

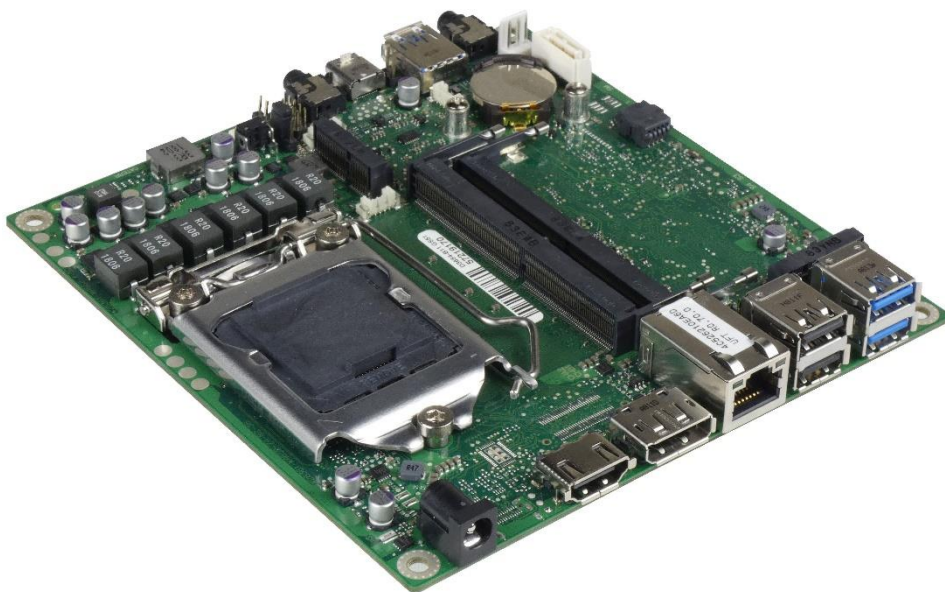
Fujitsu *CoffeeLake* Mini STX Mainboard

D3654-B

D3664-B [new]

D3674-B

BIOS Release Document



BIOS *CoffeeLake* Desktop 36x4-B **FUJITSU**

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Revision History:

Date	BIOS Version	Notes
23.07.2019	R1.21.0	Added new Mainboard Version D3664-B. First released BIOS version R1.21.0. Added feature.
15.07.2019	R1.21.0	Added new BIOS version
28.05.2019	R1.18.0	Added new BIOS version, Consolidated D3654-B and D3674-B
11.03.2019	R1.13.0	Added new BIOS version
03.12.2018	R1.2.0	Initial mass production release

1 General Notes

This BIOS is based on the AMI Aptio V5.0.0.13 R1.x.x

1.1 Released OS Versions

- MS Windows 10 (64bit)

1.2 BIOS Update Options

EFI Flash Update

Use ZIP-files for EFI-based BIOS Update

- Copy content of the BIOS ZIP to any FAT32 formatted USB drive/stick. The files should be visible in following directories:
 - EfiFlash.efi -> /EFI/FUJITSU
 - Flash update files (e.g. .UPD) in root directory of USB stick.
 - Boot the system and choose "FUJITSU Update Utility" in F12 boot menu.

Please see the BIOS-Flash-Tools documentation for more information:

<ftp://ftp.ts.fujitsu.com/pub/Mainboard-OEM-Sales/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.ts.fujitsu.com/pub/Mainboard-OEM-Sales/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.

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1.3 Modify BIOS Setup Settings and Defaults (Tool BIOSSET)

BIOS settings can be modified by the Windows and Linux tool BIOSSET (Modify BIOS Setup Settings and Defaults). See BIOSSET tool help (parameter -h) for further details.

<ftp://ftp.ts.fujitsu.com/pub/Mainboard-OEM-Sales/Services/Software&Tools/Common-Mainboard-Tools/BiosSet/>

1.4 What's about DOS support and where are the DOS tools?

Due to Intel's and Microsoft's decision, there is no "Legacy" OS support (CSM mode) implemented anymore. So only usage of UEFI operating systems is possible. We will provide the necessary tools and documentation for Windows and Linux.

Editcmos (DOS) -> Biosset (Windows and Linux)

EfiFlash.exe (DOS) -> EfiFlash.efi (EFI environment) or Dskflash/Deskflash (Windows/Linux)

SMCO, LVDS tool, OEMIdent are also available for Windows and Linux.

<ftp://ftp.ts.fujitsu.com/pub/Mainboard-OEM-Sales/Services/Software&Tools/Common-Mainboard-Tools/>

1.5 FTP BIOS Folder

The released BIOS versions are available here:

ftp://ftp.ts.fujitsu.com/pub/Mainboard-OEM-Sales/Products/Mainboards/Industrial&ExtendedLifetime/D3654-B_Mini-STX/BIOS_D3654-B/

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 Previous BIOS releases

Since BIOS version R1.18.0 we have consolidated BIOS-Info document for D3654-B and D3674-B. You can find the revision history for previous released BIOS versions within the "Previous_Versions" subfolder:

D3654-B:

ftp://ftp.ts.fujitsu.com/pub/Mainboard-OEM-Sales/Products/Mainboards/Industrial&ExtendedLifetime/D3654-B_Mini-STX/BIOS_D3654-B/Previous_Versions/

D3674-B:

ftp://ftp.ts.fujitsu.com/pub/Mainboard-OEM-Sales/Products/Mainboards/Industrial&ExtendedLifetime/D3674-B_ThinMini-ITX/BIOS_D3674-B/Previous_Versions/

3 BIOS R1.18.0

Changes vs. previous released BIOS

- Integrated Fixes for CVE-2018-12179, CVE-2018-12180, CVE-2018-12181, CVE-2019-0098, CVE-2019-0099, CVE-2019-0153, CVE-2019-0170, CVE-2018-12126, CVE-2018-12127, CVE-2018-12130
- Updated CPU Microcode (0xB4) for CoffeeLake-S U-0 and (0xB8) for CoffeeLake-S R-0
- Updated to Management Engine Firmware version 12.0.35.1427
- Updated BMC Teutates Firmware (V059)
- Feature: Erase Disk is now enabled by default.
- Feature: BIOS option "CPU TDP Limit" is now available by default.
 - Only for mainboards shipped with R1.18.0 or later!
 - If BIOS was flashed from version <R1.18.0 setting can only be activated by system integrator tool "OEMIdent"
- Fixed (D3674 only): FAN startup check was not working properly
- Fixed: Corrected POST messages while execution of Auto BIOS update.
- Fixed: POST hangs with some CPUs, when "Keyboard Error Reporting" is "Enabled" and no keyboard is connected.
- Fixed: The ME sporadically remained in recovery mode after flash to BIOS R1.13.0 and was not accessible anymore.

Known Issues and Limitations:

- No legacy OS support (UEFI only due to Intel restrictions)!
- Default value for "Intel® Speed Shift Technology" (Hardware P-State control) has been changed to "Disabled". This will only take effect, if you load "Optimized Defaults" after BIOS update.
- **BIOS downgrade to a version prior R1.13.0 is blocked due to security reasons and the support of 9th gen Intel CPUs!**

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4 BIOS R1.21.0 [updated]

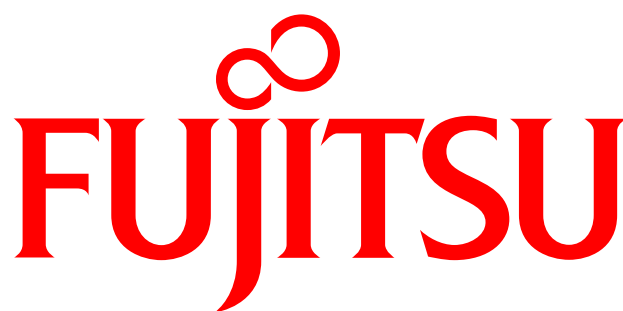
First released BIOS version for D3664-B [new]

Changes vs. previous released BIOS

- Fixed: Windows Boot Manager was missing when using Windows 10 1903
- Fixed: POST beep at start of POST was not working.
- Feature: Improved real time performance due to reduced SMIs.

Known Issues and Limitations:

- No legacy OS support (UEFI only due to Intel restrictions)!
- Default value for "Intel ® Speed Shift Technology" (Hardware P-State control) has been changed to "Disabled". This will only take effect, if you load "Optimized Defaults" after BIOS update.
- [D3664-B1 only] BIOS R1.21.0 provides the option for Intel Optane support although not possible on D3664-B (hardware limitation)
- Integrated Intel TPM is high sporadically disappearing after combined S3 / Reboot cycles.
- **BIOS downgrade to a version prior R1.13.0 is blocked due to security reasons and the support of 9th gen Intel CPUs!**



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