

Fujitsu *CoffeeLake* Industrial Mainboards

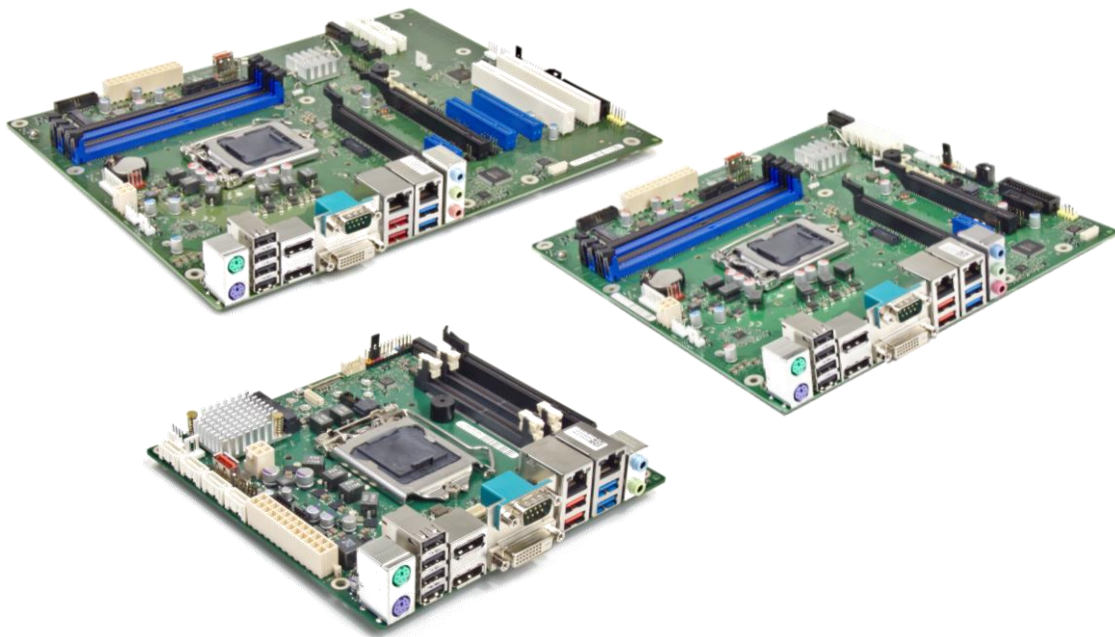
D3633-S

D3634-S

D3641-S

D3646-S

BIOS Release Document



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Revision History:

Date	BIOS Version	Notes
26.11.2018	R1.3.0	Initial mass production release for D3634. Updated Known Restrictions and Limitations
12.11.2018	R1.3.0	Added new BIOS version (D3633, D3641, D3646)
18.09.2018	R1.2.0	Initial mass production release (D3633, D3641, D3646)
23.08.2018	R1.1.0	Initial mass production release (D3641, D3646)

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.

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) -> Eflash.efi (EFI environment) or Dskflash/Deskflash (Windows/Linux)

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

(*) not all documentation and tools are available yet. They will be uploaded on our FTP server as soon as possible.

1.5 FTP BIOS Folder

The released BIOS versions are available here:

D363x-S:

ftp://ftp.ts.fujitsu.com/pub/Mainboard-OEM-Sales/Products/Mainboards/Industrial&ExtendedLifetime/D363x-S_Mini-ITX/BIOS_D363x/

D364x-S:

ftp://ftp.ts.fujitsu.com/pub/Mainboard-OEM-Sales/Products/Mainboards/Industrial&ExtendedLifetime/D364x-S/BIOS_D364x-S/

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 R1.2.0

First released mass production BIOS only for D3633-S, D3641-S and D3646-S

- Includes updated CPU microcode. Fix for Intel-SA-00115 (CVE2018-3639, CVE2018-3640)
 - 0x96 for CoffeeLake-S U-0
- Includes updated Intel ME version 12.0.6.1120
 - Fix for CVE-2018-3655, CVE-2018-3657, CVE-2018-3658, CVE-2018-3659, CVE -2018-3616

Known Issues and Limitations:

- No legacy OS support (UEFI only due to Intel restrictions)!

3 BIOS R1.3.0 [Update]

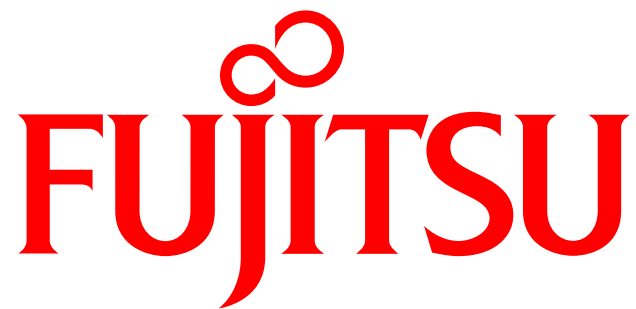
First released mass production BIOS only for D3634-S [new]

BIOS Changes vs. R1.2.0:

- Updated CPU Microcode (0x9A) for CoffeeLake-S U-0
- Updated to Management Engine Firmware version 12.0.10.1127 (Fix for CVE-2018-3655)
- Feature: Implemented setup option for SERR# and PERR#. (Advanced > PCI Subsystem Configuration)
- Feature: Implemented setup option for eDP brightness. (Advanced > Embedded Display Port Configuration)
- Fixed: Some m.2 PCIe devices were not detected.
- Fixed: LVDS backlight enable polarity corrected.
- Fixed: Power Button=Disabled was not working. (Boot)
- Fixed: Default for C-States corrected to "disabled".
- Fixed: Default for POST Beep corrected to "disabled".
- Fixed: Corrected typo of PCI Slot number. (Advanced > PCI Subsystem Configuration)
- Fixed: Plugged memory module for "DIMM CHA1" not shown. (Main > System Information)

Known Issues and Limitations: [Update]

- No legacy OS support (UEFI only due to Intel restrictions)!
- Energy saving settings are not disabled completely (NativePCIe and NativeASPM are enabled)
- BIOS defaults not loaded if jumper is set to Recovery position without connecting a recovering image on USB stick.
- POST beep only works on internal buzzer, not from the internal frontpanel speaker.
- "System Power Limit" > "Custom System Power Limit" not working properly.



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