

Software Release Notes

*USB Power Delivery Software Framework (PSF)*

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| Microchip Technology, Inc. | | | Microchip Technology, Incorporated  2355 W. Chandler Boulevard  Chandler, Arizona 85224  480/792-7416 |
| REV | DATE | ORIGINATOR | DESCRIPTION OF CHANGE |
| 0.8 | June 29, 2019 | Poornima | Initial version of PSF release for design completion |
| 0.81 | July 26, 2019 | Muthukumar | Internal release for PSF\_Config.h documentation |
| 0.82 | Aug 21, 2019 | Muthukumar | Internal release for PSF\_Port.h 50% completion |
| 0.83 | Sep 13, 2019 | Muthukumar | Internal release for Harmony Integration and PSF\_Port.h 100% completion |
| 0.9 | Oct 24, 2019 | Muthukumar | First Web release |

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# Introduction

|  |  |
| --- | --- |
| Component Type | Software Stack Package |
| **Target Silicon** | SAMD20 + UPD350 |
| **Where can an end user see the version number** | Version number appended with filename //depot\_dsg/PSF/Source/UPD350\_PSF\_Stack\_Package/PSF\_Stack/include/ProjectVersion.h |

USB Power Delivery Software Framework (PSF) – a software-based Power Delivery stack along with UPD350 Type -c Port Controller (Maverick) is a USB-PD solution. It is a generic user-friendly stack that can be ported across various hardware platform.

# Release notes

## Version 0.90

|  |  |
| --- | --- |
| Release date | 24-Oct-2019 |
| **Release Type** | Web release |
| **Pre-requisites (if any)** | **UNG8222 -Hades Platform with UNG 8122 Rev D PM-PD configured for 1-Hot** |
| **Source code path** | //depot\_dsg/PSF/PSF/ |
| **Source code label / branch & perforce change list number** | **Label:** PSF\_STACK\_V0.90  **Changelist:** 178665 |
| **Software Requirements Specification (SRS) Path and Revision Number** | //depot\_dsg/PSF/Project\_Management/Requirement/Open Sourcing PSF phase I requirement.docx Rev:1.0  //depot\_dsg/PSF/Project\_Management/System Dos/Release/PSF Systems DOS v1.0\_REVIEW\_CANDIDATE.pdf |
| **Software Design Document (SDD) Path and Revision Number** | //depot\_dsg/PSF/ Project\_Management /Design/Modular Design/PIO configuration management modular Design.docx Rev0.1  //depot\_dsg/PSF/ Project\_Management /Design/Modular Design/Power supply management design changes from Zeus.docx Rev0.1  //depot\_hw\_amazon/doc/design/Zeus Stack Firmware Design.docx Rev1.1 |
| **Software Developer Test Plan (SDTP) Path and Revision Number** | //depot\_dsg/PSF/Project\_Management/Developer\_Test\_Plan/  PSF\_Developer\_Test\_Plan.xlsm Rev 1.0 |
| **Software Requirements Tracker (SRT) Path and Revision Number** | NA as the release is design completion release |

|  |  |
| --- | --- |
| **Hex Name** | **Hardware Platform** |
| PSF\_Hades\_Source\_V0.90.hex | USB PD Software Framework(PSF) Hades EVB |

### Not implemented / Limited functionality requirements

1. PSF-7 - HiByte has potential error
2. PSF-21 - VBUS Power fault handling not working
3. PSF-22 - VOCNN OCS handling not working
4. PSF-23 - PD Negotiation Fails when PDOs are Configured more than 5 with certain values

### Bug Fixes

1. PSF-6 - Compilation error with XC32 compiler
2. PSF-8 - Port enable and disable logic isn’t working as expected
3. PSF-19 FW has build issue when CONFIG\_PD\_PORT\_COUNT set to 1
4. PSF-17 Hooks for UPD interface (SPI/I2C) to be modified to accommodate I2C

### Features added

NA

### Notes

1. Stack directory structure is modified
2. Developer tested release

## Version 0.83

|  |  |
| --- | --- |
| Release date | 13-Sep-2019 |
| **Release Type** | Temp release |
| **Pre-requisites (if any)** | **Applicable for platform with SAMD2016E + UPD350 B Silicon** |
| **Source code path** | //depot\_dsg/PSF/Source/ |
| **Source code label / branch & perforce change list number** | **Label:** PSF\_STACK\_V0.83  **Changelist:** 1757280 |
| **Software Requirements Specification (SRS) Path and Revision Number** | //depot\_dsg/PSF/Doc/Requirement/Open Sourcing PSF v2.0 requirement.docx Rev:1.0  //depot\_dsg/PSF/Doc/System Dos/Release/PSF Systems DOS v0.3.pdf |
| **Software Design Document (SDD) Path and Revision Number** | //depot\_dsg/PSF/Doc/Design/Modular Design/PIO configuration management modular Design.docx Rev0.1  //depot\_dsg/PSF/Doc/Design/Modular Design/Power supply management design changes from Zeus.docx Rev0.1  //depot\_hw\_amazon/doc/design/Zeus Stack Firmware Design.docx Rev1.1 |
| **Software Developer Test Plan (SDTP) Path and Revision Number** | NA as the release is design completion release |
| **Software Requirements Tracker (SRT) Path and Revision Number** | NA as the release is design completion release |

|  |  |
| --- | --- |
| **Hex Name** | **Hardware Platform** |
| PSF\_Amazon\_Platform\_SourceOnly\_V0.83.hex | UPD301 – Amazon (Port-2 Alone) |
| PSF\_Hades\_SourceOnly\_V0.83.hex | UNG8222 – Hades (Port-1 and Port-2) |

### Not implemented / Limited functionality requirements

1. PSF-7 - HiByte has potential error
2. PSF-6 - Compilation error with XC32 compiler
3. PSF-8 - Port enable and disable logic isnt working as expected

### Bug Fixes

NA

### Features added

1. Harmony Integration with PSF Stack

### Notes

1. Policy Manager, Policy Engine and Protocol Layer module files are reviewed and updated
2. 100% completion of PSF\_Port.h file.
3. Developer Test Plan completion.

## Version 0.82

|  |  |
| --- | --- |
| Release date | 21-Aug-2019 |
| **Release Type** | Temp release |
| **Pre-requisites (if any)** | **Applicable for platform with SAMD2016E + UPD350 B Silicon** |
| **Source code path** | //depot\_dsg/PSF/Source/ |
| **Source code label / branch & perforce change list number** | **Label:** PSF\_STACK\_V0.82  **Changelist:** 1750611 |
| **Software Requirements Specification (SRS) Path and Revision Number** | //depot\_dsg/PSF/Doc/Requirement/Open Sourcing PSF v2.0 requirement.docx Rev:1.0  //depot\_dsg/PSF/Doc/System Dos/Release/PSF Systems DOS v0.3.pdf |
| **Software Design Document (SDD) Path and Revision Number** | //depot\_dsg/PSF/Doc/Design/Modular Design/PIO configuration management modular Design.docx Rev0.1  //depot\_dsg/PSF/Doc/Design/Modular Design/Power supply management design changes from Zeus.docx Rev0.1  //depot\_hw\_amazon/doc/design/Zeus Stack Firmware Design.docx Rev1.1 |
| **Software Developer Test Plan (SDTP) Path and Revision Number** | NA as the release is design completion release |
| **Software Requirements Tracker (SRT) Path and Revision Number** | NA as the release is design completion release |

### Not implemented / Limited functionality requirements

NA

### Bug Fixes

1. PSF-5 - Port-1 is not working in v0.81 FW

### Features added

NA

### Notes

1. MCU Idle – SOC and Stack Partition is done.
2. 50% completion of PSF\_Port.h file.
3. Globals, UPDHw and Timers module files are reviewed and updated.
4. SAMD20 MCU Module files are reviewed.

## Version 0.81

|  |  |
| --- | --- |
| Release date | 26-Jul-2019 |
| **Release Type** | Temp release |
| **Pre-requisites (if any)** | **Applicable for platform with SAMD2016E + UPD350 B Silicon** |
| **Source code path** | //depot\_dsg/PSF/Source/ |
| **Source code label / branch & perforce change list number** | **Label:** PSF\_STACK\_V0.81  **Changelist:** |
| **Software Requirements Specification (SRS) Path and Revision Number** | //depot\_dsg/PSF/Doc/Requirement/Open Sourcing PSF v2.0 requirement.docx Rev:1.0  //depot\_dsg/PSF/Doc/System Dos/Release/PSF Systems DOS v0.3.pdf |
| **Software Design Document (SDD) Path and Revision Number** | //depot\_dsg/PSF/Doc/Design/Modular Design/PIO configuration management modular Design.docx Rev0.1  //depot\_dsg/PSF/Doc/Design/Modular Design/Power supply management design changes from Zeus.docx Rev0.1  //depot\_hw\_amazon/doc/design/Zeus Stack Firmware Design.docx Rev1.1 |
| **Software Developer Test Plan (SDTP) Path and Revision Number** | NA as the release is design completion release |
| **Software Requirements Tracker (SRT) Path and Revision Number** | NA as the release is design completion release |

### Not implemented / Limited functionality requirements

NA

### Bug Fixes

NA

### Features added

1. Documentation “PSF Stack Configuration.pdf” to configure PSF stack.

### Notes

1. Depository restructured for SAMD20 MCU files

### Known Limitations

NA

**Jira Filter Used:**

**Date:**

|  |  |  |  |
| --- | --- | --- | --- |
| Bug ID | Summary / Description | Priority | Notes |
|  |  |  |  |
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|  |  |  |  |

## Version 0.8

|  |  |
| --- | --- |
| Release date | 29-June-2019 |
| **Release Type** | Alpha |
| **Pre-requisites (if any)** | **Applicable for platform with SAMD2016E + UPD350 B Silicon** |
| **Source code path** | //depot\_dsg/PSF/Source/ |
| **Source code label / branch & perforce change list number** | **Label:** PSF\_STACK\_V0.8  **Changelist:** 1740390 |
| **Software Requirements Specification (SRS) Path and Revision Number** | //depot\_dsg/PSF/Doc/Requirement/Open Sourcing PSF v2.0 requirement.docx  Rev:1.0  //depot\_dsg/PSF/Doc/System Dos/Release/PSF Systems DOS v0.3.pdf |
| **Software Design Document (SDD) Path and Revision Number** | //depot\_dsg/PSF/Doc/Design/Modular Design/PIO configuration management modular Design.docx Rev0.1  //depot\_dsg/PSF/Doc/Design/Modular Design/Power supply management modular Design.docx Rev0.1  //depot\_hw\_amazon/doc/design/Zeus Stack Firmware Design.docx Rev1.1 |
| **Software Developer Test Plan (SDTP) Path and Revision Number** | NA as the release is design completion release |
| **Software Requirements Tracker (SRT) Path and Revision Number** | NA as the release is design completion release |

### Not implemented / Limited functionality requirements

This release is not applicable for PSF intended Hardware platform Hades.

### Bug Fixes

NA as it is initial release

### Features added

* Two port source-only operation demonstrable on FDB2(UNG 8165) – UPD301 Platform
* PIO configurability as per PSF V0.3 system DOS
* Power supply manager design approach changes
* PIO override support

### Notes

This release is marking the design completion of PSF as per V0.3 PSF system DOS