

Kontron Motherboard Labeling

- Motherboard serial number and type label
- Motherboard revision
- BIOS version and MAC adress label
- ICT and UFT test label
- Internal Labels (just for information)

Revision History

Revision	Change description	Date
V1.0	Initial version	2024-05-24
V1.1	Add new motherboard type label 28x10mm „Variant 2“	2024-12-06
V1.2	Add former Fujitsu type label, Update naming “Variant 1” and “Variant 2” to “Kontron [advanced] Motherboard label”	2025-01-24

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1 Motherboard Labeling and Revision Scheme

This section explains the standard motherboard type label used across all Kontron-designed motherboards (Kxxxx series). The label provides information about Current Model Name, Hardware Revision and Motherboard Serial Number (in 2D Data Matrix code format).

For former Fujitsu motherboard designs (Dxxxx series, excluding D3723 and D3714/24), no change to the existing 1D barcode label featuring the "GS" mark is planned.

1.1 Former Fujitsu type label

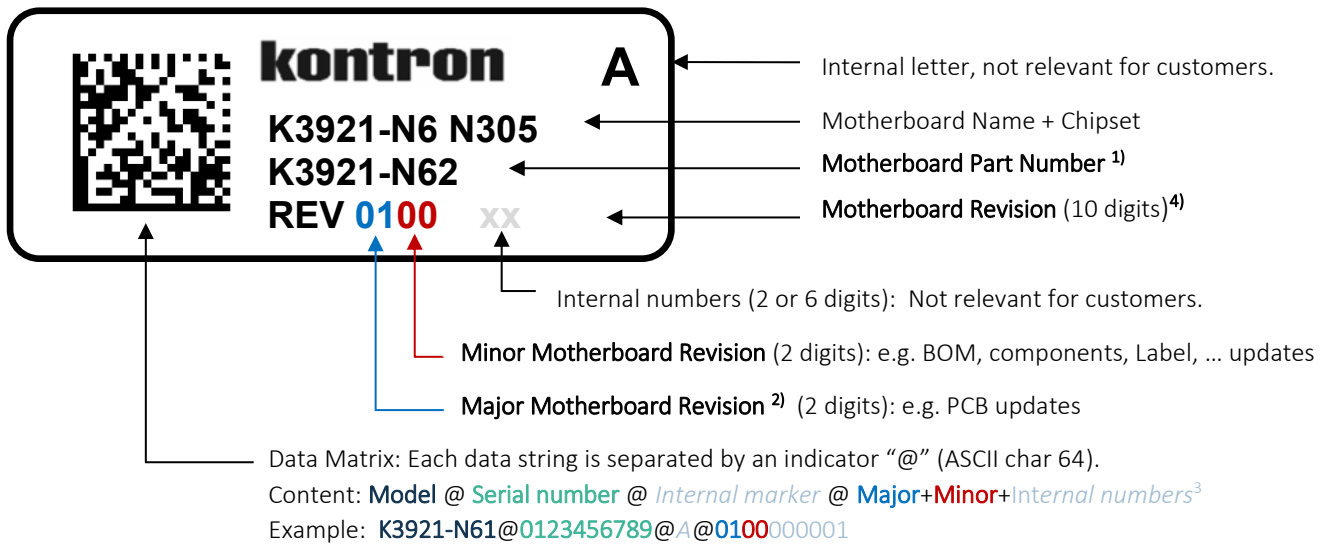


(example)

A detailed description is available on FTP server:

➤ [Motherboard Labeling Designed-by-Fujitsu.pdf](#)

1.2 Kontron motherboard label (20x8mm)



Footnotes

1) Motherboard part number example:

- **K3921-N61:**
 - **K3921-N62:** Kontron board family (technology based family: K38=ADL/RPL-S, K39=ADL-N, ...)
 - **K3921-N62:** Formfactor: 2=mSTX, 3=mITX, 4=μATX, 5=ATX, 8=μATX-Server
 - **K3921-N62:** Board model (upcounting number)
 - **K3921-N62:** Specific variation of board model with difference in functionality, e.g. different SoC or connectivity.
 - **K3921-N62:** PCB version (2 = 2nd PCB layout)

2) Major revision is always "01" for first release to manufacturing even "PCB version" on the revision label (Q12) indicates that this is already the second PCB layout. For evaluation/pre-production motherboards the major revision is marked with alphabetic letters (0A, 0B, ...).

Example:

- Latest development revision of K3921-N6 motherboard: **0B04**
- Initial released motherboard revision: **0100** (Most likely only a rename of the latest dev. revision number with removed debug parts)

3) The "Internal numbers" counter contains the hardware major and minor revision and also some Kontron/Production/Logistic related numbers, which are not relevant for customers.

4) Starting from approximately June 2024, the motherboard type label has been updated to mitigate confusion related to motherboard revision numbers. The updated labeling process will occur incrementally. We have removed internal-only numbers. Only the numbers marked in blue and red are relevant for verifying the current hardware revision. Additionally, any future BIOS updates will no longer increment the hardware revision counter.



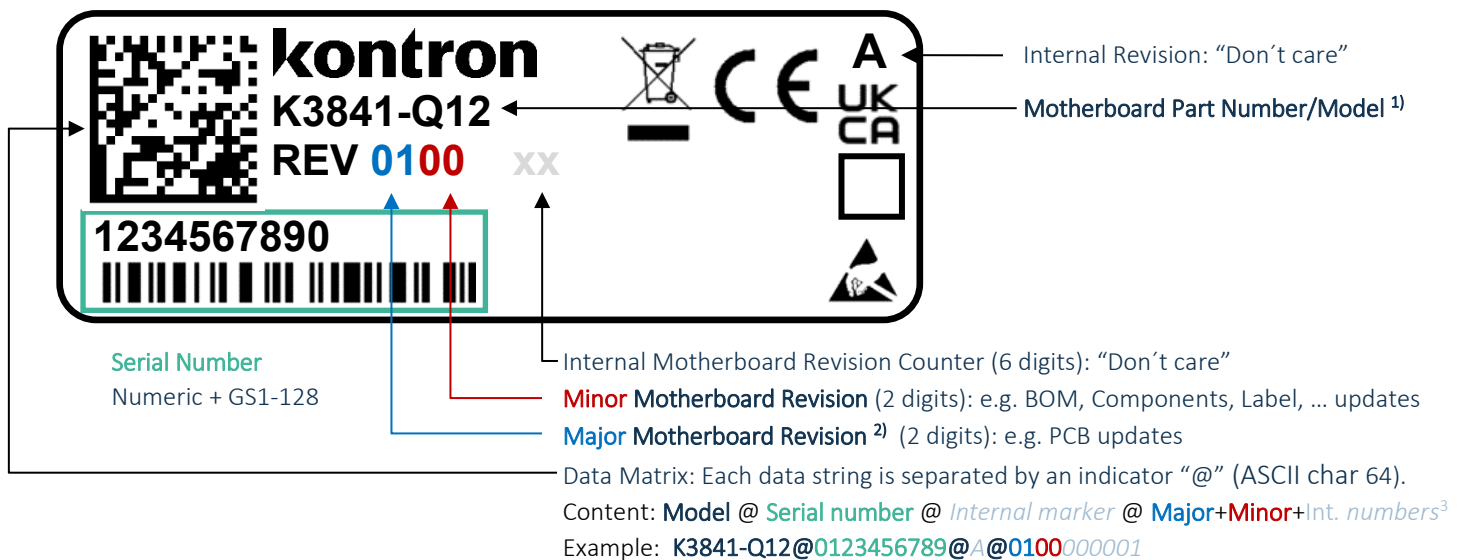
1.3 Kontron advanced motherboard label (28x10mm)

The advanced motherboard label (formerly “Variant 2”) is introduced as the new standard motherboard label for designs launched in 2025 or later.

This adjustment will be applied gradually to the entire portfolio Kontron motherboard portfolio (Kxxxx, D37x4, D3723), beginning in February 2025. Due to ongoing production and our helpful buffer stocks for short-term customer demand, implementation will still take some time.

What’s different to the Variant 1 – 20x8mm label?

- Add Motherboard serial number as text and GS1-128 1D barcode
- Add certification and WEEE marks (UKCA, CE, trash bin)
- Remove row “Motherboard Name + Chipset”. Keep “Motherboard Part Number”



1) Motherboard part number example:

- K3841-Q12:
 - **K38**41-Q12: Kontron board family (technology based family: K38=ADL/RPL-S, K39=ADL-N, K40=MTL-U/H, ...)
 - K38**4**1-Q12: Formfactor: 2=mSTX, 3=mITX, 4=μATX, 5=ATX, 8=μATX-Server
 - K384**1**-Q12: Board model (upcounting number)
 - K3841-Q**1**2: Specific variation of board model with difference in functionality, e.g. different SoC or connectivity.
 - K3841-Q1**2**: PCB version (2 = 2nd PCB layout)

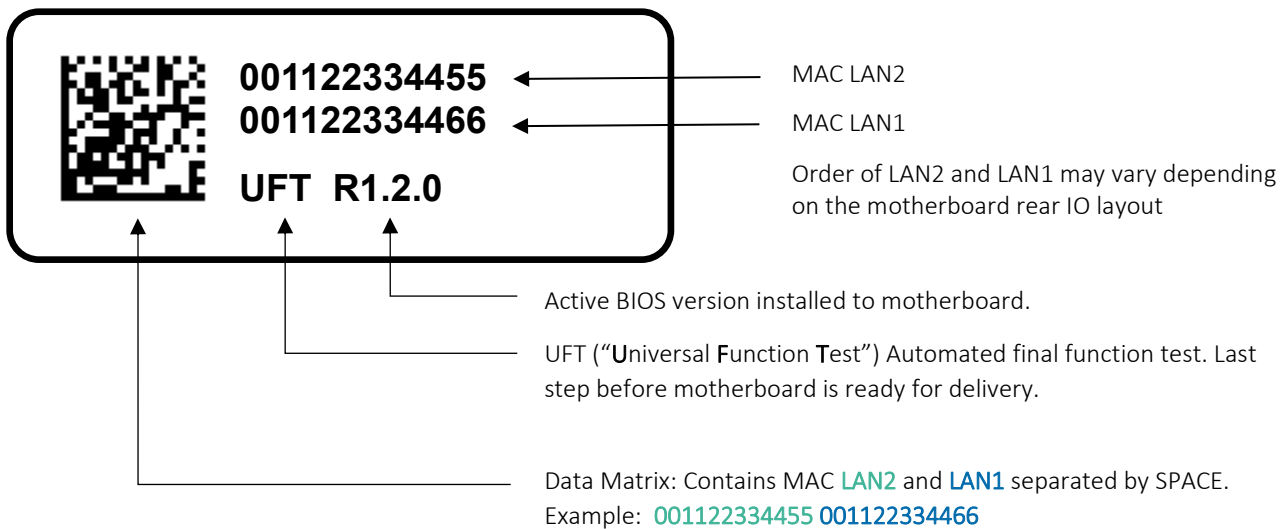
2) Major revision is always “01” for first release to manufacturing even “PCB version” on the revision label (Q**12**) indicates that this is already the second PCB layout. For evaluation/pre-production motherboards the major revision is marked with alphabetic letters (0A, 0B, ...).

Example:

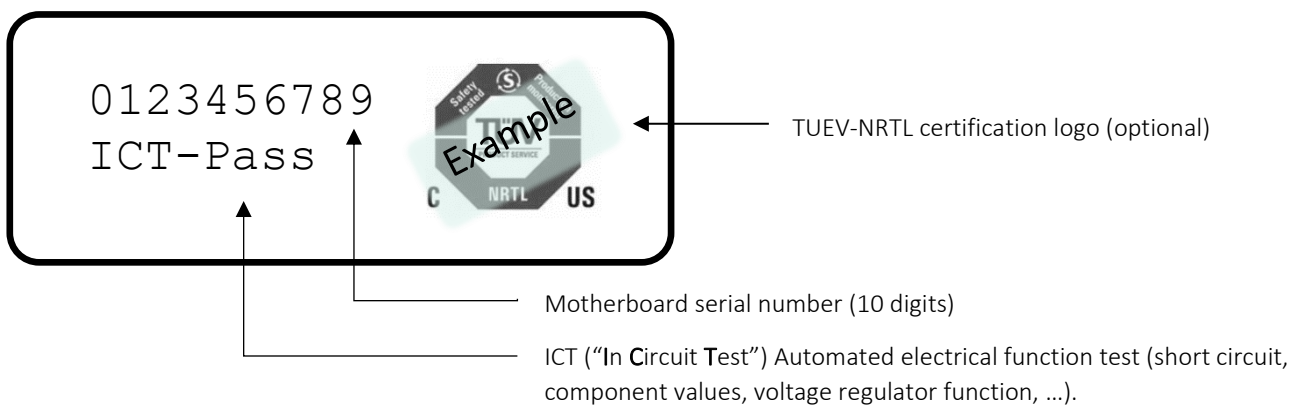
- Latest development revision of Kxxx-Yz motherboard: **0B04**
- Initial released motherboard revision: **0100** (Most likely only a rename of the latest dev. revision number with removed debug parts)

3) The “Internal numbers” counter contains the hardware major and minor revision and also some Kontron/Production/Logistic related numbers, which are not relevant for customers.

2 BIOS Version, MAC address and functional test





3 ICT test label, TUEV-NRTL



4 Internal labels (for production purpose)



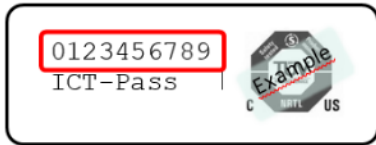
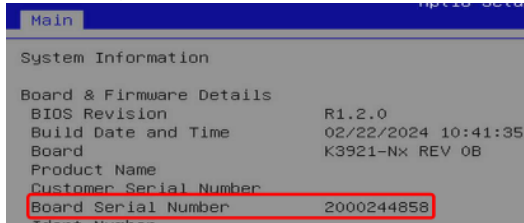
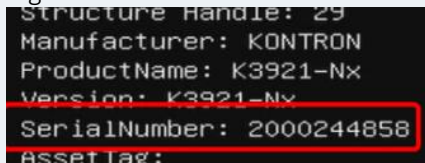
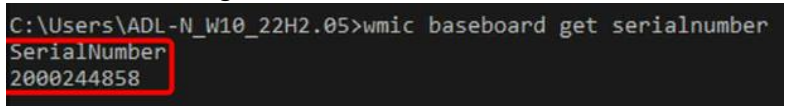
Additional labels and markings may appear on the PCBs or motherboards. These labels serve internal production purposes only and **should be disregarded** by customers.

It's important to note that the internal labels do not adhere to the external customer PCN process, which means that changes to their format, content, and appearance may occur without prior notice.

Description	Picture
1D barcode Contains 10-digits serial number (same as on the motherboard label). Applied to PCB before any placement take place for internal tracking on CM side (contract manufacturer) The position may vary depending on the available space and is specified by the CM.	
2D Data matrix laser marking Contains 10-digit serial number (same as on the motherboard label) Optional: Internal order number, applied by the CM (7 digit numbers) The position may vary depending on the available space and is specified by the CM. To stabilize the process of PCB labeling and meet the increased demands regarding cycle times, our contract manufacturer (CM) transitioned to laser marking the circuit boards beginning from WW10/2024 .	

5 Additional Information: Motherboard Serial Number

The motherboard serial number can be obtained or verified through different approaches:

Method	Description
Kontron motherboard label (20x8mm) (Variant 1)	 K3921-N61@0123456789@A@0100000001
Kontron advanced motherboard label (28x10mm) (Variant 2)	 K3841-Q12@1234567890@A@0100000001
ICT Label	
BIOS setup UI	[Main > System Information] 
SMBIOS	Type 2 (Baseboard) Offset 07h (Serial Number) E.g. in EFI shell: "smbiosview -t 2" 
Windows WMIC	"wmic baseboard get serialnumber" 



About Kontron

Kontron AG (www.kontron.com, ISIN AT0000A0E9W5, WKN A0X9EJ, KTN) is a leading IoT technology company. For more than 20 years, Kontron has been supporting companies from a wide range of industries to achieve their business goals with intelligent solutions. From automated industrial operations, smarter and safer transport to advanced communications, connectivity, medical, and energy solutions, the company delivers technologies that add value for its customers. With the acquisition of Katek SE in early 2024, Kontron significantly strengthens its portfolio with the new GreenTec division, focusing on solar energy and eMobility, and grows to around 8,000 employees in over 20 countries worldwide. Kontron is listed on the SDAX® and TecDAX® of the German Stock Exchange.

For more information, please visit: www.kontron.com

Global Headquarters

Kontron Europe GmbH

Gutenbergstraße 2
85737 Ismaning, Germany
Tel.: + 49 821 4086 0
Fax: + 821 4086 111
pcmb-sales@kontron.com