



Software Release Notes USB Power Delivery Software Framework (PSF)

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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
0.90	Oct 24, 2019	Muthukumar	First Web release
0.91	Nov 11,2019	Poornima	Bug fix release
0.92	Dec 12, 2019	Poornima	Documentation release
0.95	Jan 09, 2020	Ram Ganesh	Release with complete documentation and Bug fix
1.00	Feb 26, 2020	Ishwarya A	PD Source only feature complete release with bug fixes
1.01	Mar 19,2020	Ram Ganesh	Phase 2 Alpha release

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1 Introduction

Component Type	Software Stack Package
Target Silicon	SAMD20 + UPD350
Where can an end	Version number appended with filename
user see the version	https://bitbucket.microchip.com/projects/UNG_APPS/repos/usb-
number	pd-software-framework-
	<pre>public/browse/PSF/PSF/Source/include/ProjectVersion.h</pre>

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.

2 Release notes

2.1 Version 1.01

Release date	19-Mar-2020
Release Type	PSF Phase 2 Alpha release
Pre-requisites (if any)	UNG8222 – PSF-EVB with
	UNG 8122 Rev D PM-PD configured for 1-Hot or
	MPQ4230 Monolithic PM-PD
Source code path	https://bitbucket.microchip.com/projects/UNG_APPS/repos/us
	<u>b-pd-software-framework-</u>
	<pre>public/browse?at=refs%2Fheads%2FPSF_v1.01_Release</pre>
Source Tag and Bit Bucket	Tag: PSF_STACK_V1.01
commit	Commit: 1ab5ccc4f9e
Software Requirements	https://bitbucket.microchip.com/projects/UNG_APPS/repos/us
Specification (SRS) Path and	<u>b-pd-software-framework-</u>
Revision Number	private/browse/PSF/Project_Management/Requirement/Open
	%20Sourcing%20PSF%20phase%20I%20requirement.docx
	Rev1.0
	https://bitbucket.microchip.com/projects/UNG_APPS/repos/us
	<u>b-pd-software-framework-</u>
	private/browse/PSF/Project_Management/System%20Dos/Rel
	ease/PSF%20Systems%20DOS%20v1_1.pdf Rev 1.1
Software Design Document (SDD)	https://bitbucket.microchip.com/projects/UNG_APPS/repos/us
Path and Revision Number	b-pd-software-framework-
	private/browse/PSF/Project_Management/Design/Modular%20
	Design/PIO%20configuration%20management%20modular%2
	0Design.docx Rev0.1
	https://bitbucket.microchip.com/projects/UNG_APPS/repos/us
	b-pd-software-framework-
	private/browse/PSF/Project_Management/Design/Modular%20
	Design/Power%20supply%20management%20design%20chan
	ges%20from%20Zeus.docx Rev0.1

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	//depot_hw_amazon/doc/design/Zeus Stack Firmware
	Design.docx Rev1.1
	https://bitbucket.microchip.com/projects/UNG_APPS/repos/us
	b-pd-software-framework-
	private/browse/PSF/Project_Management/Design/Modular%20
	Design/PPM%20Notification%2C%20Status%20%26%20Clie
	nt%20Request%20FW%20Design.docx Rev 0.1
	https://bitbucket.microchip.com/projects/UNG_APPS/repos/us
	b-pd-software-framework-
	private/browse/PSF/Project_Management/Design/Modular%20
	Design/PSF%20Power%20Balancing%20Firmware%20Desig
	n.docx Rev 0.1
	https://bitbucket.microchip.com/projects/UNG_APPS/repos/us
	b-pd-software-framework-
	private/browse/PSF/Project_Management/Design/Modular%20
	Design/Status%20and%20Control%20Registers.docx Rev 0.1
Software Developer Test Plan	https://bitbucket.microchip.com/projects/UNG_APPS/repos/us
(SDTP) Path and Revision	<u>b-pd-software-framework-</u>
Number	private/browse/PSF/Project_Management/Developer_Test_Pla
	n/PSF_Developer_Test_Plan.xlsm Rev 1.0
Software Requirements Tracker	NA for PSF
(SRT) Path and Revision Number	
(SK1) I atil and Kevision I amber	

Hex Name	Hardware Platform
PSF_EVB_Source_Lite_V1.01.hex	USB PD Software Framework(PSF) EVB with
	UNG 8122 Rev D PM-PD configured for 1-Hot
PSF_EVB_Source_Pro_V1.01.hex	USB PD Software Framework(PSF) EVB with
	MPQ4230 Monolithic I2C PMPD

2.1.1 Not implemented / Limited functionality requirements

- 1. PSF-44: TDA 2.3.1.1 Source Dynamic Load Test, Provider or Provider/Consumer Test Fails when PUT is configured as Source.
- 2. PSF-85: Ellisys Compliance fails with MPQ4230 I2C DC/DC Converter when INCLUDE_POWER_MANAGEMENT_CTRL = 1
- 3. PSF-86: VBUS drop observed during Voltage transitions when the sink load is higher
- 4. PSF-89: No activity seen on Port 2 when MPQ I2C DC/DC controller is used with PSF
- 5. PSF-90: Continuous PD re-negotiation when number of source PDOs is 7
- 6. PSF-91: Build failure when INCLUDE_UPD_PIO_OVERRIDE_SUPPORT is set to 0
- 7. PSF-88: u16PortIntMask and u16PortStatusChange of Status registers need to be implemented.

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2.1.2 Bug Fixes

- 1. PSF-70: "Data" Configurable Parameter cannot be Configured to Other Options mentioned in the System DOS Bits 8:6 of u32CfgData in PORT_CFG_STATUS structure holds the option to configure USB Data parameters.
- 2. PSF-71: PSF feedback for porting to 16-bit MCU Suggested type casts are taken care and a new Hook function is introduced for enable/disable of DC_DC_EN.
- 3. PSF-82: tVCONNSourceOn timer value exceeds the Max Limit given in USB PD Specification VCONN On and Off timer values are updated as per the PD Specification.
- 4. PSF-87: Handle Unexpected message when Sink capabilities message is received in wrong PE State Unexpected message handling is fixed by sending soft reset in case sink caps message is received in wrong PE state.

2.1.3 Features added

- Boot time Configuration parameters and Run time Status registers
- Support for MPQ4230 I2C DC/DC controller
- Power Balancing

2.1.4 Notes

- Only 2 Port Source and Sink solution has been tested at 8MHz SPI clock speed.
- System level PD communication between PSF and UPD350 through I2C interface is untested.
- For Source Pro application, Ellisys compliance has been tested only in Port 1 with INCLUDE_POWER_MANAGEMENT_CTRL = 0 and INCLUDE_POWER_BALANCING = 0 whereas for Source Lite application, 2 port Ellisys compliance has been tested.

2.2 Version 1.00

Release date	26-Feb-2020
Release Type	PD Source only feature complete release
Pre-requisites (if any)	UNG8222 – PSF-EVB with UNG 8122 Rev D PM-PD
	configured for 1-Hot
Source code path	https://bitbucket.microchip.com/projects/UNG_APPS/repos/us
	b-pd-software-framework-public/browse/PSF/PSF
Source Tag and Bit Bucket	Tag: PSF_STACK_V1.00
commit	Commit:88a4353
Software Requirements	https://bitbucket.microchip.com/projects/UNG_APPS/repos/us
Specification (SRS) Path and	<u>b-pd-software-framework-</u>
Revision Number	<pre>private/browse/PSF/Project_Management/Requirement/Open</pre>
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	Rev1.0

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Software Design Document (SDD) Path and Revision Number	https://bitbucket.microchip.com/projects/UNG_APPS/repos/usb-pd-software-framework-private/browse/PSF/Project_Management/System%20Dos/Release/PSF%20Systems%20DOS%20v1.0_REVIEW_CANDIDATE.pdf https://bitbucket.microchip.com/projects/UNG_APPS/repos/usb-pd-software-framework-private/browse/PSF/Project_Management/Design/Modular%20Design/PIO%20configuration%20management%20modular%20Design.docx_Rev0.1 https://bitbucket.microchip.com/projects/UNG_APPS/repos/usb-pd-software-framework-private/browse/PSF/Project_Management/Design/Modular%20Design/Power%20supply%20management/Design/Modular%20Design/Power%20supply%20management%20design%20changes%20from%20Zeus.docx_Rev0.1 //depot_hw_amazon/doc/design/Zeus_Stack_FirmwareDesign.docx_Rev1.1
Software Developer Test Plan (SDTP) Path and Revision Number	https://bitbucket.microchip.com/projects/UNG_APPS/repos/us b-pd-software-framework- private/browse/PSF/Project_Management/Developer_Test_Pla n/PSF_Developer_Test_Plan.xlsm_Rev_1.0
Software Requirements Tracker (SRT) Path and Revision Number	NA for PSF

Hex Name	Hardware Platform
PSF EVB Source V1.00.hex	USB PD Software Framework(PSF) EVB

2.2.1 Not implemented / Limited functionality requirements

8. PSF-44: TDA 2.3.1.1 Source Dynamic Load Test, Provider or Provider/Consumer Test Fails when PUT is configured as Source

2.2.2 Bug Fixes

- 1. PSF-21: VBUS OCS Power fault handling not working Max Power Fault Count check is included for implicit contract also.
- 2. PSF-26: Build Fails When INCLUDE_POWER_FAULT_HANDLING Macro is set to 0 Fixed the error thrown by the compiler.
- 3. PSF-43: TD.PD.SRC.E16 PDO Transition Test fails inconsistently in Port 1 Alone when Configured as Source There was a difference in actual voltage threshold values and those calculated by FW due to the improper float to int conversions handled in FW. This is fixed.
- 4. PSF-45: TDA 2.3.2.1 PDO Transition Test Source, Provider or Provider/Consumer Test Fails on both Ports The fix is same as that of PSF-43

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2.2.3 Features added

NA

2.2.4 Notes

- This is PD Source only feature complete release with bug fixes mentioned in section 2.1.2. Verified the bugs fixed and ellisys compliance has been run for 2 ports.
- Only 2 Port Source and Sink solution has been tested at 8MHz SPI clock speed.
- System level PD communication between PSF and UPD350 through I2C interface is untested, whereas basic I2C read/writes are tested.

2.3 Version 0.95

Release date	09-Jan-2020				
Release Type	Beta release				
Pre-requisites (if any)	UNG8222 – PSF-EVB with UNG 8122 Rev D PM-PD				
	configured for 1-Hot				
Source code path	https://bitbucket.microchip.com/projects/UNG_APPS/repos/us				
	<u>b-pd-software-framework-public/browse/PSF/PSF</u>				
Source Tag and Bit Bucket	Tag: PSF_STACK_V0.95				
commit	Commit:2ff8758				
Software Requirements	https://bitbucket.microchip.com/projects/UNG_APPS/repos/us				
Specification (SRS) Path and	<u>b-pd-software-framework-</u>				
Revision Number	private/browse/PSF/Project_Management/Requirement/Open				
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	Rev1.0				
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Software Design Document (SDD)	ATE.pdf https://bithyskat.migrashin.com/projects/LINC_ADDS/repos/ys				
Path and Revision Number	https://bitbucket.microchip.com/projects/UNG_APPS/repos/us b-pd-software-framework-				
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	Design.docx Rev1.1				

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(SDTP) Path and Revision	<u>b-pd-software-framework-</u>
Number	private/browse/PSF/Project_Management/Developer_Test_Pla
	n/PSF_Developer_Test_Plan.xlsm Rev 1.0
Software Requirements Tracker	NA for PSF
(SRT) Path and Revision Number	

Hex Name	Hardware Platform
PSF_EVB_Source_V0.95.hex	USB PD Software Framework(PSF) EVB

2.3.1 Not implemented / Limited functionality requirements

- 9. PSF-44: TDA 2.3.1.1 Source Dynamic Load Test, Provider or Provider/Consumer Test Fails when PUT is configured as Source
- 10. PSf-41: SPT.5 Over Current QuadraMAX Test Fails on Both Ports

2.3.2 Bug Fixes

- 5. PSF-21: VBUS OCS Power fault handling not working DC_DC_EN was toggled twice to reset the fault occurred. Since DC_DC was set and reset immediately, DC-DC controller did not have enough time to reset itself. PIO Override drive was not reset after a Fault. Both the issues are fixed.
- 6. PSF-7: HiByte has potential error Fixed the warning generated by PC Lint
- 7. PSF-65: PD Source tests in Ellisys compliance fails when MchpPSF_Run() is called for every 3ms This issue is fixed by setting PE_PDCONNECTED_STS_MASK in ePE_SRC_NEGOTIATE_CAPABILITY state.
- 8. PSF-61: Unable to charge HP-Laptop Possible Bug with VCONN SWAP response (Reject/Not Supported) For source only operation, INCLUDE_VCONN_SWAP_SUPPORT should be defined as '1'. Same is updated in the PSF_Config.h file description.
- 9. PSF-69: When INCLUDE_UPD_PIO_OVERRIDE_SUPPORT defined as 0, negotiation is not happening Undervoltage was detected by FW without considering whether under voltage power fault detection was enabled; Which caused undervoltage detection and follow up power shutdown. It is fixed now.

2.3.3 Features added

NA

2.3.4 Notes

• Only 2 Port Source and Sink solution has been tested at 8MHz SPI clock speed.

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• System level PD communication between PSF and UPD350 through I2C interface is untested, whereas basic I2C read/writes are tested.

Following JIRAs marked as invalid after debug.

- 1. PSF-28: Hard Reset Occurs when Dell Precision is Connected as Port Partner This is because of Dell Precision consuming more current than advertised(>3A)
- 2. PSF-29: PD Negotiation is not Constant When Chromebook C1501W Connected as Port Partner The repeated request is raised by Chromebook for which PSF responds as per PD specification.
- 3. PSF-35: PD Negotiation is no Successful When Dell XPS 9550 is Connected as Port Partner This issue is not reproducible. 20V Power Negotiation is successful with Dell XPS.
- 4. PSF-25: The PUT is not Disabled Even After the Under-Voltage Count Exceeds the Maximum Fault Count PSF sometime detects the Hard reset from Dell latitude first before reacting to power fault that has occurred. Thus, it ends up processing the Hard reset message received which will not counted as fault.

2.4 Version 0.92

Release date	12-Dec-19				
Release Type	Documentation release				
Pre-requisites (if any)	UNG8222 -Hades Platform with UNG 8122 Rev D PM-PD				
	configured for 1-Hot				
Source code path	https://bitbucket.microchip.com/projects/UNG_APPS/repos/us				
	b-pd-software-framework-public/browse/PSF/PSF				
Source Tag and Bit Bucket	Tag: PSF_STACK_V0.92				
commit	Commit:6cb0890				
Software Requirements	https://bitbucket.microchip.com/projects/UNG_APPS/repos/us				
Specification (SRS) Path and	<u>b-pd-software-framework-</u>				
Revision Number	<pre>private/browse/PSF/Project_Management/Requirement/Open</pre>				
	%20Sourcing%20PSF%20phase%20I%20requirement.docx				
	Rev1.0				
	https://bitbucket.microchip.com/projects/UNG_APPS/repos/us				
	<u>b-pd-software-framework-</u>				
	private/browse/PSF/Project_Management/System%20Dos/Rel				
	ease/PSF%20Systems%20DOS%20v1.0_REVIEW_CANDID				
	ATE.pdf				
Software Design Document (SDD)					
Path and Revision Number	<u>b-pd-software-framework-</u>				
	private/browse/PSF/Project_Management/Design/Modular%20				
	Design/PIO% 20configuration% 20management% 20modular% 2				
	ODesign.docx Rev0.1				
	https://bitbucket.microchip.com/projects/UNG_APPS/repos/us				
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Software Developer Test Plan (SDTP) Path and Revision	https://bitbucket.microchip.com/projects/UNG_APPS/repos/usb-pd-software-framework-
Number	private/browse/PSF/Project Management/Developer Test Pla n/PSF Developer Test Plan.xlsm Rev 1.0
Software Requirements Tracker (SRT) Path and Revision Number	NA for PSF

Hex Name	Hardware Platform
PSF_Hades_Source_V0.92.hex	USB PD Software Framework(PSF) Hades
	EVB

2.4.1 Not implemented / Limited functionality requirements

Firmware Bug fixes are not made for this release. All the bugs observed with V0.91 release is applicable for V0.92 release too.

2.4.2 Bug Fixes

No Bug fixes made

2.4.3 Features added

This release is made to mark the release of following documents

- PSF User Guide
- Getting Started with PSF
- Demo Read me

2.4.4 Notes

None.

2.5 Version 0.91

Release date	11-Nov-19	
Release Type	Internal Temp Bug fix release	
Pre-requisites (if any)	UNG8222 -Hades Platform with UNG 8122 Rev D PM-PD	
	configured for 1-Hot	
Source code path	https://bitbucket.microchip.com/projects/UNG_APPS/repos/us	
	b-pd-software-framework-public/browse/PSF/PSF	
Source Tag and Bit Bucket	Tag: PSF_STACK_V0.91	
commit	Commit:41b3dbe	
Software Requirements	https://bitbucket.microchip.com/projects/UNG_APPS/repos/us	
Specification (SRS) Path and	<u>b-pd-software-framework-</u>	
Revision Number	private/browse/PSF/Project_Management/Requirement/Open	
	%20Sourcing%20PSF%20phase%20I%20requirement.docx	
	Rev1.0	

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Software Design Document (SDD) Path and Revision Number	https://bitbucket.microchip.com/projects/UNG_APPS/repos/usb-pd-software-framework-private/browse/PSF/Project_Management/System%20Dos/Release/PSF%20Systems%20DOS%20v1.0_REVIEW_CANDID_ATE.pdf https://bitbucket.microchip.com/projects/UNG_APPS/repos/usb-pd-software-framework-private/browse/PSF/Project_Management/Design/Modular%20_Design/PIO%20configuration%20management%20modular%2_0Design.docx_Rev0.1_https://bitbucket.microchip.com/projects/UNG_APPS/repos/usb-pd-software-framework-private/browse/PSF/Project_Management/Design/Modular%20_Design/Power%20supply%20management%20design%20changes%20from%20Zeus.docx_Rev0.1_//depot_hw_amazon/doc/design/Zeus_Stack_Firmware_Design.docx_Rev1.1_
Software Developer Test Plan (SDTP) Path and Revision Number	https://bitbucket.microchip.com/projects/UNG_APPS/repos/us b-pd-software-framework- private/browse/PSF/Project_Management/Developer_Test_Pla n/PSF_Developer_Test_Plan.xlsm Rev 1.0
Software Requirements Tracker (SRT) Path and Revision Number	NA for PSF

Hex Name	Hardware Platform
PSF_Hades_Source_V0.91.hex	USB PD Software Framework(PSF) Hades
	EVB

2.5.1 Not implemented / Limited functionality requirements

1. PSF-7 - HiByte has potential error

2.5.2 **Bug Fixes**

- 1. PSF-19 -FW has build issue when CONFIG_PD_PORT_COUNT set to 1
- 2. PSF-21 VBUS OCS Power fault handling not working
- 3. PSF-26 Build Fails When INCLUDE_POWER_FAULT_HANDLING Macro is set to 0
- 4. PSF-31 Build Fails When INCLUDE_PDFU Macro is set to 1
- 5. PSF-32 Configuring CONFIG_PORT_n_SINK_USB_COM macro Field is not Effective
- 6. PSF-33 Configuring CONFIG_PORT_n_SINK_UNCONSTRAINED_PWR macro Field is not Effective
- 7. PSF-34 Build Fails When INCLUDE_PD_3_0 Macro is set to 0

2.5.3 Features added

NA

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2.5.4 Notes

Following JIRA reported marked invalid after developing from developer's side:

- 1. PSF-22 -VCONN OCS handling not working
- 2. PSF 23 PD Negotiation Fails when PDOs are Configured more than 5 with certain values
- 3. PSF-25 The PUT is not Disabled Even After the Under Voltage Count Exceeds the Maximum Fault Count

2.6 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 &	Label: PSF_STACK_V0.90
perforce change list number	Changelist: 178665
Software Requirements	//depot_dsg/PSF/Project_Management/Requirement/Open
Specification (SRS) Path and	Sourcing PSF phase I requirement.docx Rev:1.0
Revision Number	//depot_dsg/PSF/Project_Management/System
	Dos/Release/PSF Systems DOS
	v1.0_REVIEW_CANDIDATE.pdf
Software Design Document (SDD)	//depot_dsg/PSF/ Project_Management /Design/Modular
Path and Revision Number	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	//depot_dsg/PSF/Project_Management/Developer_Test_Plan/
(SDTP) Path and Revision	PSF_Developer_Test_Plan.xlsm Rev 1.0
Number	
Software Requirements Tracker	NA as the release is design completion release
(SRT) Path and Revision Number	

Hex Name	Hardware Platform
PSF_Hades_Source_V0.90.hex	USB PD Software Framework(PSF) Hades
	EVB

2.6.1 Not implemented / Limited functionality requirements

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

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2.6.2 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

2.6.3 Features added

NA

2.6.4 Notes

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

2.7 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 &	Label: PSF_STACK_V0.83
perforce change list number	Changelist: 1757280
Software Requirements	//depot_dsg/PSF/Doc/Requirement/Open Sourcing PSF v2.0
Specification (SRS) Path and	requirement.docx Rev:1.0
Revision Number	//depot_dsg/PSF/Doc/System Dos/Release/PSF Systems DOS
	v0.3.pdf
Software Design Document (SDD)	//depot_dsg/PSF/Doc/Design/Modular Design/PIO
Path and Revision Number	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	NA as the release is design completion release
(SDTP) Path and Revision	
Number	
Software Requirements Tracker	NA as the release is design completion release
(SRT) Path and Revision Number	

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)

2.7.1 Not implemented / Limited functionality requirements

5. PSF-7 - HiByte has potential error

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- 6. PSF-6 Compilation error with XC32 compiler
- 7. PSF-8 Port enable and disable logic isnt working as expected

2.7.2 Bug Fixes

NA

2.7.3 Features added

1. Harmony Integration with PSF Stack

2.7.4 Notes

- 3. Policy Manager, Policy Engine and Protocol Layer module files are reviewed and updated
- 4. 100% completion of PSF_Port.h file.
- 5. Developer Test Plan completion.

2.8 Version 0.82

2.0 10/3/0// 0.02	
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 &	Label: PSF_STACK_V0.82
perforce change list number	Changelist: 1750611
Software Requirements	//depot_dsg/PSF/Doc/Requirement/Open Sourcing PSF v2.0
Specification (SRS) Path and	requirement.docx Rev:1.0
Revision Number	//depot_dsg/PSF/Doc/System Dos/Release/PSF Systems DOS
	v0.3.pdf
Software Design Document (SDD)	//depot_dsg/PSF/Doc/Design/Modular Design/PIO
Path and Revision Number	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	NA as the release is design completion release
(SDTP) Path and Revision	
Number	
Software Requirements Tracker	NA as the release is design completion release
(SRT) Path and Revision Number	

2.8.1 Not implemented / Limited functionality requirements

NA

2.8.2 Bug Fixes

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

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2.8.3 Features added

NA

2.8.4 Notes

- 6. MCU Idle SOC and Stack Partition is done.
- 7. 50% completion of PSF_Port.h file.
- 8. Globals, UPDHw and Timers module files are reviewed and updated.
- 9. SAMD20 MCU Module files are reviewed.

2.9 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 &	Label: PSF_STACK_V0.81
perforce change list number	Changelist:
Software Requirements	//depot_dsg/PSF/Doc/Requirement/Open Sourcing PSF v2.0
Specification (SRS) Path and	requirement.docx Rev:1.0
Revision Number	//depot_dsg/PSF/Doc/System Dos/Release/PSF Systems DOS
	v0.3.pdf
Software Design Document (SDD)	//depot_dsg/PSF/Doc/Design/Modular Design/PIO
Path and Revision Number	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	NA as the release is design completion release
(SDTP) Path and Revision	
Number	
Software Requirements Tracker	NA as the release is design completion release
(SRT) Path and Revision Number	

2.9.1 Not implemented / Limited functionality requirements

NA

2.9.2 Bug Fixes

NA

2.9.3 Features added

1. Documentation "PSF Stack Configuration.pdf" to configure PSF stack.

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2.9.4 Notes

1. Depository restructured for SAMD20 MCU files

2.9.5 Known Limitations

NΑ

Jira Filter Used:

Date:

Bug ID	Summary / Description	Priority	Notes

2.10 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 &	Label: PSF_STACK_V0.8
perforce change list number	Changelist: 1740390
Software Requirements	//depot_dsg/PSF/Doc/Requirement/Open Sourcing PSF v2.0
Specification (SRS) Path and	requirement.docx
Revision Number	Rev:1.0
	//depot_dsg/PSF/Doc/System Dos/Release/PSF Systems DOS
	v0.3.pdf
Software Design Document (SDD)	//depot_dsg/PSF/Doc/Design/Modular Design/PIO
Path and Revision Number	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	NA as the release is design completion release
(SDTP) Path and Revision	
Number	
Software Requirements Tracker	NA as the release is design completion release
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2.10.1 Not implemented / Limited functionality requirements

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

2.10.2 Bug Fixes

NA as it is initial release

2.10.3 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

2.10.4 Notes

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

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