



STM32MP1 Developer Package - debug symbol files



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A quality version of this page, approved on 17 November 2020, 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-v2.1.0 release

- The STM32MP1 debug symbol files is delivered through a tarball file named **en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-11-12.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](#).

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.
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STM32MP1 Developer Package debug symbol files - STM32MP15-Ecosystem-v2.1.0 release	
Download	You need to be logged on to my.st.com before accessing the following link en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-11-12.tar.xz
Installation	<ul style="list-style-type: none"> Go to the host PC directory in which you want to install the Developer Package (<i><Developer Package installation directory></i>); if you follow the proposition to organize the working directory, this means: <pre style="border: 1px dashed black; padding: 5px;">\$ cd <working directory path>/Developer-Package</pre> <ul style="list-style-type: none"> Download the tarball file in this directory Uncompress the tarball file to get the debug symbol files (for Linux kernel, U-Boot, TF-A and OP-TEE OS): <pre style="border: 1px dashed black; padding: 5px;">PC \$> \$ tar xvf en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-11-12.tar.xz</pre>
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-5-4-dunfell-mp1-20-11-12/images/stm32mp1* directory:

Debug symbol file for TF-A
→ TF-A for OP-TEE boot stage
Debug symbol file for TF-A



```

stm32mp1
├── arm-trusted-firmware
│   ├── tf-a-bl2-optee.elf
│   ├── tf-a-bl2-serialboot.elf
│   ├── tf-a-bl2-trusted.elf
│   ├── tf-a-bl32-serialboot.elf
│   └── tf-a-bl32-trusted.elf
├── bootloader
│   ├── u-boot-stm32mp157a-dk1-optee.elf
│   └── u-boot-stm32mp157a-dk1-trusted.
elf
│   ├── u-boot-stm32mp157a-ev1-optee.elf
│   └── u-boot-stm32mp157a-ev1-trusted.
elf
│   ├── u-boot-stm32mp157c-dk2-optee.elf
│   └── u-boot-stm32mp157c-dk2-trusted.
elf
│   ├── u-boot-stm32mp157c-ev1-optee.elf
│   └── u-boot-stm32mp157c-ev1-trusted.
elf
│   ├── u-boot-stm32mp157d-dk1-optee.elf
│   └── u-boot-stm32mp157d-dk1-trusted.
elf
│   ├── u-boot-stm32mp157d-ev1-optee.elf
│   └── u-boot-stm32mp157d-ev1-trusted.
elf
│   ├── u-boot-stm32mp157f-dk2-optee.elf
│   └── u-boot-stm32mp157f-dk2-trusted.
elf
│   ├── u-boot-stm32mp157f-ev1-optee.elf
│   └── u-boot-stm32mp157f-ev1-trusted.
elf
├── kernel
│   └── vmlinux
└── optee
    ├── tee-stm32mp157a-dk1-optee.elf
    ├── tee-stm32mp157a-ev1-optee.elf
    └── tee-stm32mp157c-dk2-optee.elf
  
```

→ fsbl for flasher
 Debug symbol file for TF-A
 → TF-A for OP-TEE boot stage
 Debug symbol file for TF-A
 → secure monitor for flasher
 Debug symbol file for TF-A
 → runtime software stage

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for U-Boot
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 boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for Linux
 kernel



```
├── tee-stm32mp157c-ev1-optee.elf
├── tee-stm32mp157d-dk1-optee.elf
├── tee-stm32mp157d-ev1-optee.elf
├── tee-stm32mp157f-dk2-optee.elf
└── tee-stm32mp157f-ev1-optee.elf
```

**Debug symbol file for OP-TEE
OS → STM32MP15 Discovery
kits**

**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
boards**

**Debug symbol file for OP-TEE
OS → STM32MP15 Discovery
kits**

**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
boards**

**Debug symbol file for OP-TEE
OS → STM32MP15 Discovery
kits**

**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
boards**

**Debug symbol file for OP-TEE
OS → STM32MP15 Discovery
kits**



**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
boards**



2 Archives

This wiki is for the v2 ecosystem releases. For information about the previous ecosystem releases, please go through the Wiki archives.

2.1 STM32MP15-Ecosystem-v2.0.0 release


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Release note	 If you are interested in older releases, please have a look into the section Archives .

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```

stm32mp1
├── arm-trusted-firmware
│   ├── tf-a-bl2-optee.elf
│   ├── tf-a-bl2-serialboot.elf
│   ├── tf-a-bl2-trusted.elf
│   ├── tf-a-bl32-serialboot.elf
│   └── tf-a-bl32-trusted.elf
├── bootloader
│   ├── u-boot-stm32mp157a-dk1-optee.elf
│   ├── u-boot-stm32mp157a-dk1-trusted.
│   ├── u-boot-stm32mp157a-ev1-optee.elf
│   ├── u-boot-stm32mp157a-ev1-trusted.
│   ├── u-boot-stm32mp157c-dk2-optee.elf
│   ├── u-boot-stm32mp157c-dk2-trusted.
│   ├── u-boot-stm32mp157c-ev1-optee.elf
│   ├── u-boot-stm32mp157c-ev1-trusted.
│   ├── u-boot-stm32mp157d-dk1-optee.elf
│   ├── u-boot-stm32mp157d-dk1-trusted.
│   ├── u-boot-stm32mp157d-ev1-optee.elf
│   ├── u-boot-stm32mp157d-ev1-trusted.
│   ├── u-boot-stm32mp157f-dk2-optee.elf
│   ├── u-boot-stm32mp157f-dk2-trusted.
│   ├── u-boot-stm32mp157f-ev1-optee.elf
│   └── u-boot-stm32mp157f-ev1-trusted.
├── kernel
│   └── vmlinux
└── optee
  
```

Debug symbol file for TF-A
 → TF-A for OP-TEE boot stage
 Debug symbol file for TF-A
 → fsbl for flasher
 Debug symbol file for TF-A
 → TF-A for OP-TEE boot stage
 Debug symbol file for TF-A
 → secure monitor for flasher
 Debug symbol file for TF-A
 → runtime software stage

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

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 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation



tee-stm32mp157a-dk1-optee.elf	Debug symbol file for Linux kernel
tee-stm32mp157a-ev1-optee.elf	
tee-stm32mp157c-dk2-optee.elf	
tee-stm32mp157c-ev1-optee.elf	
tee-stm32mp157d-dk1-optee.elf	Debug symbol file for OP-TEE OS → STM32MP15 Discovery kits
tee-stm32mp157d-ev1-optee.elf	Debug symbol file for OP-TEE OS → STM32MP15 Evaluation boards
tee-stm32mp157f-dk2-optee.elf	Debug symbol file for OP-TEE OS → STM32MP15 Discovery kits
tee-stm32mp157f-ev1-optee.elf	Debug symbol file for OP-TEE OS → STM32MP15 Evaluation boards

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Das U-Boot -- the Universal Boot Loader (see [U-Boot_overview](#))

Trusted Firmware for Arm Cortex-A

Open Portable Trusted Execution Environment

Operating System

Stable: 17.06.2020 - 15:26 / Revision: 16.01.2020 - 13:43

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Debug symbol file for TF-A
 → TF-A for OP-TEE boot stage
Debug symbol file for TF-A



```

stm32mp1
├── arm-trusted-firmware
│   ├── tf-a-bl2-optee.elf
│   ├── tf-a-bl2-serialboot.elf
│   ├── tf-a-bl2-trusted.elf
│   ├── tf-a-bl32-serialboot.elf
│   └── tf-a-bl32-trusted.elf
├── bootloader
│   ├── u-boot-stm32mp157a-dk1-optee.elf
│   └── u-boot-stm32mp157a-dk1-trusted.
elf
│   ├── u-boot-stm32mp157a-ev1-optee.elf
│   └── u-boot-stm32mp157a-ev1-trusted.
elf
│   ├── u-boot-stm32mp157c-dk2-optee.elf
│   └── u-boot-stm32mp157c-dk2-trusted.
elf
│   ├── u-boot-stm32mp157c-ev1-optee.elf
│   └── u-boot-stm32mp157c-ev1-trusted.
elf
│   ├── u-boot-stm32mp157d-dk1-optee.elf
│   └── u-boot-stm32mp157d-dk1-trusted.
elf
│   ├── u-boot-stm32mp157d-ev1-optee.elf
│   └── u-boot-stm32mp157d-ev1-trusted.
elf
│   ├── u-boot-stm32mp157f-dk2-optee.elf
│   └── u-boot-stm32mp157f-dk2-trusted.
elf
│   ├── u-boot-stm32mp157f-ev1-optee.elf
│   └── u-boot-stm32mp157f-ev1-trusted.
elf
├── kernel
│   └── vmlinux
└── optee
    ├── tee-stm32mp157a-dk1-optee.elf
    ├── tee-stm32mp157a-ev1-optee.elf
    └── tee-stm32mp157c-dk2-optee.elf
    
```

→ fsbl for flasher
 Debug symbol file for TF-A
 → TF-A for OP-TEE boot stage
 Debug symbol file for TF-A
 → secure monitor for flasher
 Debug symbol file for TF-A
 → runtime software stage

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards
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Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for Linux
 kernel

Debug symbol file for Linux
 kernel



```
├── tee-stm32mp157c-ev1-optee.elf
├── tee-stm32mp157d-dk1-optee.elf
├── tee-stm32mp157d-ev1-optee.elf
├── tee-stm32mp157f-dk2-optee.elf
└── tee-stm32mp157f-ev1-optee.elf
```

**Debug symbol file for OP-TEE
OS → STM32MP15 Discovery
kits**

**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
boards**

**Debug symbol file for OP-TEE
OS → STM32MP15 Discovery
kits**

**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
boards**

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OS → STM32MP15 Discovery
kits**

**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
boards**

**Debug symbol file for OP-TEE
OS → STM32MP15 Discovery
kits**



**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
boards**



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```

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│   ├── tf-a-bl2-serialboot.elf
│   ├── tf-a-bl2-trusted.elf
│   ├── tf-a-bl32-serialboot.elf
│   └── tf-a-bl32-trusted.elf
├── bootloader
│   ├── u-boot-stm32mp157a-dk1-optee.elf
│   ├── u-boot-stm32mp157a-dk1-trusted.
│   ├── u-boot-stm32mp157a-ev1-optee.elf
│   ├── u-boot-stm32mp157a-ev1-trusted.
│   ├── u-boot-stm32mp157c-dk2-optee.elf
│   ├── u-boot-stm32mp157c-dk2-trusted.
│   ├── u-boot-stm32mp157c-ev1-optee.elf
│   ├── u-boot-stm32mp157c-ev1-trusted.
│   ├── u-boot-stm32mp157d-dk1-optee.elf
│   ├── u-boot-stm32mp157d-dk1-trusted.
│   ├── u-boot-stm32mp157d-ev1-optee.elf
│   ├── u-boot-stm32mp157d-ev1-trusted.
│   ├── u-boot-stm32mp157f-dk2-optee.elf
│   ├── u-boot-stm32mp157f-dk2-trusted.
│   ├── u-boot-stm32mp157f-ev1-optee.elf
│   └── u-boot-stm32mp157f-ev1-trusted.
├── kernel
│   └── vmlinux
└── optee
    
```

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tee-stm32mp157a-dk1-optee.elf	Debug symbol file for Linux kernel
tee-stm32mp157a-ev1-optee.elf	
tee-stm32mp157c-dk2-optee.elf	
tee-stm32mp157c-ev1-optee.elf	
tee-stm32mp157d-dk1-optee.elf	Debug symbol file for OP-TEE OS → STM32MP15 Discovery kits
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Das U-Boot -- the Universal Boot Loader (see [U-Boot_overview](#))

Trusted Firmware for Arm Cortex-A

Open Portable Trusted Execution Environment

Operating System



Pages in category "Developer Package"

The following 3 pages are in this category, out of 3 total.

- [How to cross-compile with the Developer Package](#)
- [STM32MP1 Developer Package](#)
- [STM32MP1 Developer Package for Android](#)

Stable: 16.04.2021 - 10:22 / Revision: 19.01.2021 - 10:30

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



1 STM32MP15-Ecosystem-v2.1.0 release

- The STM32MP1 debug symbol files is delivered through a tarball file named **en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-11-12.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](#).

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-v2.1.0 release	
Download	You need to be logged on to my.st.com before accessing the following link en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-11-12.tar.xz
Installation	<ul style="list-style-type: none"> Go to the host PC directory in which you want to install the Developer Package (<i><Developer Package installation directory></i>); if you follow the proposition to organize the working directory, this means: <pre style="border: 1px dashed black; padding: 5px;">\$ cd <working directory path>/Developer-Package</pre> <ul style="list-style-type: none"> Download the tarball file in this directory Uncompress the tarball file to get the debug symbol files (for Linux kernel, U-Boot, TF-A and OP-TEE OS): <pre style="border: 1px dashed black; padding: 5px;">PC \$> \$ tar xvf en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-11-12.tar.xz</pre>
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-5-4-dunfell-mp1-20-11-12/images/stm32mp1* directory:

Debug symbol file for TF-A
 → TF-A for OP-TEE boot stage
Debug symbol file for TF-A



```

stm32mp1
├── arm-trusted-firmware
│   ├── tf-a-bl2-optee.elf
│   ├── tf-a-bl2-serialboot.elf
│   ├── tf-a-bl2-trusted.elf
│   ├── tf-a-bl32-serialboot.elf
│   └── tf-a-bl32-trusted.elf
├── bootloader
│   ├── u-boot-stm32mp157a-dk1-optee.elf
│   └── u-boot-stm32mp157a-dk1-trusted.
elf
│   ├── u-boot-stm32mp157a-ev1-optee.elf
│   └── u-boot-stm32mp157a-ev1-trusted.
elf
│   ├── u-boot-stm32mp157c-dk2-optee.elf
│   └── u-boot-stm32mp157c-dk2-trusted.
elf
│   ├── u-boot-stm32mp157c-ev1-optee.elf
│   └── u-boot-stm32mp157c-ev1-trusted.
elf
│   ├── u-boot-stm32mp157d-dk1-optee.elf
│   └── u-boot-stm32mp157d-dk1-trusted.
elf
│   ├── u-boot-stm32mp157d-ev1-optee.elf
│   └── u-boot-stm32mp157d-ev1-trusted.
elf
│   ├── u-boot-stm32mp157f-dk2-optee.elf
│   └── u-boot-stm32mp157f-dk2-trusted.
elf
│   ├── u-boot-stm32mp157f-ev1-optee.elf
│   └── u-boot-stm32mp157f-ev1-trusted.
elf
├── kernel
│   └── vmlinux
└── optee
    ├── tee-stm32mp157a-dk1-optee.elf
    ├── tee-stm32mp157a-ev1-optee.elf
    └── tee-stm32mp157c-dk2-optee.elf
  
```

→ fsbl for flasher
 Debug symbol file for TF-A
 → TF-A for OP-TEE boot stage
 Debug symbol file for TF-A
 → secure monitor for flasher
 Debug symbol file for TF-A
 → runtime software stage

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for Linux
 kernel



```
├── tee-stm32mp157c-ev1-optee.elf
├── tee-stm32mp157d-dk1-optee.elf
├── tee-stm32mp157d-ev1-optee.elf
├── tee-stm32mp157f-dk2-optee.elf
└── tee-stm32mp157f-ev1-optee.elf
```

**Debug symbol file for OP-TEE
OS → STM32MP15 Discovery
kits**

**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
boards**

**Debug symbol file for OP-TEE
OS → STM32MP15 Discovery
kits**

**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
boards**

**Debug symbol file for OP-TEE
OS → STM32MP15 Discovery
kits**

**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
boards**

**Debug symbol file for OP-TEE
OS → STM32MP15 Discovery
kits**



**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
boards**



2 Archives

This wiki is for the v2 ecosystem releases. For information about the previous ecosystem releases, please go through the Wiki archives.

2.1 STM32MP15-Ecosystem-v2.0.0 release


- The STM32MP1 debug symbol files is delivered through a tarball file named **en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-06-24.tar.xz** for STM32MP157x-EV1  and STM32MP157x-DKx  boards.
- Download and install the STM32MP1 debug symbol files

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We apologize for this inconvenience

STM32MP1 Developer Package debug symbol files - STM32MP15-Ecosystem-v2.0.0 release	
Download	You need to be logged on to <i>my.st.com</i> before accessing the following link en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-06-24.tar.xz
Installation	<ul style="list-style-type: none"> • Go to the host PC directory in which you want to install the Developer Package (<i><Developer Package installation directory></i>); if you follow the proposition to organize the working directory, this means: <pre>\$ cd <working directory path>/Developer-Package</pre> <ul style="list-style-type: none"> • Download the tarball file in this directory • Uncompress the tarball file to get the debug symbol files (for Linux kernel, U-Boot, TF-A and OP-TEE OS): <pre>PC \$> \$ tar xvf en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-06-24.tar.xz</pre>
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-20-06-24/images /stm32mp1* directory:



```

stm32mp1
├── arm-trusted-firmware
│   ├── tf-a-bl2-optee.elf
│   ├── tf-a-bl2-serialboot.elf
│   ├── tf-a-bl2-trusted.elf
│   ├── tf-a-bl32-serialboot.elf
│   └── tf-a-bl32-trusted.elf
├── bootloader
│   ├── u-boot-stm32mp157a-dk1-optee.elf
│   ├── u-boot-stm32mp157a-dk1-trusted.
│   ├── u-boot-stm32mp157a-ev1-optee.elf
│   ├── u-boot-stm32mp157a-ev1-trusted.
│   ├── u-boot-stm32mp157c-dk2-optee.elf
│   ├── u-boot-stm32mp157c-dk2-trusted.
│   ├── u-boot-stm32mp157c-ev1-optee.elf
│   ├── u-boot-stm32mp157c-ev1-trusted.
│   ├── u-boot-stm32mp157d-dk1-optee.elf
│   ├── u-boot-stm32mp157d-dk1-trusted.
│   ├── u-boot-stm32mp157d-ev1-optee.elf
│   ├── u-boot-stm32mp157d-ev1-trusted.
│   ├── u-boot-stm32mp157f-dk2-optee.elf
│   ├── u-boot-stm32mp157f-dk2-trusted.
│   ├── u-boot-stm32mp157f-ev1-optee.elf
│   └── u-boot-stm32mp157f-ev1-trusted.
├── kernel
│   └── vmlinux
└── optee
  
```

Debug symbol file for TF-A
 → TF-A for OP-TEE boot stage
 Debug symbol file for TF-A
 → fsbl for flasher
 Debug symbol file for TF-A
 → TF-A for OP-TEE boot stage
 Debug symbol file for TF-A
 → secure monitor for flasher
 Debug symbol file for TF-A
 → runtime software stage

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards



tee-stm32mp157a-dk1-optee.elf	Debug symbol file for Linux kernel
tee-stm32mp157a-ev1-optee.elf	
tee-stm32mp157c-dk2-optee.elf	
tee-stm32mp157c-ev1-optee.elf	
tee-stm32mp157d-dk1-optee.elf	Debug symbol file for OP-TEE OS → STM32MP15 Discovery kits
tee-stm32mp157d-ev1-optee.elf	Debug symbol file for OP-TEE OS → STM32MP15 Evaluation boards
tee-stm32mp157f-dk2-optee.elf	Debug symbol file for OP-TEE OS → STM32MP15 Discovery kits
tee-stm32mp157f-ev1-optee.elf	Debug symbol file for OP-TEE OS → STM32MP15 Evaluation boards

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Das U-Boot -- the Universal Boot Loader (see [U-Boot_overview](#))

Trusted Firmware for Arm Cortex-A

Open Portable Trusted Execution Environment

Operating System

Stable: 12.11.2020 - 18:07 / Revision: 10.11.2020 - 17:42

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-v2.1.0 release

- The STM32MP1 debug symbol files is delivered through a tarball file named **en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-11-12.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](#).

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-v2.1.0 release	
Download	You need to be logged on to my.st.com before accessing the following link en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-11-12.tar.xz
Installation	<ul style="list-style-type: none"> Go to the host PC directory in which you want to install the Developer Package (<<i>Developer Package installation directory</i>>); if you follow the proposition to organize the working directory, this means: <pre style="border: 1px dashed black; padding: 5px;">\$ cd <working directory path>/Developer-Package</pre> <ul style="list-style-type: none"> Download the tarball file in this directory Uncompress the tarball file to get the debug symbol files (for Linux kernel, U-Boot, TF-A and OP-TEE OS): <pre style="border: 1px dashed black; padding: 5px;">PC \$> \$ tar xvf en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-11-12.tar.xz</pre>
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-5-4-dunfell-mp1-20-11-12/images/stm32mp1 directory:

Debug symbol file for TF-A
→ TF-A for OP-TEE boot stage
Debug symbol file for TF-A



```

stm32mp1
├── arm-trusted-firmware
│   ├── tf-a-bl2-optee.elf
│   ├── tf-a-bl2-serialboot.elf
│   ├── tf-a-bl2-trusted.elf
│   ├── tf-a-bl32-serialboot.elf
│   └── tf-a-bl32-trusted.elf
├── bootloader
│   ├── u-boot-stm32mp157a-dk1-optee.elf
│   └── u-boot-stm32mp157a-dk1-trusted.
elf
│   ├── u-boot-stm32mp157a-ev1-optee.elf
│   └── u-boot-stm32mp157a-ev1-trusted.
elf
│   ├── u-boot-stm32mp157c-dk2-optee.elf
│   └── u-boot-stm32mp157c-dk2-trusted.
elf
│   ├── u-boot-stm32mp157c-ev1-optee.elf
│   └── u-boot-stm32mp157c-ev1-trusted.
elf
│   ├── u-boot-stm32mp157d-dk1-optee.elf
│   └── u-boot-stm32mp157d-dk1-trusted.
elf
│   ├── u-boot-stm32mp157d-ev1-optee.elf
│   └── u-boot-stm32mp157d-ev1-trusted.
elf
│   ├── u-boot-stm32mp157f-dk2-optee.elf
│   └── u-boot-stm32mp157f-dk2-trusted.
elf
│   ├── u-boot-stm32mp157f-ev1-optee.elf
│   └── u-boot-stm32mp157f-ev1-trusted.
elf
├── kernel
│   └── vmlinux
└── optee
    ├── tee-stm32mp157a-dk1-optee.elf
    ├── tee-stm32mp157a-ev1-optee.elf
    └── tee-stm32mp157c-dk2-optee.elf
  
```

→ fsbl for flasher
 Debug symbol file for TF-A
 → TF-A for OP-TEE boot stage
 Debug symbol file for TF-A
 → secure monitor for flasher
 Debug symbol file for TF-A
 → runtime software stage

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for Linux
 kernel



```
├── tee-stm32mp157c-ev1-optee.elf
├── tee-stm32mp157d-dk1-optee.elf
├── tee-stm32mp157d-ev1-optee.elf
├── tee-stm32mp157f-dk2-optee.elf
└── tee-stm32mp157f-ev1-optee.elf
```

**Debug symbol file for OP-TEE
OS → STM32MP15 Discovery
kits**

**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
boards**

**Debug symbol file for OP-TEE
OS → STM32MP15 Discovery
kits**

**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
boards**

**Debug symbol file for OP-TEE
OS → STM32MP15 Discovery
kits**

**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
boards**

**Debug symbol file for OP-TEE
OS → STM32MP15 Discovery
kits**



**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
boards**



2 Archives

This wiki is for the v2 ecosystem releases. For information about the previous ecosystem releases, please go through the Wiki archives.

2.1 STM32MP15-Ecosystem-v2.0.0 release


- The STM32MP1 debug symbol files is delivered through a tarball file named **en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-06-24.tar.xz** for STM32MP157x-EV1  and STM32MP157x-DKx  boards.
- Download and install the STM32MP1 debug symbol files

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Warning

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We apologize for this inconvenience

STM32MP1 Developer Package debug symbol files - STM32MP15-Ecosystem-v2.0.0 release	
Download	You need to be logged on to <i>my.st.com</i> before accessing the following link en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-06-24.tar.xz
Installation	<ul style="list-style-type: none"> • Go to the host PC directory in which you want to install the Developer Package (<i><Developer Package installation directory></i>); if you follow the proposition to organize the working directory, this means: <pre style="border: 1px dashed gray; padding: 5px;">\$ cd <working directory path>/Developer-Package</pre> <ul style="list-style-type: none"> • Download the tarball file in this directory • Uncompress the tarball file to get the debug symbol files (for Linux kernel, U-Boot, TF-A and OP-TEE OS): <pre style="border: 1px dashed gray; padding: 5px;">PC \$> \$ tar xvf en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-06-24.tar.xz</pre>
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-20-06-24/images /stm32mp1* directory:



```

stm32mp1
├── arm-trusted-firmware
│   ├── tf-a-bl2-optee.elf
│   ├── tf-a-bl2-serialboot.elf
│   ├── tf-a-bl2-trusted.elf
│   ├── tf-a-bl32-serialboot.elf
│   └── tf-a-bl32-trusted.elf
├── bootloader
│   ├── u-boot-stm32mp157a-dk1-optee.elf
│   ├── u-boot-stm32mp157a-dk1-trusted.
│   ├── u-boot-stm32mp157a-ev1-optee.elf
│   ├── u-boot-stm32mp157a-ev1-trusted.
│   ├── u-boot-stm32mp157c-dk2-optee.elf
│   ├── u-boot-stm32mp157c-dk2-trusted.
│   ├── u-boot-stm32mp157c-ev1-optee.elf
│   ├── u-boot-stm32mp157c-ev1-trusted.
│   ├── u-boot-stm32mp157d-dk1-optee.elf
│   ├── u-boot-stm32mp157d-dk1-trusted.
│   ├── u-boot-stm32mp157d-ev1-optee.elf
│   ├── u-boot-stm32mp157d-ev1-trusted.
│   ├── u-boot-stm32mp157f-dk2-optee.elf
│   ├── u-boot-stm32mp157f-dk2-trusted.
│   ├── u-boot-stm32mp157f-ev1-optee.elf
│   └── u-boot-stm32mp157f-ev1-trusted.
├── kernel
│   └── vmlinux
└── optee

```

Debug symbol file for TF-A
 → TF-A for OP-TEE boot stage
 Debug symbol file for TF-A
 → fsbl for flasher
 Debug symbol file for TF-A
 → TF-A for OP-TEE boot stage
 Debug symbol file for TF-A
 → secure monitor for flasher
 Debug symbol file for TF-A
 → runtime software stage

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards



tee-stm32mp157a-dk1-optee.elf	Debug symbol file for Linux kernel
tee-stm32mp157a-ev1-optee.elf	
tee-stm32mp157c-dk2-optee.elf	
tee-stm32mp157c-ev1-optee.elf	
tee-stm32mp157d-dk1-optee.elf	Debug symbol file for OP-TEE OS → STM32MP15 Discovery kits
tee-stm32mp157d-ev1-optee.elf	Debug symbol file for OP-TEE OS → STM32MP15 Evaluation boards
tee-stm32mp157f-dk2-optee.elf	Debug symbol file for OP-TEE OS → STM32MP15 Discovery kits
tee-stm32mp157f-ev1-optee.elf	Debug symbol file for OP-TEE OS → STM32MP15 Evaluation boards

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Das U-Boot -- the Universal Boot Loader (see [U-Boot_overview](#))

Trusted Firmware for Arm Cortex-A

Open Portable Trusted Execution Environment

Operating System

Stable: 17.11.2020 - 16:42 / Revision: 30.10.2020 - 10:34

A quality version of this page, approved on 17 November 2020, 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
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To use this package efficiently, please read the Developer Package article relative to your STM32 microprocessors Series: [Category:Developer Package](#)




1 STM32MP15-Ecosystem-v2.1.0 release

- The STM32MP1 debug symbol files is delivered through a tarball file named **en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-11-12.tar.xz** for STM32MP157x-EV1  and STM32MP157x-DKx  boards.
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STM32MP1 Developer Package debug symbol files - STM32MP15-Ecosystem-v2.1.0 release	
Download	You need to be logged on to my.st.com before accessing the following link en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-11-12.tar.xz
Installation	<ul style="list-style-type: none"> Go to the host PC directory in which you want to install the Developer Package (<i><Developer Package installation directory></i>); if you follow the proposition to organize the working directory, this means: <pre style="border: 1px dashed black; padding: 5px;">\$ cd <working directory path>/Developer-Package</pre> <ul style="list-style-type: none"> Download the tarball file in this directory Uncompress the tarball file to get the debug symbol files (for Linux kernel, U-Boot, TF-A and OP-TEE OS): <pre style="border: 1px dashed black; padding: 5px;">PC \$> \$ tar xvf en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-11-12.tar.xz</pre>
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-5-4-dunfell-mp1-20-11-12/images/stm32mp1* directory:

Debug symbol file for TF-A
→ TF-A for OP-TEE boot stage
Debug symbol file for TF-A



```

stm32mp1
├── arm-trusted-firmware
│   ├── tf-a-bl2-optee.elf
│   ├── tf-a-bl2-serialboot.elf
│   ├── tf-a-bl2-trusted.elf
│   ├── tf-a-bl32-serialboot.elf
│   └── tf-a-bl32-trusted.elf
├── bootloader
│   ├── u-boot-stm32mp157a-dk1-optee.elf
│   └── u-boot-stm32mp157a-dk1-trusted.
elf
│   ├── u-boot-stm32mp157a-ev1-optee.elf
│   └── u-boot-stm32mp157a-ev1-trusted.
elf
│   ├── u-boot-stm32mp157c-dk2-optee.elf
│   └── u-boot-stm32mp157c-dk2-trusted.
elf
│   ├── u-boot-stm32mp157c-ev1-optee.elf
│   └── u-boot-stm32mp157c-ev1-trusted.
elf
│   ├── u-boot-stm32mp157d-dk1-optee.elf
│   └── u-boot-stm32mp157d-dk1-trusted.
elf
│   ├── u-boot-stm32mp157d-ev1-optee.elf
│   └── u-boot-stm32mp157d-ev1-trusted.
elf
│   ├── u-boot-stm32mp157f-dk2-optee.elf
│   └── u-boot-stm32mp157f-dk2-trusted.
elf
│   ├── u-boot-stm32mp157f-ev1-optee.elf
│   └── u-boot-stm32mp157f-ev1-trusted.
elf
├── kernel
│   └── vmlinux
└── optee
    ├── tee-stm32mp157a-dk1-optee.elf
    ├── tee-stm32mp157a-ev1-optee.elf
    └── tee-stm32mp157c-dk2-optee.elf
    
```

→ fsbl for flasher
 Debug symbol file for TF-A
 → TF-A for OP-TEE boot stage
 Debug symbol file for TF-A
 → secure monitor for flasher
 Debug symbol file for TF-A
 → runtime software stage

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards
 Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for Linux
 kernel



```
├── tee-stm32mp157c-ev1-optee.elf
├── tee-stm32mp157d-dk1-optee.elf
├── tee-stm32mp157d-ev1-optee.elf
├── tee-stm32mp157f-dk2-optee.elf
└── tee-stm32mp157f-ev1-optee.elf
```

**Debug symbol file for OP-TEE
OS → STM32MP15 Discovery
kits**

**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
boards**

**Debug symbol file for OP-TEE
OS → STM32MP15 Discovery
kits**

**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
boards**

**Debug symbol file for OP-TEE
OS → STM32MP15 Discovery
kits**

**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
boards**

**Debug symbol file for OP-TEE
OS → STM32MP15 Discovery
kits**



**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
boards**



2 Archives

This wiki is for the v2 ecosystem releases. For information about the previous ecosystem releases, please go through the Wiki archives.

2.1 STM32MP15-Ecosystem-v2.0.0 release


- The STM32MP1 debug symbol files is delivered through a tarball file named **en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-06-24.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](#).

Warning

To download a package, it is recommended to be logged in to your "myst" account [2]. 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-v2.0.0 release	
Download	You need to be logged on to <i>my.st.com</i> before accessing the following link en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-06-24.tar.xz
Installation	<ul style="list-style-type: none"> • Go to the host PC directory in which you want to install the Developer Package (<i><Developer Package installation directory></i>); if you follow the proposition to organize the working directory, this means: <pre style="border: 1px dashed gray; padding: 5px;">\$ cd <working directory path>/Developer-Package</pre> <ul style="list-style-type: none"> • Download the tarball file in this directory • Uncompress the tarball file to get the debug symbol files (for Linux kernel, U-Boot, TF-A and OP-TEE OS): <pre style="border: 1px dashed gray; padding: 5px;">PC \$> \$ tar xvf en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-06-24.tar.xz</pre>
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-20-06-24/images /stm32mp1* directory:



```

stm32mp1
├── arm-trusted-firmware
│   ├── tf-a-bl2-optee.elf
│   ├── tf-a-bl2-serialboot.elf
│   ├── tf-a-bl2-trusted.elf
│   ├── tf-a-bl32-serialboot.elf
│   └── tf-a-bl32-trusted.elf
├── bootloader
│   ├── u-boot-stm32mp157a-dk1-optee.elf
│   ├── u-boot-stm32mp157a-dk1-trusted.
│   ├── u-boot-stm32mp157a-ev1-optee.elf
│   ├── u-boot-stm32mp157a-ev1-trusted.
│   ├── u-boot-stm32mp157c-dk2-optee.elf
│   ├── u-boot-stm32mp157c-dk2-trusted.
│   ├── u-boot-stm32mp157c-ev1-optee.elf
│   ├── u-boot-stm32mp157c-ev1-trusted.
│   ├── u-boot-stm32mp157d-dk1-optee.elf
│   ├── u-boot-stm32mp157d-dk1-trusted.
│   ├── u-boot-stm32mp157d-ev1-optee.elf
│   ├── u-boot-stm32mp157d-ev1-trusted.
│   ├── u-boot-stm32mp157f-dk2-optee.elf
│   ├── u-boot-stm32mp157f-dk2-trusted.
│   ├── u-boot-stm32mp157f-ev1-optee.elf
│   └── u-boot-stm32mp157f-ev1-trusted.
├── kernel
│   └── vmlinux
└── optee
  
```

Debug symbol file for TF-A
 → TF-A for OP-TEE boot stage
 Debug symbol file for TF-A
 → fsbl for flasher
 Debug symbol file for TF-A
 → TF-A for OP-TEE boot stage
 Debug symbol file for TF-A
 → secure monitor for flasher
 Debug symbol file for TF-A
 → runtime software stage

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards



tee-stm32mp157a-dk1-optee.elf	Debug symbol file for Linux kernel
tee-stm32mp157a-ev1-optee.elf	
tee-stm32mp157c-dk2-optee.elf	
tee-stm32mp157c-ev1-optee.elf	
tee-stm32mp157d-dk1-optee.elf	Debug symbol file for OP-TEE OS → STM32MP15 Discovery kits
tee-stm32mp157d-ev1-optee.elf	Debug symbol file for OP-TEE OS → STM32MP15 Evaluation boards
tee-stm32mp157f-dk2-optee.elf	Debug symbol file for OP-TEE OS → STM32MP15 Discovery kits
tee-stm32mp157f-ev1-optee.elf	Debug symbol file for OP-TEE OS → STM32MP15 Evaluation boards

Linux® is a registered trademark of Linus Torvalds.

Das U-Boot -- the Universal Boot Loader (see [U-Boot_overview](#))

Trusted Firmware for Arm Cortex-A

Open Portable Trusted Execution Environment

Operating System

Stable: 01.03.2021 - 10:54 / Revision: 01.03.2021 - 10:53

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-v2.1.0 release

- The STM32MP1 debug symbol files is delivered through a tarball file named **en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-11-12.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](#).

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-v2.1.0 release	
Download	You need to be logged on to my.st.com before accessing the following link en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-11-12.tar.xz
Installation	<ul style="list-style-type: none"> Go to the host PC directory in which you want to install the Developer Package (<i><Developer Package installation directory></i>); if you follow the proposition to organize the working directory, this means: <pre style="border: 1px dashed black; padding: 5px;">\$ cd <working directory path>/Developer-Package</pre> <ul style="list-style-type: none"> Download the tarball file in this directory Uncompress the tarball file to get the debug symbol files (for Linux kernel, U-Boot, TF-A and OP-TEE OS): <pre style="border: 1px dashed black; padding: 5px;">PC \$> \$ tar xvf en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-11-12.tar.xz</pre>
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-5-4-dunfell-mp1-20-11-12/images/stm32mp1* directory:

Debug symbol file for TF-A
 → TF-A for OP-TEE boot stage
Debug symbol file for TF-A



```

stm32mp1
├── arm-trusted-firmware
│   ├── tf-a-bl2-optee.elf
│   ├── tf-a-bl2-serialboot.elf
│   ├── tf-a-bl2-trusted.elf
│   ├── tf-a-bl32-serialboot.elf
│   └── tf-a-bl32-trusted.elf
├── bootloader
│   ├── u-boot-stm32mp157a-dk1-optee.elf
│   └── u-boot-stm32mp157a-dk1-trusted.
elf
│   ├── u-boot-stm32mp157a-ev1-optee.elf
│   └── u-boot-stm32mp157a-ev1-trusted.
elf
│   ├── u-boot-stm32mp157c-dk2-optee.elf
│   └── u-boot-stm32mp157c-dk2-trusted.
elf
│   ├── u-boot-stm32mp157c-ev1-optee.elf
│   └── u-boot-stm32mp157c-ev1-trusted.
elf
│   ├── u-boot-stm32mp157d-dk1-optee.elf
│   └── u-boot-stm32mp157d-dk1-trusted.
elf
│   ├── u-boot-stm32mp157d-ev1-optee.elf
│   └── u-boot-stm32mp157d-ev1-trusted.
elf
│   ├── u-boot-stm32mp157f-dk2-optee.elf
│   └── u-boot-stm32mp157f-dk2-trusted.
elf
│   ├── u-boot-stm32mp157f-ev1-optee.elf
│   └── u-boot-stm32mp157f-ev1-trusted.
elf
├── kernel
│   └── vmlinux
└── optee
    ├── tee-stm32mp157a-dk1-optee.elf
    ├── tee-stm32mp157a-ev1-optee.elf
    └── tee-stm32mp157c-dk2-optee.elf
    
```

→ fsbl for flasher
 Debug symbol file for TF-A
 → TF-A for OP-TEE boot stage
 Debug symbol file for TF-A
 → secure monitor for flasher
 Debug symbol file for TF-A
 → runtime software stage

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards
 Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for Linux
 kernel



```
├── tee-stm32mp157c-ev1-optee.elf
├── tee-stm32mp157d-dk1-optee.elf
├── tee-stm32mp157d-ev1-optee.elf
├── tee-stm32mp157f-dk2-optee.elf
└── tee-stm32mp157f-ev1-optee.elf
```

**Debug symbol file for OP-TEE
OS → STM32MP15 Discovery
kits**

**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
boards**

**Debug symbol file for OP-TEE
OS → STM32MP15 Discovery
kits**

**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
boards**

**Debug symbol file for OP-TEE
OS → STM32MP15 Discovery
kits**

**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
boards**

**Debug symbol file for OP-TEE
OS → STM32MP15 Discovery
kits**



**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
boards**



2 Archives

This wiki is for the v2 ecosystem releases. For information about the previous ecosystem releases, please go through the Wiki archives.

2.1 STM32MP15-Ecosystem-v2.0.0 release


- The STM32MP1 debug symbol files is delivered through a tarball file named **en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-06-24.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](#).

Warning

To download a package, it is recommended to be logged in to your "myst" account [2]. 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-v2.0.0 release	
Download	You need to be logged on to <i>my.st.com</i> before accessing the following link en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-06-24.tar.xz
Installation	<ul style="list-style-type: none"> • Go to the host PC directory in which you want to install the Developer Package (<i><Developer Package installation directory></i>); if you follow the proposition to organize the working directory, this means: <pre style="border: 1px dashed gray; padding: 5px;">\$ cd <working directory path>/Developer-Package</pre> <ul style="list-style-type: none"> • Download the tarball file in this directory • Uncompress the tarball file to get the debug symbol files (for Linux kernel, U-Boot, TF-A and OP-TEE OS): <pre style="border: 1px dashed gray; padding: 5px;">PC \$> \$ tar xvf en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-06-24.tar.xz</pre>
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-20-06-24/images /stm32mp1* directory:



```

stm32mp1
├── arm-trusted-firmware
│   ├── tf-a-bl2-optee.elf
│   ├── tf-a-bl2-serialboot.elf
│   ├── tf-a-bl2-trusted.elf
│   ├── tf-a-bl32-serialboot.elf
│   └── tf-a-bl32-trusted.elf
├── bootloader
│   ├── u-boot-stm32mp157a-dk1-optee.elf
│   ├── u-boot-stm32mp157a-dk1-trusted.
│   ├── u-boot-stm32mp157a-ev1-optee.elf
│   ├── u-boot-stm32mp157a-ev1-trusted.
│   ├── u-boot-stm32mp157c-dk2-optee.elf
│   ├── u-boot-stm32mp157c-dk2-trusted.
│   ├── u-boot-stm32mp157c-ev1-optee.elf
│   ├── u-boot-stm32mp157c-ev1-trusted.
│   ├── u-boot-stm32mp157d-dk1-optee.elf
│   ├── u-boot-stm32mp157d-dk1-trusted.
│   ├── u-boot-stm32mp157d-ev1-optee.elf
│   ├── u-boot-stm32mp157d-ev1-trusted.
│   ├── u-boot-stm32mp157f-dk2-optee.elf
│   ├── u-boot-stm32mp157f-dk2-trusted.
│   ├── u-boot-stm32mp157f-ev1-optee.elf
│   └── u-boot-stm32mp157f-ev1-trusted.
├── kernel
│   └── vmlinux
└── optee
  
```

Debug symbol file for TF-A
 → TF-A for OP-TEE boot stage
 Debug symbol file for TF-A
 → fsbl for flasher
 Debug symbol file for TF-A
 → TF-A for OP-TEE boot stage
 Debug symbol file for TF-A
 → secure monitor for flasher
 Debug symbol file for TF-A
 → runtime software stage

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards
 Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards
 Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards



tee-stm32mp157a-dk1-optee.elf	Debug symbol file for Linux kernel
tee-stm32mp157a-ev1-optee.elf	
tee-stm32mp157c-dk2-optee.elf	
tee-stm32mp157c-ev1-optee.elf	
tee-stm32mp157d-dk1-optee.elf	Debug symbol file for OP-TEE OS → STM32MP15 Discovery kits
tee-stm32mp157d-ev1-optee.elf	Debug symbol file for OP-TEE OS → STM32MP15 Evaluation boards
tee-stm32mp157f-dk2-optee.elf	Debug symbol file for OP-TEE OS → STM32MP15 Discovery kits
tee-stm32mp157f-ev1-optee.elf	Debug symbol file for OP-TEE OS → STM32MP15 Evaluation boards

Linux® is a registered trademark of Linus Torvalds.

Das U-Boot -- the Universal Boot Loader (see [U-Boot_overview](#))

Trusted Firmware for Arm Cortex-A

Open Portable Trusted Execution Environment

Operating System

Stable: 08.12.2020 - 17:10 / Revision: 08.12.2020 - 09:16

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-v2.1.0 release

- The STM32MP1 debug symbol files is delivered through a tarball file named **en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-11-12.tar.xz** for STM32MP157x-EV1  and STM32MP157x-DKx  boards.
- Download and install the STM32MP1 debug symbol files

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Warning

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We apologize for this inconvenience

STM32MP1 Developer Package debug symbol files - STM32MP15-Ecosystem-v2.1.0 release	
Download	You need to be logged on to my.st.com before accessing the following link en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-11-12.tar.xz
Installation	<ul style="list-style-type: none"> Go to the host PC directory in which you want to install the Developer Package (<i><Developer Package installation directory></i>); if you follow the proposition to organize the working directory, this means: <pre style="border: 1px dashed black; padding: 5px;">\$ cd <working directory path>/Developer-Package</pre> <ul style="list-style-type: none"> Download the tarball file in this directory Uncompress the tarball file to get the debug symbol files (for Linux kernel, U-Boot, TF-A and OP-TEE OS): <pre style="border: 1px dashed black; padding: 5px;">PC \$> \$ tar xvf en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-11-12.tar.xz</pre>
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-5-4-dunfell-mp1-20-11-12/images/stm32mp1* directory:

Debug symbol file for TF-A
→ TF-A for OP-TEE boot stage
Debug symbol file for TF-A



```

stm32mp1
├── arm-trusted-firmware
│   ├── tf-a-bl2-optee.elf
│   ├── tf-a-bl2-serialboot.elf
│   ├── tf-a-bl2-trusted.elf
│   ├── tf-a-bl32-serialboot.elf
│   └── tf-a-bl32-trusted.elf
├── bootloader
│   ├── u-boot-stm32mp157a-dk1-optee.elf
│   └── u-boot-stm32mp157a-dk1-trusted.
elf
│   ├── u-boot-stm32mp157a-ev1-optee.elf
│   └── u-boot-stm32mp157a-ev1-trusted.
elf
│   ├── u-boot-stm32mp157c-dk2-optee.elf
│   └── u-boot-stm32mp157c-dk2-trusted.
elf
│   ├── u-boot-stm32mp157c-ev1-optee.elf
│   └── u-boot-stm32mp157c-ev1-trusted.
elf
│   ├── u-boot-stm32mp157d-dk1-optee.elf
│   └── u-boot-stm32mp157d-dk1-trusted.
elf
│   ├── u-boot-stm32mp157d-ev1-optee.elf
│   └── u-boot-stm32mp157d-ev1-trusted.
elf
│   ├── u-boot-stm32mp157f-dk2-optee.elf
│   └── u-boot-stm32mp157f-dk2-trusted.
elf
│   ├── u-boot-stm32mp157f-ev1-optee.elf
│   └── u-boot-stm32mp157f-ev1-trusted.
elf
├── kernel
│   └── vmlinux
└── optee
    ├── tee-stm32mp157a-dk1-optee.elf
    ├── tee-stm32mp157a-ev1-optee.elf
    └── tee-stm32mp157c-dk2-optee.elf
  
```

→ fsbl for flasher
 Debug symbol file for TF-A
 → TF-A for OP-TEE boot stage
 Debug symbol file for TF-A
 → secure monitor for flasher
 Debug symbol file for TF-A
 → runtime software stage

Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Discovery kits
 Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
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Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

Debug symbol file for U-Boot
 → STM32MP15 Evaluation
 boards

boards

Debug symbol file for Linux
 kernel



```
├── tee-stm32mp157c-ev1-optee.elf
├── tee-stm32mp157d-dk1-optee.elf
├── tee-stm32mp157d-ev1-optee.elf
├── tee-stm32mp157f-dk2-optee.elf
└── tee-stm32mp157f-ev1-optee.elf
```

**Debug symbol file for OP-TEE
OS → STM32MP15 Discovery
kits**

**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
boards**

**Debug symbol file for OP-TEE
OS → STM32MP15 Discovery
kits**

**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
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kits**

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OS → STM32MP15 Evaluation
boards**

**Debug symbol file for OP-TEE
OS → STM32MP15 Discovery
kits**



**Debug symbol file for OP-TEE
OS → STM32MP15 Evaluation
boards**



2 Archives

This wiki is for the v2 ecosystem releases. For information about the previous ecosystem releases, please go through the Wiki archives.

2.1 STM32MP15-Ecosystem-v2.0.0 release


- The STM32MP1 debug symbol files is delivered through a tarball file named **en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-06-24.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](#).

Warning

To download a package, it is recommended to be logged in to your "myst" account [2]. 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-v2.0.0 release	
Download	You need to be logged on to <i>my.st.com</i> before accessing the following link en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-06-24.tar.xz
Installation	<ul style="list-style-type: none"> • Go to the host PC directory in which you want to install the Developer Package (<i><Developer Package installation directory></i>); if you follow the proposition to organize the working directory, this means: <pre style="border: 1px dashed gray; padding: 5px; margin: 5px 0;">\$ cd <working directory path>/Developer-Package</pre> <ul style="list-style-type: none"> • Download the tarball file in this directory • Uncompress the tarball file to get the debug symbol files (for Linux kernel, U-Boot, TF-A and OP-TEE OS): <pre style="border: 1px dashed gray; padding: 5px; margin: 5px 0;">PC \$> \$ tar xvf en.DEBUG-stm32mp1-openstlinux-5-4-dunfell-mp1-20-06-24.tar.xz</pre>
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-20-06-24/images /stm32mp1* directory:



```

stm32mp1
├── arm-trusted-firmware
│   ├── tf-a-bl2-optee.elf
│   ├── tf-a-bl2-serialboot.elf
│   ├── tf-a-bl2-trusted.elf
│   ├── tf-a-bl32-serialboot.elf
│   └── tf-a-bl32-trusted.elf
├── bootloader
│   ├── u-boot-stm32mp157a-dk1-optee.elf
│   ├── u-boot-stm32mp157a-dk1-trusted.
│   ├── u-boot-stm32mp157a-ev1-optee.elf
│   ├── u-boot-stm32mp157a-ev1-trusted.
│   ├── u-boot-stm32mp157c-dk2-optee.elf
│   ├── u-boot-stm32mp157c-dk2-trusted.
│   ├── u-boot-stm32mp157c-ev1-optee.elf
│   ├── u-boot-stm32mp157c-ev1-trusted.
│   ├── u-boot-stm32mp157d-dk1-optee.elf
│   ├── u-boot-stm32mp157d-dk1-trusted.
│   ├── u-boot-stm32mp157d-ev1-optee.elf
│   ├── u-boot-stm32mp157d-ev1-trusted.
│   ├── u-boot-stm32mp157f-dk2-optee.elf
│   ├── u-boot-stm32mp157f-dk2-trusted.
│   ├── u-boot-stm32mp157f-ev1-optee.elf
│   └── u-boot-stm32mp157f-ev1-trusted.
├── kernel
│   └── vmlinux
└── optee
  
```

Debug symbol file for TF-A
 → TF-A for OP-TEE boot stage
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boards

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Debug symbol file for U-Boot
 → STM32MP15 Discovery kits

Debug symbol file for U-Boot
 → STM32MP15 Evaluation

boards



tee-stm32mp157a-dk1-optee.elf	Debug symbol file for Linux kernel
tee-stm32mp157a-ev1-optee.elf	
tee-stm32mp157c-dk2-optee.elf	
tee-stm32mp157c-ev1-optee.elf	
tee-stm32mp157d-dk1-optee.elf	Debug symbol file for OP-TEE OS → STM32MP15 Discovery kits
tee-stm32mp157d-ev1-optee.elf	Debug symbol file for OP-TEE OS → STM32MP15 Evaluation boards
tee-stm32mp157f-dk2-optee.elf	Debug symbol file for OP-TEE OS → STM32MP15 Discovery kits
tee-stm32mp157f-ev1-optee.elf	Debug symbol file for OP-TEE OS → STM32MP15 Evaluation boards

Linux® is a registered trademark of Linus Torvalds.

Das U-Boot -- the Universal Boot Loader (see [U-Boot_overview](#))

Trusted Firmware for Arm Cortex-A

Open Portable Trusted Execution Environment

Operating System