



# **kontron**

**Explore the Kontron Group**

We are a fast-moving multinational technology leader.

## **M.2 / Mini-PCIe / mSATA / CFast Module Support**



---

Kontron Product Center Boards

V1.5 09/2023

# Extended Lifecycle Motherboards 1/2



## Kontron OEM Motherboards

|           | mSATA | M.2 (SSD)                                          | M.2 (WLAN/BT)                       | Mini-PCIe                                           | Module Mounting Screws     | Note |
|-----------|-------|----------------------------------------------------|-------------------------------------|-----------------------------------------------------|----------------------------|------|
| D3674-B   | ---   | 1 x Key-M 2280<br>PCIe (4 lanes)                   | 1 x Key-E 2230<br>PCIe x1 / USB 2.0 | ---                                                 | Pre-installed<br>(onboard) |      |
| D3654-B   | ---   | 1 x Key-M 2280<br>PCIe (4 lanes)                   | 1 x Key-E 2230<br>PCIe x1 / USB 2.0 | ---                                                 |                            |      |
| D3644-B   | ---   | 1 x Key-M 2280<br>PCIe (4 lanes)                   | 1 x Key-E 2230<br>PCIe x1 / USB 2.0 | ---                                                 |                            |      |
| D3643-H   | ---   | 1 x Key-M<br>2280 / 22110<br>PCIe (4 lanes)        | ---                                 | ---                                                 |                            |      |
| D3642-B   | ---   | 1 x Key-M 2280<br>PCIe (4 lanes)                   | 1 x Key-E 2230<br>PCIe x1 / USB 2.0 | ---                                                 |                            |      |
| D3598-B/G | ---   | 1 x Key-M 2280<br>PCIe (4 lanes)                   | ---                                 | 1 socket<br>halfsize /<br>fullsize<br>incl. USB 2.0 |                            |      |
| D3474-B   | ---   | 1 x Key-M<br>2242 / 2260<br>SATA only              | 1 x Key-E 2230<br>PCIe x1 / USB 2.0 |                                                     |                            |      |
| D3417-B   | ---   | 1 x Key-M<br>2260 / 2280<br>PCIe (4 lanes)         | ---                                 | ---                                                 |                            |      |
| D3402-B   |       | 1 x Key-M<br>2260 / 2280<br>PCIe (4 lanes) or SATA |                                     |                                                     |                            |      |
| D3348-B   | ---   | ---                                                | ---                                 | ---                                                 |                            | ---  |

# Extended Lifecycle Motherboards 2/2



## Kontron OEM Motherboards

|          | mSATA | M.2 (SSD)                                                    | M.2 (WLAN/BT)                                    | Mini-PCIe | Module Mounting Screws     | Note                                                                                   |
|----------|-------|--------------------------------------------------------------|--------------------------------------------------|-----------|----------------------------|----------------------------------------------------------------------------------------|
| K3921-H  | ---   | 1 x Key-M<br>2230 / 2242 / 2280<br>PCIe x1 (Gen3) or<br>SATA | 1 x Key-E<br>2230<br>CNVi / PCIe x1 / USB<br>2.0 | ---       | Pre-installed<br>(onboard) | Each Key-M socket provides mechanical support for 2230/2242/2280. Default spacer: 2280 |
| K3843-B2 | ---   | 1 x Key-M<br>2280<br>PCIe x4 (Gen4)                          | ---                                              | ---       | Pre-installed<br>(onboard) |                                                                                        |
| K3843-B1 | ---   | 2 x Key-M<br>2280<br>PCIe x4 (Gen4)                          | ---                                              | ---       | Pre-installed<br>(onboard) |                                                                                        |
| K3842-Q  | ---   | 2 x Key-M<br>2230 / 2242 / 2280<br>PCIe x4 (Gen4)            | 1 x Key-E<br>2230<br>CNVi / PCIe x1 / USB<br>2.0 | ---       | Pre-installed<br>(onboard) | Each Key-M socket provides mechanical support for 2230/2242/2280. Default spacer: 2280 |

# Industrial Motherboards (Micro-ATX / ATX)



## Kontron OEM Motherboards

|         | mSATA                                 | M.2 (SSD)                                         | M.2 (WLAN/BT)                                    | Mini-PCIe                                              | Module Mounting Screws     | Note                                                                                                                                                                      |
|---------|---------------------------------------|---------------------------------------------------|--------------------------------------------------|--------------------------------------------------------|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| K3851-R | ---                                   | 2 x Key-M<br>2230 / 2242 / 2280<br>PCIe x4 (Gen4) | 1 x Key-E<br>2230<br>CNVi / PCIe x1 / USB<br>2.0 | ---                                                    | Pre-installed<br>(onboard) | Each Key-M socket provides mechanical support for 2230/2242/2280. Default spacer: 2280                                                                                    |
| K3841-Q |                                       |                                                   |                                                  |                                                        |                            |                                                                                                                                                                           |
| D3646-S | ---                                   | 1 x Key-M<br>2280<br>PCIe (4 lanes)               | 1 x Key-E<br>2230<br>PCIe x1 / USB 2.0           | ---                                                    | Pre-installed<br>(onboard) |                                                                                                                                                                           |
| D3641-S |                                       |                                                   |                                                  |                                                        |                            |                                                                                                                                                                           |
| D3445-R | 1 socket<br>fullsize                  | ---                                               | ---                                              | ---                                                    | Pre-installed<br>(onboard) |                                                                                                                                                                           |
| D3445-S | ---                                   | ---                                               | ---                                              | ---                                                    | ---                        |                                                                                                                                                                           |
| D3446-S | 1 socket<br>halfsize /<br>fullsize *) | ---                                               | ---                                              | 1 socket<br>halfsize /<br>fullsize<br>incl. USB 2.0 *) | screw kit<br>F5000-S002    | *) D344x-S provides <u>one</u> common halfsize/fullsize socket for mSATA and Mini-PCIe; configurable via BIOS Setup. Socket is shared with onboard SATA Connector (Port2) |
| D3441-S |                                       |                                                   |                                                  |                                                        |                            |                                                                                                                                                                           |
| D3235-S | ---                                   | ---                                               | ---                                              | ---                                                    | ---                        |                                                                                                                                                                           |
| D3236-S | 1 socket<br>fullsize                  | ---                                               | ---                                              | ---                                                    | onboard clip<br>mounting   | mSATA socket is shared with onboard SATA Connector (Port2)                                                                                                                |
| D3231-S |                                       |                                                   |                                                  |                                                        |                            |                                                                                                                                                                           |

# Industrial Motherboards (Mini-ITX / Mini-STX) 1/3



## Kontron OEM Motherboards

|         | mSATA                                             | M.2 (SSD)                                                                        | M.2 (WLAN/BT)                                                     | Mini-PCIe                                                           | Module Mounting Screws     | Note                                                                                                                                                                                                                                |
|---------|---------------------------------------------------|----------------------------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------------|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| D3634-S | ---                                               | 1 x Key-M<br>2242 / 2260 / 2280<br>PCIe (2 lanes)<br>Default Spacer: 2280        | ---<br><br>(M.2 WLAN/BT possible via Mini-PCIe/M.2 adapter D3436) | 1 socket<br>halfsize /<br>fullsize<br>incl. USB 2.0                 | Pre-installed<br>(onboard) | M.2 / Mini-PCIe stuffing options:<br><br>M.2-2280 only or<br>M.2-2260/2242 + halfsize Mini-PCIe or<br>M.2-2242 + fullsize Mini-PCIe                                                                                                 |
| D3633-S |                                                   | 1 x Key-M<br>2242 / 2260 / 2280<br>PCIe (4 lanes)<br>Default Spacer: 2280        |                                                                   |                                                                     |                            |                                                                                                                                                                                                                                     |
| D3544-S | ---                                               | 1 x Key-B<br>2242 / 2260 / 2280<br>PCIe (1 lane) or SATA<br>Default Spacer: 2242 | 1 x Key-E<br>2230<br>PCIe x1 / USB 2.0                            | ---                                                                 | Pre-installed<br>(onboard) | M.2 (SSD): SATA-mode shared with SATA Port1<br>D3543-S: No support for Mini-PCIe to M.2-Key E Adapter D3436-S!                                                                                                                      |
| D3543-S |                                                   |                                                                                  |                                                                   | 1 socket<br>halfsize /<br>fullsize<br>incl. USB 2.0                 |                            |                                                                                                                                                                                                                                     |
| D3434-S | ---                                               | 1 x Key-M<br>2242 / 2260<br>SATA only                                            | ---                                                               | 1 socket<br>halfsize /<br>fullsize<br>incl. USB 2.0 *)              | screw kit<br>F5000-S002    | *) D3433-S provides <u>one</u> common halfsize/fullsize socket for mSATA and Mini-PCIe; configurable via BIOS Setup.<br>Stuffing options:<br>(mSATA)/Mini-PCIe fullsize + M.2 2242 or<br>(mSATA)/Mini-PCIe halfsize + M.2 2242/2260 |
| D3433-S | 1 socket<br>halfsize /<br>fullsize *)             | 1 x Key-M<br>2242 / 2260<br>PCIe (2 lanes) or SATA                               |                                                                   |                                                                     |                            |                                                                                                                                                                                                                                     |
| D3243-S | 1 socket<br>fullsize *)<br>incl. „shared“ USB 2.0 | ---                                                                              | ---                                                               | 1 socket<br>halfsize<br>(incl. USB 2.0)<br><br>1 socket fullsize *) | screw kit<br>F5000-S001    | *) D3243-S provides <u>one</u> common fullsize socket for mSATA and Mini-PCIe (USB 2.0 support shared with USB stick socket); configurable via BIOS Setup                                                                           |
| D3313-S | 1 socket<br>halfsize /<br>fullsize                | ---                                                                              | ---                                                               | 1 socket<br>halfsize /<br>fullsize<br>incl. USB 2.0                 | screw kit<br>F5000-S001    | mSATA shared with onboard SATA Connector (Port1)                                                                                                                                                                                    |

# Industrial Motherboards (Mini-ITX / Mini-STX) 2/3



## Kontron OEM Motherboards

|                      | mSATA | M.2 (SSD)                                                                                                                                                                                                      | M.2 (WLAN/BT)                                                     | Mini-PCle                                        | Module Mounting Screws  | Note                                                                                                        |
|----------------------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|--------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------------|
| K3833-Q<br>K3832-Q   | ---   | 1 x Key-M<br>2242<br>PCIe x4 (Gen4)                                                                                                                                                                            | 1 x Key-E<br>2230<br>CNVi / PCIe x1 / USB 2.0                     | ---                                              | Pre-installed (onboard) |                                                                                                             |
| K3831-H              | ---   | 1 x Key-M<br>2242<br>PCIe x4 (Gen4)                                                                                                                                                                            | 1 x Key-E<br>2230<br>CNVi / PCIe x1 / USB 2.0                     | ---                                              | Pre-installed (onboard) |                                                                                                             |
| D3714-V/R<br>D3724-R | ---   | 1 x Key-M<br>2230/2242/2280<br>PCIe x4 (Gen3)<br>Default Spacer: 2280                                                                                                                                          | 1 x Key-E<br>2230<br>PCIe x1 / USB 2.0                            | ---                                              | Pre-installed (onboard) |                                                                                                             |
| D3713-V/R<br>D3723-R | ---   | 1 x Key-M<br>2230/2242/2280<br>PCIe x4 (Gen3)<br>Default Spacer: 2280<br><br>1 x Key-B<br>2242/3052/2260/2280<br>R-series: PCIe x1 (Gen3)<br>V-series: PCIe x2 (Gen3)<br>USB2.0 / SATA<br>Default Spacer: 2242 | ---<br><br>(M.2 WLAN/BT possible via Mini-PCle/M.2 adapter D3436) | 1 socket<br>halfsize / fullsize<br>incl. USB 2.0 | Pre-installed (onboard) | R-series: Key-M shared with PCIe x4 slot<br><br>R-series / V-series:<br>Key-B: SATA shared with SATA port 1 |

# Industrial Motherboards (Mini-ITX / Mini-STX) 3/3



## Kontron OEM Motherboards

|         | CFast    | M.2 (SSD)                                                                                                                                                                   | M.2 (WLAN/BT)                                                        | Mini-PCIe | Module Mounting Screws     | Note                                                                                                                                               |
|---------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|-----------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| K3932-N | 1 x SATA | 1 x Key-M<br>2230 / 2242 / 2280<br>PCIe x2 (Gen3)<br>Default Spacer/Screw:<br>2230 + 2280                                                                                   | 1 x Key-E<br>2230<br>CNVi (WiFi)<br>USB 2.0 (BT)<br>no PCIe support! | ---       | Pre-installed<br>(onboard) | Key-M 2280 / Key-E 2230:<br>Shared mounting screw<br><br>Key-M spacer/screw „2230“ has to be removed<br>first when using 2242 or 2280 Key-M module |
| K3931-N | ---      | 1 x Key-M<br>2230 / 2242 / 2280<br>PCIe x2 (Gen3)<br>Default Spacer/Screw:<br>2230 + 2280<br><br>1 x Key-B<br>2242 / 2280<br>PCIe x1 (Gen3) or SATA<br>Default Spacer: 2242 | 1 x Key-E<br>2230<br>CNVi (WiFi)<br>USB 2.0 (BT)<br>no PCIe support! | ---       | Pre-installed<br>(onboard) | Key-M 2280 / Key-E 2230:<br>Shared mounting screw<br><br>Key-M spacer/screw „2230“ has to be removed<br>first when using 2242 or 2280 Key-M module |
| K3921-N | ---      | 1 x Key-M<br>2230 / 2242 / 2280<br>PCIe x2 (Gen3)<br>Default Spacer: 2280                                                                                                   | 1 x Key-E<br>2230<br>CNVi / PCIe x1 / USB 2.0                        | ---       | Pre-installed<br>(onboard) |                                                                                                                                                    |

# M.2 / mSata / Mini-PCle Screw Kits

Kontron OEM Motherboards



| Spacer<br>(mSata/Mini-PCle) | Mounting screw<br>(mSata/Mini-PCle) | M.2 spacer screw                | M.2 mounting screw                          |
|-----------------------------|-------------------------------------|---------------------------------|---------------------------------------------|
| C26361-B416-C3              | C26361-B120-C2<br>(M2x9.6)          | C26361-B443-C210<br>(1067-6492) | C26361-B443-C220<br>(M3x3.2)<br>(1067-6496) |



| F5000-S001                                                               | F5000-S002                                                                           |
|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 4x spacer<br>4x mounting screw                                           | 1x spacer<br>1x mounting screw<br>1x M.2 spacer screw *)<br>1x M.2 mounting screw *) |
| Packed in one plastic bag<br>Delivery kit contains <b>20</b> single bags | Packed in one plastic bag<br>Delivery kit contains <b>10</b> single bags             |
| For motherboards:<br>D3313-S / D3243-S                                   | For motherboards:<br>D3433-S, D3434-S, D3441-S &<br>D3446-S                          |

\*) M.2 spacer/screw included in S002 delivery kit, but only required for D3433-S & D3434-S





# **kontron**

## **Thank you for your attention**

---

Copyright © 2023 Kontron AG. All rights reserved. All data is for information purposes only and not guaranteed for legal purposes. Information has been carefully checked and is believed to be accurate; however, no responsibility is assumed for inaccuracies. Kontron and the Kontron logo and all other trademarks or registered trademarks are the property of their respective owners and are recognized. Specifications are subject to change without notice.