERIES
TWN4 MULTITECH NANO LEGIC 63 M SERIES
TWN4 MULTITECH HF MINI READER SERIES
TWN4 MULTITECH 2 (M) SERIES AND TWN4 MULTITECH 2 LEGIC (M) SERIES
TWN4 MULTITECH 3 M SERIES AND TWN4 MULTITECH 3 LEGIC M SERIES
TWN4 USB FRONT READER SERIES AND TWN4 USB FRONT READER LEGIC SERIES
TWN4 PALON COMPACT SERIES AND TWN4 PALON COMPACT LEGIC SERIES
TWN4 PALON COMPACT PANEL SERIES AND
TWN4 PALON COMPACT LEGIC PANEL SERIES
TWN4 PALON COMPACT WALL SERIES AND
TWN4 PALON COMPACT LEGIC WALL SERIES
TWN4 PALON SQUARE M LF HF SERIES

ELATEC
RFID Systems

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1 INTRODUCTION

1.1 REASON FOR CHANGE

Due to the discontinuation of HID's iCLASS® SE Processor and the implementation of HID's next generation secure element, (OMNIKEY® SECURE ELEMENT) in selected ELATEC product series, ELATEC is forced to update the bootloader and firmware of most of the product series.

By implementing the latest hardware components as well as the newest firmware in ELATEC RFID products. ELATEC can offer its customers and partners, products that provide the latest technological advances.

A more detailed description of the affected products and associated variants is explained on the following pages.

1.2 REVISION HISTORY

VERSION	CHANGE DESCRIPTION	EDITION
01	First Edition	06/2023

2 CHANGE DESCRIPTION

This change affects the delivery of new products, already delivered products do not need to be updated.

The integration of the latest hardware components as described in chapter 1.1. causes an bootloader and firmware update for all mentioned products. The new bootloader 1.64 and firmware 4.64 include all features of the previous bootloader and firmware versions.

The reason for the product change is that ELATEC RFID readers/writers, need a new bootloader and firmware in order to support HID's transponder technologies in the future. The bootloader and firmware update affects all specified products. For RFID reader/writer with activated -I or -PI option there will be an additional hardware change.

The version of the bootloader and the version of the firmware are visible on the label of the product, i.e., B/**B1.64**/NCF**4.64**/xxx

3 PARTS AND PRODUCTS AFFECTED

3.1 TWN4 MULTITECH NANO M SERIES, TWN4 MULTITECH NANO LEGIC 42 M SERIES AND TWN4 MULTITECH NANO LEGIC 63 M SERIES

The Product Change Notification (PCN) comprises the entire series of TWN4 MultiTech Nano M, TWN4 MultiTech Nano LEGIC 42 M and TWN4 MultiTech Nano LEGIC 63 M products. Both, OEM PCBs (i.e., modules) and the desktop housing versions. All product variants are affected, including all LEGIC frontends as well as coated or uncoated PCB-variations and customer-specific derivates.

The PCN also includes all variants, that differ among others by different pin assignment, cable lengths, cable connectors, firmware options, colors etc. The common product names are TWN4 MultiTech Nano M, TWN4 MultiTech Nano LEGIC 42 M and TWN4 MultiTech Nano LEGIC 63 M with optional amendments to those names.

PART NUMBER	OLD BOOTLOADER VERSION	NEW BOOTLOADER VERSION	OLD FIRMWARE VERSION	NEW FIRMWARE VERSION
T4NM-FDCX-YYY	1.50	1.64	4.07	4.64
T4NM-B5XX-YYY	1.08	1.64	3.06	4.64
T4NM-D5XX-YYY	1.08	1.64	4.05	4.64

XXX = stands for interface indications, firmware customizations, housing colors or inlays
YYY = stands for firmware options, customizations

For some product variants, the old bootloader and the old firmware version may differ from the indication above. However, also in this case the bootloader and the firmware will be updated to the newest version specified above.

3.2 TWN4 MULTITECH HF MINI READER SERIES

The Product Change Notification (PCN) comprises the entire series of TWN4 MultiTech HF Mini reader products. Both, OEM PCBs (i.e., modules) and the desktop housing versions. All product variants are affected, including all coated or uncoated PCB-variations and customer-specific derivates.

The PCN also includes all variants, that differ among others by different pin assignment, cable lengths, cable connectors, firmware options, colors etc. The common product names are TWN4 MultiTech HF Mini reader and TWN4 Mini Reader MIFARE NFC with optional amendments to those names.

PART NUMBER	OLD BOOTLOADER VERSION	NEW BOOTLOADER VERSION	OLD FIRMWARE VERSION	NEW FIRMWARE VERSION
T4MR-FXXX-YYY	1.50	1.64	4.07	4.64

XXX = stands for interface indications, firmware customizations, housing colors or inlays
YYY = stands for firmware options, customizations

For some product variants, the old bootloader and the old firmware version may differ from the indication above. However, also in this case the bootloader and the firmware will be updated to the newest version specified above.

3.3   TWN4 MULTITECH 2 (M) SERIES AND TWN4 MULTITECH 2 LEGIC (M) SERIES

The Product Change Notification (PCN) comprises the entire series of TWN4 MultiTech 2 series and TWN4 MultiTech 2 LEGIC series products. Both, OEM PCBs (i.e., modules) and the desktop housing versions. All product variants are affected, including all LEGIC frontends, all coated or uncoated PCB-variations and customer-specific derivates.

The PCN also includes all variants, that differ among others by different pin assignment, cable lengths, cable connectors, firmware options, colors etc. The common product names are TWN4 MultiTech 2 (M) and TWN4 MultiTech 2 LEGIC (M) with optional amendments to those names.

PART NUMBER	OLD BOOTLOADER VERSION	NEW BOOTLOADER VERSION	OLD FIRMWARE VERSION	NEW FIRMWARE VERSION
T4BO-F2XX-YYY	1.08	1.64	3.08	4.64
T4BO-F6XX-YYY	1.50	1.64	4.07	4.64
T4BO-F7XX-YYY	1.08	1.64	2.02	4.64
T4BT-FXXX-YYY	1.50	1.64	4.07	4.64
HPK4-FXXX-YYY	1.50	1.64	4.07	4.64
T4OK-FXXX-YYY	1.50	1.64	4.07	4.64
T4BO-B6XX-YYY	1.50	1.64	4.50	4.64
T4BO-B7XX-YYY	1.62	1.64	4.61	4.64
T4BT-BXXX-YYY	1.50	1.64	4.50	4.64
T4BT-BXXX-5YY	1.50	1.64	4.50	4.64

XXX = stands for interface indications, firmware customizations, housing colors, inlays etc.
YYY = stands for firmware options, customizations etc.

For some product variants, the old bootloader and the old firmware version may differ from the indication above. However, also in this case the bootloader and the firmware will be updated to the newest version specified above.

3.4 TWN4 MULTITECH 3 M SERIES AND TWN4 MULTITECH 3 LEGIC M SERIES

The Product Change Notification (PCN) comprises the entire series of TWN4 MultiTech 3 M series and TWN4 MultiTech 3 LEGIC M series products. Both, OEM PCBs (i.e., modules) and the desktop housing versions. All product variants are affected, including all LEGIC frontends, all coated or uncoated PCB-variations and customer-specific derivates.

The PCN also includes all variants, that differ among others by different pin assignment, cable lengths, cable connectors, firmware options, colors etc. The common product names are TWN4 MultiTech 3 M and TWN4 MultiTech 3 LEGIC M with optional amendments to those names.

PART NUMBER	OLD BOOTLOADER VERSION	NEW BOOTLOADER VERSION	OLD FIRMWARE VERSION	NEW FIRMWARE VERSION
T43O-F6XX-YYY	1.09	1.64	3.10	4.64
T43O-F7XX-YYY	1.09	1.64	3.12	4.64
T43O-B6XX-YYY	1.09	1.64	3.22	4.64
T43O-B7XX-YYY	1.09	1.64	3.22	4.64

XXX = stands for interface indications, firmware customizations, housing colors, inlays etc.
YYY = stands for firmware options, customizations etc.

For some product variants, the old bootloader and the old firmware version may differ from the indication above. However, also in this case the bootloader and the firmware will be updated to the newest version specified above.

3.5 TWN4 USB FRONT READER SERIES AND TWN4 USB FRONT READER LEGIC SERIES

The Product Change Notification (PCN) comprises the entire series of TWN4 USB Front Reader and TWN4 USB Front Reader LEGIC series products. Both, OEM PCBs (i.e., modules) and the desktop housing versions. All product variants are affected, including all LEGIC frontends, all coated or uncoated PCB-variations and customer-specific derivates.

The PCN also includes all variants, that differ among others by different pin assignment, cable lengths, cable connectors, firmware options, colors etc. The common product names are TWN4 MultiTech 3 M and TWN4 MultiTech 3 LEGIC M with optional amendments to those names.

PART NUMBER	OLD BOOTLOADER VERSION	NEW BOOTLOADER VERSION	OLD FIRMWARE VERSION	NEW FIRMWARE VERSION
T43O-F6XX-YYY	1.09	1.64	3.10	4.64
T43O-F7XX-YYY	1.09	1.64	3.12	4.64
T43O-B6XX-YYY	1.09	1.64	3.22	4.64
T43O-B7XX-YYY	1.09	1.64	3.22	4.64

XXX = stands for interface indications, firmware customizations, housing colors, inlays etc.
YYY = stands for firmware options, customizations etc.
For some product variants, the old bootloader and the old firmware version may differ from the indication above. However, also in this case the bootloader and the firmware will be updated to the newest version specified above.

3.6 TWN4 PALON COMPACT M SERIES, TWN4 PALON COMPACT LEGIC SERIES
TWN4 PALON COMPACT PANEL SERIES, TWN4 PALON COMPACT LEGIC PANEL SERIES
TWN4 PALON COMPACT WALL SERIES AND TWN4 PALON COMPACT LEGIC WALL SERIES

The Product Change Notification (PCN) comprises the entire series of TWN4 Palon Compact M and TWN4 Palon Compact LEGIC M series products. The TWN4 Palon Compact Panel, TWN4 Palon Compact Panel LEGIC, TWN4 Palon Compact Wall and TWN4 Palon Compact LEGIC Wall variants are further housing variations, each of which has the TWN4 Palon Compact M or TWN4 Palon Compact LEGIC M as its base.

Therefore, all variants are summarized in this chapter. Both, OEM PCBs (i.e., modules) and the desktop housing versions. All product variants are affected, including all Light versions, LEGIC frontends, all coated or uncoated PCB-variations and customer-specific derivates.

The PCN also includes all variants, that differ among others by different pin assignment, cable lengths, cable connectors, firmware options, colors etc. The common product names are TWN4 Palon Compact M and TWN4 Palon Compact LEGIC M with optional amendments to those names.

PART NUMBER	OLD BOOTLOADER VERSION	NEW BOOTLOADER VERSION	OLD FIRMWARE VERSION	NEW FIRMWARE VERSION
T4W2-FXXX-YYY	1.08	1.64	3.12	4.64
T4W2-BXXX-YYY	1.08	1.64	3.12	4.64
T4PK-FXXX-YYY	1.08	1.64	3.20	4.64
T4PK-BXXX-YYY	1.08	1.64	3.20	4.64
T4WK-FXXX-YYY	1.08	1.64	3.20	4.64
T4WK-BXXX-YYY	1.08	1.64	3.20	4.64

XXX = stands for interface indications, firmware customizations, housing colors, inlays etc.
YYY = stands for firmware options, customizations etc.

For some product variants, the old bootloader and the old firmware version may differ from the indication above. However, also in this case the bootloader and the firmware will be updated to the newest version specified above.

3.7   TWN4 PALON SQUARE M LF HF SERIES

The Product Change Notification (PCN) comprises the entire series of TWN4 Palon Square M LF HF series products. OEM PCBs (i.e., modules) all product variants are affected, including, all Light versions, coated or uncoated PCB-variations and customer-specific derivates.

The PCN also includes all variants, that differ among others by different pin assignment, cable lengths, cable connectors, firmware options, colors etc. The common product names are TWN4 Palon Square M LF HF with optional amendments to those names.

PART NUMBER	OLD BOOTLOADER VERSION	NEW BOOTLOADER VERSION	OLD FIRMWARE VERSION	NEW FIRMWARE VERSION
T4WQ-FXXX-YYY	1.21	1.64	4.01	4.64
T4W2-BXXX-YYY	1.08	1.64	3.12	4.64

XXX = stands for interface indications, firmware customizations, housing colors, inlays etc.
YYY = stands for firmware options, customizations etc.

For some product variants, the old bootloader and the old firmware version may differ from the indication above. However, also in this case the bootloader and the firmware will be updated to the newest version specified above.

3.8   CUSTOMER SPECIFIC PRODUCTS

Customers and partners have the possibility to customize generic articles according to their wishes. If this option has already been used and customized products have been purchased from ELATEC, it is possible to keep the old bootloader and firmware configuration depending on the product variant and functionality.

Modifications of customer-specific products are usually never made by ELATEC without prior consultation with the customer or partner. If customer specific products have been purchased from ELATEC, which are based on the previously described products (this can be recognized by the product names, which are available in the product documentation) ELATEC would ask customers and partners to contact us.

4 CUSTOMER IMPACT

The bootloader, firmware and product specific hardware update causes following impact for customers and partners:

- **Most important**: Customers and partners should test and release the new bootloader, firmware and hardware.

  - ELATEC will support customers with samples, if necessary.

  - Please contact ELATEC's customer service or the responsible salesman, if a sample is required:
    - Europe: Customer-service-puchheim@elatec.com
    - USA: CustomerServiceAmericas@elatec.com
    - Asia: apac-info@elatec.com

  - Please send the release of the bootloader and firmware to ELATEC's support team:
    - Europe: support-rfid@elatec.com
    - USA: Support-Americas@elatec.com
    - Asia: apac-info@elatec.com

  - The DevPack4.64 will be provided by ELATEC's support team. Please send a request, in case the DevPack is required.

- **The replacement of different radio components can influence the radio characteristics of the reader/writer. ELATEC has performed survey measurements, that confirm the conformity of the readers.**

- **Not all readers/writers have had components replaced, but all readers/writers shipped with -I or -PI functionality are affected.**

- **Customers and partners, who purchase readers/writers with housings from ELATEC, usually do not need to perform any further tests / measurements because an device certification has been obtained from ELATEC. Available certifications vary per product and country, please contact ELATEC, if you have specific certification questions about your product.**

- **Customers and partners, who purchase readers/writers without housing from ELATEC and implement the products in their devices may have to re-test their device. ELATEC has performed survey measurements, in these, no effects on the radio properties were found. However, the connected periphery can play a major role in the radio measurements and this can vary greatly per use case. ELATEC asks customers and partners to evaluate these effects for their certifications.**

5 TIMELINE

The delivery of products with the updated bootloader and firmware will start in July 2023.

However, due to the different stock levels, volatile product sales per product series and different product variants per product series, an exact date of the transition cannot be predicted.

The earliest transition will be in July 2023, which does not mean that individual product series can be converted or shipped at a later date. If customers and partners wish explicit products with specific bootloader and firmware versions, this would have to be aligned individually.

6 CONTACT

For technical inquiries or questions, please contact:

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For commercial inquiries or questions, please contact:

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