# STM32MP1 Developer Package - debug symbol files

A quality version of this page, approved on *17 November 2021*, was based off this revision.

This article provides the following information:

- How to download and install the **latest** debug symbol files (for Linux kernel, U-Boot,TF-A and OP-TEE OS) for the STM32 microprocessor Series used
- Where to find the associated release note

**Warning**

To use this package efficiently, please read the Developer Package article relative to your STM32 microprocessors Series: Category:Developer Package

# 1 STM32MP15-Ecosystem-v3.1.0 release

- The STM32MP1 debug symbol files is delivered through a tarball file named **en.DEBUG-stm32mp1-openstlinux-5-10-dunfell-mp1-21-11-17_tar.xz** for STM32MP157x-EV1 and STM32MP157x-DKx boards.
- Download and install the STM32MP1 debug symbol files



**Warning**

To download a package, it is recommended to be logged in to your "myst" account [1]. If, trying to download, you encounter a “403 error”, you could try to empty your browser cache to workaround the problem. We are working on the resolution of this problem.
We apologize for this inconvenience

| | **STM32MP1 Developer Package debug symbol files - STM32MP15-Ecosystem-v3.1.0 release** |
|---|---|
| Download | You need to be logged on to *my.st.com* before accessing the following link<br>en.DEBUG-stm32mp1-openstlinux-5-10-dunfell-mp1-21-11-17_tar.xz |
| Installation | • Go to the host PC directory in which you want to install the Developer Package (*<Developer Package installation directory>*); if you follow the proposition to organize the working directory, this means:<br>`PC $> cd <working directory path>/Developer-Package`<br>• Download the tarball file in this directory<br>• Uncompress the tarball file to get the debug symbol files (for Linux kernel, U-Boot, TF-A and OP-TEE OS):<br>`PC $> tar xvf en.DEBUG-stm32mp1-openstlinux-5-10-dunfell-mp1-21-11-17_tar.xz` |
| Release note | If you are interested in older releases, please have a look into the section Archives. |

- The debug symbol files are in the *<Developer Package installation directory>*/stm32mp1-openstlinux-5.10-dunfell-mp1-21-11-17/images/stm32mp1 *directory:*

```
stm32mp1
├── arm-trusted-firmware
│   ├── bl32
│   │   └── debug
│   │       └── tf-a-bl32-stm32mp15.elf          Debug symbol
```

```
file for TF-A BL32
│   └── debug
│       ├── tf-a-bl2-emmc.elf                              Debug
symbol file for TF-A → TF-A for emmc boot stage
│       ├── tf-a-bl2-nand.elf                              Debug
symbol file for TF-A → TF-A for nand boot stage
│       ├── tf-a-bl2-nor.elf                             Debug
symbol file for TF-A → TF-A for nor boot stage
│       ├── tf-a-bl2-sdcard.elf                   Debug symbol
file for TF-A → TF-A for SDcard boot stage
│       ├── tf-a-bl2-uart.elf                              Debug
symbol file for TF-A → TF-A for UART downloading boot stage
│       └── tf-a-bl2-usb.elf                             Debug
symbol file for TF-A → TF-A for USB downloading boot stage
├── kernel
│   ├── config-5.10.61                                     Reference
Config file for Linux kernel
│   └── vmlinux                                   Debug symbol
file for Linux kernel
├── optee
│   └── debug
│       ├── tee-stm32mp157a-dk1.elf                        Debug
symbol file for OP-TEE OS → STM32MP15 Discovery kits
│       ├── tee-stm32mp157a-ev1.elf                        Debug
symbol file for OP-TEE OS → STM32MP15 Evaluation boards
│       ├── tee-stm32mp157c-dk2.elf                        Debug
symbol file for OP-TEE OS → STM32MP15 Discovery kits
│       ├── tee-stm32mp157c-ed1.elf                        Debug
symbol file for OP-TEE OS → STM32MP15 Evaluation boards
│       ├── tee-stm32mp157c-ev1.elf                        Debug
symbol file for OP-TEE OS → STM32MP15 Evaluation boards
│       ├── tee-stm32mp157d-dk1.elf                        Debug
symbol file for OP-TEE OS → STM32MP15 Discovery kits
│       ├── tee-stm32mp157d-ev1.elf                        Debug
symbol file for OP-TEE OS → STM32MP15 Evaluation boards
│       ├── tee-stm32mp157f-dk2.elf                        Debug
symbol file for OP-TEE OS → STM32MP15 Discovery kits
│       ├── tee-stm32mp157f-ed1.elf                        Debug
symbol file for OP-TEE OS → STM32MP15 Evaluation boards
│       └── tee-stm32mp157f-ev1.elf                        Debug
symbol file for OP-TEE OS → STM32MP15 Evaluation boards
└── u-boot
    └── debug
        ├── u-boot-stm32mp157a-dk1-trusted.elf              Debug
symbol file for U-Boot → STM32MP15 Discovery kits
        ├── u-boot-stm32mp157a-ev1-trusted.elf              Debug
symbol file for U-Boot → STM32MP15 Evaluation boards
        ├── u-boot-stm32mp157c-dk2-trusted.elf              Debug
symbol file for U-Boot → STM32MP15 Discovery kits
        ├── u-boot-stm32mp157c-ed1-trusted.elf              Debug
symbol file for U-Boot → STM32MP15 Evaluation boards
        ├── u-boot-stm32mp157c-ev1-trusted.elf              Debug
symbol file for U-Boot → STM32MP15 Evaluation boards
        ├── u-boot-stm32mp157d-dk1-trusted.elf              Debug
symbol file for U-Boot → STM32MP15 Discovery kits
        ├── u-boot-stm32mp157d-ev1-trusted.elf              Debug
```

```
symbol file for U-Boot → STM32MP15 Evaluation boards
        ├── u-boot-stm32mp157f-dk2-trusted.elf          Debug
symbol file for U-Boot → STM32MP15 Discovery kits
        ├── u-boot-stm32mp157f-ed1-trusted.elf          Debug
symbol file for U-Boot → STM32MP15 Evaluation boards
        └── u-boot-stm32mp157f-ev1-trusted.elf          Debug
symbol file for U-Boot → STM32MP15 Evaluation boards
```

# 2 Archives

This wiki is for the v3 ecosystem releases. For information about the previous ecosystem releases, please go through the Wiki archives.

## 2.1 STM32MP15-Ecosystem-v3.0.0 release

- The STM32MP1 debug symbol files is delivered through a tarball file named **en.DEBUG-stm32mp1-openstlinux-5.10-dunfell-mp1-21-03-31.tar.xz** for STM32MP157x-EV1 and STM32MP157x-DKx boards.
- Download and install the STM32MP1 debug symbol files

*The software package is provided AS IS, and by downloading it, you agree to be bound to the terms of the software license agreement (SLA). The detailed content licenses can be found here.*

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| | **STM32MP1 Developer Package debug symbol files - STM32MP15-Ecosystem-v3.0.0 release** |
|---|---|
| Download | You need to be logged on to *my.st.com* before accessing the following link<br>en.DEBUG-stm32mp1-openstlinux-5.10-dunfell-mp1-21-03-31.tar.xz |
| Installation | • Go to the host PC directory in which you want to install the Developer Package (*<Developer Package installation directory>*); if you follow the proposition to organize the working directory, this means:<br>`PC $> cd <working directory path>/Developer-Package`<br>• Download the tarball file in this directory<br>• Uncompress the tarball file to get the debug symbol files (for Linux kernel, U-Boot, TF-A and OP-TEE OS):<br>`PC $> tar xvf en.DEBUG-stm32mp1-openstlinux-5.10-dunfell-mp1-21-03-31.tar.xz` |
| Release note | If you are interested in older releases, please have a look into the section Archives. |

- The debug symbol files are in the *<Developer Package installation directory>*/stm32mp1-openstlinux-5.10-dunfell-mp1-21-03-31/images/stm32mp1 *directory:*

```
stm32mp1
├── arm-trusted-firmware
│   └── debug
│       ├── tf-a-bl2-emmc.elf                          Debug
symbol file for TF-A → TF-A for emmc boot stage
│       ├── tf-a-bl2-nand.elf                          Debug
symbol file for TF-A → TF-A for nand boot stage
│       ├── tf-a-bl2-nor.elf                         Debug
symbol file for TF-A → TF-A for nor boot stage
│       ├── tf-a-bl2-sdcard.elf                  Debug symbol
file for TF-A → TF-A for SDcard boot stage
│       ├── tf-a-bl2-uart.elf                          Debug
symbol file for TF-A → TF-A for UART downloading boot stage
│       └── tf-a-bl2-usb.elf                         Debug
symbol file for TF-A → TF-A for USB downloading boot stage
├── kernel
│   └── vmlinux                                  Debug symbol
file for Linux kernel
├── optee
│   └── debug
│       ├── tee-stm32mp157a-dk1.elf                  Debug
symbol file for OP-TEE OS → STM32MP15 Discovery kits
│       ├── tee-stm32mp157a-ev1.elf                  Debug
symbol file for OP-TEE OS → STM32MP15 Evaluation boards
│       ├── tee-stm32mp157c-dk2.elf                  Debug
symbol file for OP-TEE OS → STM32MP15 Discovery kits
│       ├── tee-stm32mp157c-ed1.elf                  Debug
symbol file for OP-TEE OS → STM32MP15 Evaluation boards
│       ├── tee-stm32mp157c-ev1.elf                  Debug
symbol file for OP-TEE OS → STM32MP15 Evaluation boards
│       ├── tee-stm32mp157d-dk1.elf                  Debug
symbol file for OP-TEE OS → STM32MP15 Discovery kits
│       ├── tee-stm32mp157d-ev1.elf                  Debug
symbol file for OP-TEE OS → STM32MP15 Evaluation boards
│       ├── tee-stm32mp157f-dk2.elf                  Debug
symbol file for OP-TEE OS → STM32MP15 Discovery kits
│       ├── tee-stm32mp157f-ed1.elf                  Debug
symbol file for OP-TEE OS → STM32MP15 Evaluation boards
│       └── tee-stm32mp157f-ev1.elf                  Debug
symbol file for OP-TEE OS → STM32MP15 Evaluation boards
└── u-boot
    └── debug
        ├── u-boot-stm32mp157a-dk1-trusted.elf         Debug
symbol file for U-Boot → STM32MP15 Discovery kits
        ├── u-boot-stm32mp157a-ev1-trusted.elf         Debug
symbol file for U-Boot → STM32MP15 Evaluation boards
        ├── u-boot-stm32mp157c-dk2-trusted.elf         Debug
symbol file for U-Boot → STM32MP15 Discovery kits
        ├── u-boot-stm32mp157c-ed1-trusted.elf         Debug
symbol file for U-Boot → STM32MP15 Evaluation boards
        ├── u-boot-stm32mp157c-ev1-trusted.elf         Debug
symbol file for U-Boot → STM32MP15 Evaluation boards
        ├── u-boot-stm32mp157d-dk1-trusted.elf         Debug
symbol file for U-Boot → STM32MP15 Discovery kits
        ├── u-boot-stm32mp157d-ev1-trusted.elf         Debug
```

```
symbol file for U-Boot → STM32MP15 Evaluation boards
        ├── u-boot-stm32mp157f-dk2-trusted.elf          Debug
symbol file for U-Boot → STM32MP15 Discovery kits
        ├── u-boot-stm32mp157f-ed1-trusted.elf          Debug
symbol file for U-Boot → STM32MP15 Evaluation boards
        └── u-boot-stm32mp157f-ev1-trusted.elf          Debug
symbol file for U-Boot → STM32MP15 Evaluation boards
```

Das U-Boot -- the Universal Boot Loader (see U-Boot_overview)

Universal Asynchronous Receiver/Transmitter