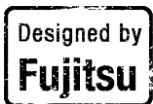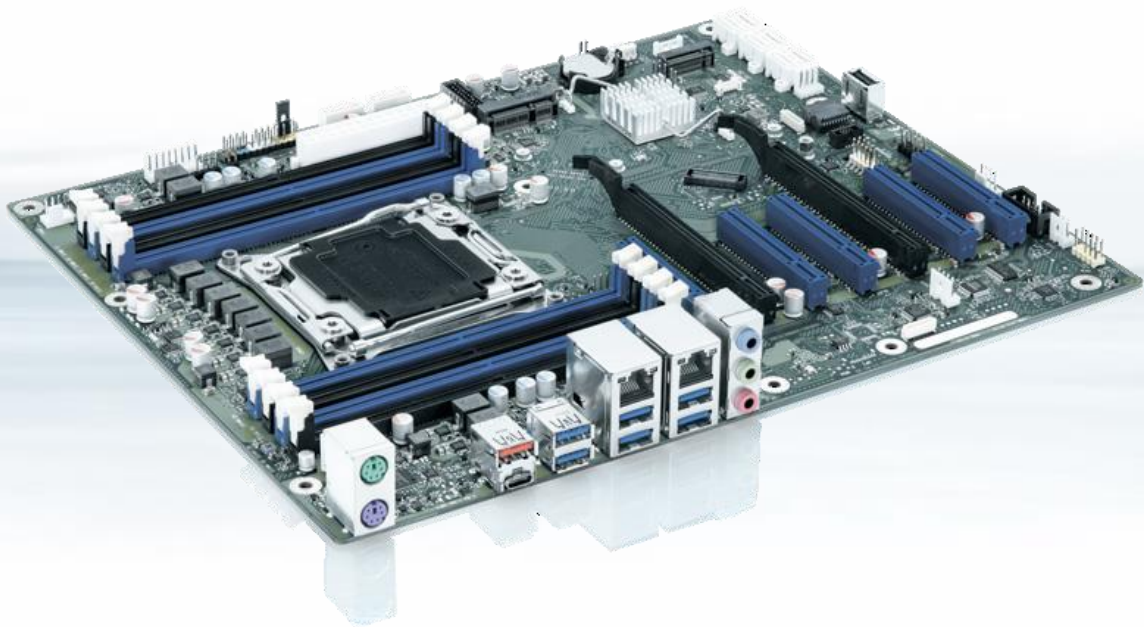# D3598-B ATX

BIOS Release Document

▼

Intel® C422 Workstation chipset and Intel® Xeon® processors

▶ 2x PCIe x16
▶ Intel® VROC Support
▶ Dual LAN & Mini-PCIe
▶ HW Watchdog
▶ USB 3.1 Gen2 Type C

POSSIBILITIES START HERE **kontron**

S&T Group

Content

Revision History:

Date	BIOS Version	Notes
23.09.2020	R1.23.0	Added new BIOS version
18.02.2020	R1.22.0	Added new BIOS version (R1.22.0)
02.12.2019	R1.20.0	Changed whole document to Kontron design Reordered some chapters
27.11.2019	R1.20.0	Added new BIOS version (R1.20.0) Removed old BIOS versions from BIOS-Info document FTP links changed to Kontron FTP server

1. General Notes

▶ AMI Aptio V5.0.0.15

1.1 Released OS Versions

▶ MS Windows 10 (64bit)
▶ MS Windows 7 (64bit)

1.2 BIOS Update Options

DOS Flash Update
Use ZIP-files for DOS-based BIOS Update
→ Copy related files (folder "DOS") to a DOS-bootable device and run <DosFlash.BAT>

Please see the BIOS-Flash-Tools documentation for more information:
ftp://ftp.kontron.com/Services/Software_Tools/BIOS-Flash-Tools/

Windows Flash Update
Use Dxxx-xyz.DFI.$xe for Windows-based BIOS update
→ Rename file to *.exe after download and run exe-file from MS Windows

Auto BIOS Update
With Auto BIOS Update it is possible to check a Fujitsu server automatically to see if there is a new BIOS version for the system. For the update, no operating system or external storage medium is required. This feature must be enabled in BIOS Setup first.
For details on the Auto BIOS Update function please see the BIOS manual.

BIOS Recovery
Please see the BIOS-Flash-Tools documentation for more information:
ftp://ftp.kontron.com/Services/Software_Tools/BIOS-Flash-Tools/

Additional information
If you have any problems after a BIOS flash please try if "Load Optimized Default Values" (F3) in BIOS setup solves the problem.

1.3 FTP BIOS Folder D3598-B

The released BIOS version is available here:

D3598-B:
ftp://ftp.kontron.com/Products/Motherboards/ExtendedLifeCycle/D3598-B/BIOS_D3598/

1.4 How to create a DOS bootable USB stick?

You can use the Fujitsu tool FTS_Basic-BootStick.EXE to easily create a Free-DOS bootable Stick:
ftp://ftp.kontron.com/Services/Software_Tools/Common-Mainboard-Tools/USB-FreeDOS-Bootstick/
Rename file from *.$xe to *.exe and run tool in Windows.

1.5 Modify BIOS Setup Settings and Defaults (Tool EditCMOS / BIOSSET)

The file D3598-***.R1.x.0.SetupItemId.txt provides the list of BIOS Setup items that this BIOS version allows to be modified by the tool EditCMOS (Modify BIOS Setup Settings and Defaults).

See EditCMOS tool for further details:
ftp://ftp.kontron.com/Services/Software_Tools/Common-Mainboard-Tools/EditCMOS_UEFI/

For Windows/Linux the Tool BIOSSET can be used instead, it is part of this package:
ftp://ftp.kontron.com/Services/Software_Tools/Common-Mainboard-Tools/BiosSet/

Both tools are also described in our Manufacturing-Tools HowTo document:
ftp://ftp.kontron.com/Services/Software_Tools/Common-Mainboard-Tools/

1.6 Note: Customer Service Release BIOS

Besides the released BIOS versions there may be additional BIOS versions
(Customer Service Release BIOS = CSR BIOS) that solve specific customer problems.
Please note: These versions are available via OEM FTP only and they are not pre-installed ex factory.

2. BIOS R1.8.0

Release history for BIOS versions R1.8.0 and prior can be found under following link:
ftp://ftp.kontron.com/Products/Motherboards/ExtendedLifeCycle/D3598-B/BIOS_D3598/Previous_Versions/

3. BIOS R1.20.0

<div style="border: 3px solid #8B0000; background-color: #FFC0CB; padding: 20px;">

<div align="center">

<u>IMPORTANT NOTE</u>

</div>

Due to update of core BIOS version and included support for CascadeLake CPUs, there are some important changes, which should be noticed, BEFORE you start any update progress on your systems!

<div align="center">

Please have a look to "BIOS R1.20.0 Known Issues and Limitations first!

</div>

</div>

BIOS Changes vs. R1.8.0:

▶ Updated BIOS UEFI core version to V5.0.0.15

▶ Updated CPU Microcode (0x2000065) for Skylake W H0/M0/U0

▶ Feature: Support for new CascadeLake A0/B0/B1 CPUs added (Microcode 0x500002Ch).

▶ Updated to Management Engine Firmware version 11.12.0.1622

▶ Updated to System Management Controller (Teutates) Firmware 61.

Known Issues and Limitations:

▶ As a result of updated CPU support / Core BIOS there are some important notes:

  o For any further BIOS update, it is mandatory, to update systems to R1.20.0 first! This BIOS version prepares the motherboard for any further BIOS updates.

  o It is **not possible to flash back** to BIOS version <R1.20.0!

  o All **BIOS settings get lost** during update from BIOS prior R1.20.0 to R1.20.0. Archive-Flash files, created with BIOS versions prior to R1.20.0 will not work for R1.20.0 BIOS and later. Further BIOS updates, based on R1.20.0 and later will preserve BIOS settings as usual.

▶ It's not possible to flash BIOS R1.20.0 via DeskFlash.exe again, when BIOS R1.20.0 is already running.

4. BIOS R1.22.0

BIOS Changes previous version:

▶ Fixed: OS does not start when rebooting with 2 TB RAID configuration under some circumstances (with additional RAID card).

▶ Fixed: No beep when booting without memory modules.

▶ Fixed: Sometimes resume from S4 hibernation not working correctly.

▶ Fixed: Diagnostic Program not available in Boot menu, if all other boot devices are disabled.

▶ Fixed: "Network Stack Configuration" in BIOS menu "Advanced" appeared twice.

▶ Fixed: Device "FUJ0435" appears in Windows device manager – Device was removed.

▶ Fixed: No video output via Serial-Over-LAN (AMT SOL)

Known Issues and Limitations:

▶ As a result of updated CPU support / Core BIOS there are some important notes:

    o For any further BIOS update, it is mandatory, to update systems to R1.20.0 first! This BIOS version prepares the motherboard for any further BIOS updates.

    o It is **not possible to flash back** to BIOS version <R1.20.0!

    o All **BIOS settings get lost** during update from BIOS prior R1.20.0 to R1.20.0. Archive-Flash files, created with BIOS versions prior to R1.20.0 will not work for R1.20.0 BIOS and later. Further BIOS updates, based on R1.20.0 and later will preserve BIOS settings as usual.

▶ It's not possible to flash BIOS R1.20.0 via DeskFlash.exe again, when BIOS R1.20.0 is already running.

5. BIOS R1.23.0 [<mark>new</mark>]

BIOS Changes previous version:

▶ Intel Platform Update (IPU) 2020.1 - Integrated fixes for:

     ○ Intel SA-00295 (Ripple 20)

     ○ Intel SA-00329

▶ Updated CPU Microcodes

     ○ SkylakeW H0/M0/U0 (50654)   0x2006906

     ○ Cascade Lake A0 (50655)   0x3000010

     ○ Cascade Lake B0 (50656)   0x4002F01

     ○ Cascade Lake B1 (50657)   0x5002F01

▶ Updated to Management Engine Firmware version 11.12.79.1722

▶ Updated Intel i210 UEFI LAN driver – Improves POST boot time for i210/i350 based systems.

▶ Info: BIOS Feature "Auto BIOS Update" not working with the Fujitsu default server address. The server infrastructure at Fujitsu does not contain data for Kontron Extended Lifecycle and Industrial motherboards anymore. Therefore, the address was removed. Kontron will not provide an update server. Custom TFTP server solutions are still possible.

▶ Info: Replaced Fujitsu logos with Kontron logos.

     ○ Diagnostic screen logo (Quiet Boot = Disabled) removal takes immediate effect after BIOS update.

     ○ Silent boot logo will not be replaced during BIOS updates in field (logo preserve function). It just takes effect on newly produced or RMA processed motherboards. To activate the logo on "old" motherboards, you can use the Logo file from: ftp://ftp.kontron.com/Services/Software_Tools/Miscellaneous/

         ▪ Kontron_QuietBootBIOSLogo.zip

Known Issues and Limitations:

▶ As a result of updated CPU support / Core BIOS there are some important notes:

    ○ For any further BIOS update, it is mandatory, to update systems to R1.20.0 first! This BIOS version prepares the motherboard for any further BIOS updates.

    ○ It is **not possible to flash back** to BIOS version <R1.20.0!

    ○ All **BIOS settings get lost** during update from BIOS prior R1.20.0 to R1.20.0. Archive-Flash files, created with BIOS versions prior to R1.20.0 will not work for R1.20.0 BIOS and later. Further BIOS updates, based on R1.20.0 and later will preserve BIOS settings as usual.

▶ It's not possible to flash BIOS R1.20.0 via DeskFlash.exe again, when BIOS R1.20.0 is already running.

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