REFERENCE: SSMGR-SSE-112	
APPROVED BY: ☐ Process CCB	**PROJECT:** SSE Process
AUTHORIZED AUDIENCE: DELIVERY	Software & Systems Management Gateway Review Report Template

Document History

Version	Comments	Date (dd/mm/yy)	Author
0.1	Template Creation	3/29/2016	J.Orts
0.2	Added functional Safety questions	4/11/2016	G.Figuerola
0.3	Added microcontroller ressources question	4/11/2016	A.Palomino
0.4	Updated entry 26 - Changed Majors to Critical	5/19/2016	J.Orts
0.5	Deleted from Sheet " SSE Check List" de signature from Director	5/19/2016	J.Orts
0.6	Updated entry 29 - is the corresponding safety release document (like a Farh freigabe) signed (if required by the OEM)?	5/20/2016	R.Martinez
1.0	added entry 32. To assure that Lear Internal Requirements are checked, reviewed and implemented/tested if applicable as well reworked the sheet "SSE Board Approval Signature" as per new SSE Organization	4/24/2017	J.Orts
1.1	- Added entry 33. Non Volatile Data management Review - Updated SSE Board Approval Signature - Updated as well Responsible to answer (SWTL or System Leader)	9/25/2017	A.Palomino J.Orts
1.2	[PROCESS-9463] Added SSMGR checlist in process as 530 document	10/9/2017	xmateu
1.3	[PROCESS-9463] Added report from the SSMGR checklist and SSMGR_Pre-Information_Template in a single document	10/9/2017	xmateu
1.31	[PROCESS-11352] File name changed from "SSMGR-SW-112" to "SSMGR-SSE-	8/20/2018	G.Figuerola
1.32	[PROCESS-11854] Merged check 12 and 13 and OSS policy compliance added in check 13	10/22/2018	xmateu
1.33	[PROCESS-12150] Scorecard directives. Updated SSE Board Approval Signature sheet, Check 3 for System Test execution or Production Waiver approved Check 17 for SPP and Tailoring approvals added	2/7/2019	xmateu
1.34	[PROCESS-12195] Check 18 redundant and moved to Cybersecurity signoff added	2/7/2019	Don McKenzie
1.35	[PROCESS-12150] Scorecard directives. Updated SSE Board Approval Signature sheet after Process Central Office review	2/7/2019	xmateu
1.36	[PROCESS-12735] Added missing approvers EPL and Local Engineering Director	10/3/2019	C. Tàpias
1.37	[PROCESS-12658] sentence: "VP signature required if deviations exist, otherwise SSE Director/Manager and SQA Lead" added in page page "SSE Board Approval Signature"	11/8/2019	G.Figuerola
1.38	[PROCESS-10050] added Quality VP approval. Also added SW2 questions in the checklist	5/5/2020	C. Tàpias
1.39	[PROCESS-10050] . In approval tab, removed the "CHANGE APPROVED FOR MY CHANGE or 2nd/3rd..SOP LAUNCHING", as every time that there is a new SOP, a new SSMGR has to be done. . In approval tab, add an approval section for each approver, to be able that they approve separatelly and add comments . In cover, added flow for the ssmgr approval. . Checklists #3, #11, #14 modified to cover the SW2/sw3/sw4 criteria for SWTL . Checklist #4 added to cover the SW2/SW3/SW4 criteria for SWTL	5/5/2020	C. Tàpias
1.40	[PROCESS-13205] . Checklist #4 removed and the question inetgrated in check 26 . Check #1 updated adding PV . Check #10 updated removing the license agreement question, as it is also mentioned in check #14 . In SSMGR Report tab, column A, highlighted in Orange coulour the questions related with the SSE Quality Directives.	19/5/2020	C. Tàpias

1.41	[PROCES-12602] Added Waiver tab to fill it when the SSMGR can not be approved	19/5/2020	C. Tàpias
1.42	[PROCESS-13237] Included the template LST-SW-559 in the question #14	5/27/2020	F. Peiro
1.43	[PROCES-12602] Updated wording in Waiver tab	5/28/2020	F. Peiro
1.44	[PROCESS-13305] Waiver format changed to make it more usable.	6/16/2020	C. Tapias
1.45	[PROCESS-13305] Waiver format changed to make it more usable.	6/16/2020	C. Tapias
1.46	[PROCESS-12530] Added compiler warning in item 15	8/20/2020	C. Tapias
1.47	[PROCESS-13894] visio in this tab updated to show approval criteria, and that the waiver is done before approval by SSE VP. In approval tab, changed the order of approvers. Added tab for SSMGR1 & 2 action plan. EPL and Engineering director removed as approvers (EPL left as attendant in the process). Regarding questions: Q1 reworked to be answered with "yes" if all ok. Q2 removed NM and added CN. Q3,4,5,6,7,9,10,15 minor rewording. Q13,Q14,17,Q30 removed, as been reformulated for SSMGR1. Q18,Q21 reworded adding more requests. Q26 simplified. Q29 changed.Q32 removed and added hint in Q12. Added at the beginning 12 questions for SSMG1	12/8/2020	C. Tapias
1.48	[PROCESS-13854] updated question 12 adding special attention to manufacturing plant requirements. Question 39 added for cybersecurity topic	12/8/2020	C. Tapias
1.49	[PROCESS-13351] removed question 31 regarding PPAP	12/8/2020	C. Tapias
1.50	[PROCESS-13178] limits for quality indexes updated in question 19	12/8/2020	C. Tapias
1.51	[PROCESS-12514] question 25 updated to make more clear that is regarding clarifications	12/8/2020	C. Tapias
1.52	[PROCESS-13894] question 35 changed to 90%. Question 32 reworded. Question 41 added. Added column B (hidden) for backwards compatibility. Question 22 reworded as used for code review and not for dependencies check	12/9/2020	C. Tapias
1.5	[PROCESS-14229] Updated "customer requirements" to "Stakeholder Requirements"	4/12/2021	J.Tiansing

Table of Contents:

SSMGR-Pre Information

This section contains a list of questions as pre information about details for the SW release to be reviewed by quality and management

SSE Board Approval Signature

This section contains the relevant signatures to approve or deny software reviewed ready for production or model year change

SSMGR Report

This section contains a list of questions in order to assess whether the software version evaluated is ready for production or model year change
In column A, highlighted in orange colour the questions related with the SSE Quality Directives.

Current SW Release CM Information

PROJECT NAME:	Ford SDLC
SVN URL:	http://esvls-svn01.corp.lear.com/svn/SW_FORD_CX482_3_SDLC/tags/CX482-3_LJ6T-14F530-BK_6919-Jun-2021
SVN Revision:	4818
Is this a First Release for production (1st SOP)?:	No

Previous SW Release for production CM Information

SVN URL:	http://esvls-svn01.corp.lear.com/svn/SW_FORD_CX482_3_SDLC/tags/CX482-3_LJ6T-14F530-BJ_6523-Mar-2021
SVN Revision:	4143

SW Release Motivation & Contents

SW Release Motivation:	Normal Development Release	
	Changes Release	X
	Bug Fix Release	X

Change Requests & Defects Included in the SW Release:

SWCX4823SD-1707 - Ford China Has Multiple Vehicles With "No Start" Issue
SWCX4823SD-1772 - Ford SDLC Enters Reset Loop While Vehicle is Being Driven

Software & System Management GateWay Review

Customer + Project name and Software Release Version:	Ford SDLC CX482/3 version BK
Description of the Change: SWCX4823SD-1707 - Ford China Has Multiple Vehicles With "No Start" Issue SWCX4823SD-1772 - Ford SDLC Enters Reset Loop While Vehicle is Being Driven Same DBC as BH & BJ releases	
Software Team Leader Responsible: Charles Peacock	

Software and System Board Approval

		Yes / No	Comments
Product Line SSE Manager / Director	**Approval**	Yes	*Carl Gearns* 3-Aug-2021
			Signature, Date
Local SQA Lead	**Approval**	Yes	
			Signature, Date

Yes / No (if not, specify reason why in the comments)

CHANGE APPROVED FOR 1st PRODUCTION SOP LAUNCHING

Comments:_____

LEAR CORPORATION

Software & System Management GateWay Review Report

Customer + Project name and Software Release Version:	Ford SDLC CX482/3 version BK

Description of the Change:
SWCX4823SD-1707 - Ford China Has Multiple Vehicles With "No Start" Issue
SWCX4823SD-1772 - Ford SDLC Enters Reset Loop While Vehicle is Being Driven
Same DBC as BH & BJ releases

Software Team Leader Responsible:

Charles Peacock

Item	Verification Criteria	Area	Responsible	SSMGR 1 (DV)	SSMGR 2 (PV)	SSMGR SOP (1st SOP)	SSMGR SOP (MY or future SOP's)	Comments/Risk	Reference to SSE Process
				(YES/NO/Pending/NA)					
Is the SW & System Project Plan (SPP-SSE-120.docx) approved?	SPP-SSE-120 approved and LPMP deliverable closed Updates reviewed and approved by SQA.	SSE Engineering	SW & System Team Leader				NA	Project kickoff before 1-Jan-2019	SW and System Project Management, Activity 9
Is the Software & System Project Schedule (SPS-SSE-130) prepared and up to date, and JIRA tickets created for all tasks in the plan?	Show evidences for SPS-SSE-130 and JIRA ticket numbers in it Dashboard: # Tasks Overdue = 0	SSE Engineering	SW & System Team Leader				NA	Project kickoff before 1-Jan-2019	SW and System Project Management, Activity 5,15
Are the resources assigned as planned in the RMT and current forecast?	SPP matches RMT in regards of this topic SSE Project Governance Review Report (SSPGR-SSE-110)	SSE Engineering	SW & System Team Leader				YES		SW and System Project Management, Activity 18
Are the microcontroller resources planned, measured and tracked, and on target ? Specify ROM/RAM/EEPROM/CPU/Quiescent Current	Dashboard:% CPU Load, % Used RAM,% Used ROM,% Used EEPROM = 100% For Quiescent Current: System Test Reports result OK	SSE Engineering	SW Team Leader				YES	Ford has accepted SWAD which list memory usage	SW Design, Activity 1 SW Integration And Test, Activity 7,9
Is the Non Volatile Data management guidelines used and reviews performed and documented?	Operation Mode & Memory Management Reviews done	SSE Engineering	SW Team Leader	NA			YES		Operation Mode & Memory Management, Activities 5,6,7,8
Are all Critical Deliverables completed according to the reporting criteria?	zero [LEAR] QA Issues open regarding the Critical Deliverables.	SSE Engineering	SW & System Team Leader				YES		SW and System Quality Assurance
Have all tools been allocated to the project as planned in SPP, and all the licenses status are available according plan (LST-SW-559)? Note: license agreement is approval criteria for software type SW2/SW3/SW4	Check that SPP and LST-SW-559 contains the info as requested, and licenses up to date	SSE Engineering	SW & System Team Leader				YES		SW and System Project Management, Activities 5,11 SW & Systems supplier management Activity 7
Are all development tools qualified according to the ASIL level of the product? If no, is there an action plan to qualify them?	WP8-11.5.1_SWToolList_ISO26262.xlsx status according request	SSE Engineering	SW Team Leader				NA	Project is QM	Confidence in SW Tools
Are all Stakeholder Requirementss agreed in RFQ, reviewed (analyzed) released and planned?	Confirm that Stakeholder Requirementss have been released at least once, and that they are planned.	SSE Engineering	System Team Leader		NA	NA	YES		Stakeholder Requirements Elicitation and Management, Activity 7
Are all clarifications related to requirements scheduled for this phase, processed, closed and agreed with the customer?	DOORS Requirements Clarification Report (RCD-SYS-183) clarifications closed and updated spec received when needed	SSE Engineering	System Team Leader				YES		Stakeholder Requirements Elicitation and Management, Activity 6
Are all the System & SW Requirement relevant for DV testing reviewed, implemented and verified?	Requirements Pending Tasks Report (RPT-SYS-184) & Requirements Pending Objects Report (RPO-SYS-186) status according request Does NA from SSMGR2 & SOP, because then included in item 12	SSE Engineering	SW & System Team Leader		NA	NA	YES		System Requirements Specification and Analysis Activity 2, SW Requirements Specification and Analysis Activity 2, SW Implementation, SW Unit Testing, SW Integration And Test, SW Test, System Test

Question	Evidence / Criteria	Org	Role				Result	Comment	Reference
Are ALL the System & Software requirements scheduled for this phase reviewed and implemented ? Special attention to Safety, Cybersecurity, manufacturing plant relevant and Lear Internal Software & System requirements	For general statistics, Dashboard: % System/SW Requirements Analyzed, % System/SW Requirements Implemented = 100% For detailed analysis: Requirements Pending Tasks Report (RPT-SYS-184) & Requirements Pending Objects Report (RPO-SYS-186), 0 NOKs	SSE Engineering	System Team Leader				YES		System Requirements Specification and Analysis Activity 2, SW Requirements Specification and Analysis Activity 2, SW Implementation,
Are ALL the Lear Internal SW&System Requirements reviewed (analyzed) and released?	SW&System Requirements modules available in project DOORS and released	SSE Engineering	System Team Leader				YES		Stakeholder Requirements Elicitation and Management, Activity 3,7
Are all Safety relevant requirement tested for this phase ?	Safety Dashboard: "% System Requirements Tested" = 100%	SSE Engineering	System Team Leader				NA	No safety requirements	Functional Safety, System Test
Are ALL the Security relevant requirements required for this phase implemented and verified?	Requirements Pending Tasks Report (RPT-SYS-184) & Requirements Pending Objects Report (RPO-SYS-186) status according request	SSE Engineering	SW & System Team Leader				NA	No security requiremetns	System Requirements Specification and Analysis Activity 2, SW Requirements Specification and Analysis Activity 2, SW Implementation, SW Unit Testing, SW Integration And Test, SW Test, System Test
Are the Software "Key Components" supplier reviews performed and documented? - Design & Integration Review with Supplier -Component Errata sheets Review	Key component review report (SKCRC-SW-558) for each key component identified in SW Verification & Implementation Plan (IVP-SW-226)	SSE Engineering	SW Team Leader				YES		SW Integration And Test, Activity 8
Are the 3rd parties software components reviewed and documented ? -Design & Integration Review with Supplier -Component Errata sheets Review -License agreement Review -Component Hot Fixes Review	Key component review report (SKCRC-SW-558) for each key component identified in SW Verification & Implementation Plan (IVP-SW-226)	SSE Engineering	SW Team Leader	NA			YES		SW Integration And Test, Activity 8
Is all SW Third Party content defined, and all contracts and licenses approved ?	SPP defines the needed SW Packages and which supplier will deliver them. . Ask Purchasing about the contracts and provide feedback	SSE Engineering	SW Team Leader				YES		SW and Systems Supplier Management
Have all planned OSS modules been approved by OSS Manager? Note: approval criteria for software type SW2/SW3/SW4	Show evidence of approval. Either a report from OSS coordinator with all justified or a letter from OSS coordinator saying project does not have OSS	SSE Engineering	SW Team Leader				NA	No open source in Lear code	SW Release, Activity 2
Are the sleep & wake-up strategy reviewed and documented ?	Inspection Meeting Protocol (IMP-SW-538) approved, related with sleep & wake up.	SSE Engineering	SW Team Leader	NA			YES		SW Design, Activity 7
Are all the Changes Requests (PCRs, DCDs …) included in the SW since last SSMGR, approved by the EPL in a written form? Since first SOP: Are the changes introduced in the code due to defect fixing, approved by Customer? Do you confirm that no other changes are included in the SW?	JIRA export with [LEAR] PCRs received since last SSMGR. All have written evidence of EPL approval (comment of EPL in the ticket, email attached, etc..) JIRA export with [LEAR] Defects and [LEAR] OEM Defects entered since last SSMGR. "[LEAR] Approved by = Customer" JIRA export with SWImplementation Tasks/Subtasks created since last SSMGR and not linked to any defect or PCR analyzed and no issue identified	SSE Engineering	System Team Leader	NA			YES		Problem Resolution, Activity 7 Change Management, Activity 7
Are the SW changes since last SSMGR reviewed? *Note: CBAP question*	JIRA export with all changes since last SSMGR. . Code review ticket present, executed and closed.	SSE Engineering	SW Team Leader	NA	NA		YES		SW Implementation, Activity 4
Have all the SW Components and changes been code reviewed with the appropriate review methodology according to the ASIL level?	Dashboard: "% SW Components Code Reviewed" = 100%	SSE Engineering	SW Team Leader	NA			YES	Project is QM	SW Implementation, Activity 4
If there are changes in the Coding/Configurations/Databases/… since last SSMGR; are the changes reviewed and dependences analyzed? *Note: CBAP question*	Subset of question 4, but with special attention to Coding/Configurations/Databases/	SSE Engineering	SW Team Leader	NA	NA		YES		SW Implemetation, Activity 4
Have all SW Changes since the last SSMGR been verified that there is no impact on product application performance? (DV/PV)? *Note: CBAP question*	JIRA export with all changes since last SSMGR. None impacts DV/PV (See SSMGR guideline).	SSE Engineering	SW & System Team Leader	NA			YES		Change Management, Activity 6

Question	Evidence							Comment	Reference
Are the TSC changes scheduled for this phase completely defined, approved (by customer), tracked and implemented ?	Show evidences	SSE Engineering	System Team Leader	NA			NA	No TSC	Functional Safety, System Requirements Specification and Analysis Activity 2, SW Requirements Specification and Analysis Activity 2, SW Implementation,
If there are changes since last SSMGR, are the changes in SW and HW and dependences analyzed? *Note: CBAP question*	HW changes have been reviewed with SW Team to assure dependencies are identified. Evidence can be HITS requirements, meeting minutes SW/HW, etc.. List of SW changes affecting HW have been identified in Question 1. They have to be reviewed with HW	SSE Engineering	SW & System Team Leader	NA	NA		YES		Change Management, Activity 6
Is the system Test scope for this phase, reviewed and approved ?	System Test Scope Definition Document (STS-SYS-303) signed in case of regression test	SSE Engineering	System Team Leader				YES		System Test, Activity 8
Is the System Test complete according to the System Test Scope Strategy? Since first SOP: If not, has the Production Release Disclaimer been completed and approved? (also system test for Lear Internal System requirements) *Note: approval criteria for software type SW2/SW3/SW4 and CBAP question*	All System Test Reports (SysTR-SYS-310) available according System Test Scope	SSE Engineering	System Team Leader				YES		System Test, Activity 10
Is the EOL documentation updated (according the SW-HW changes) & dependences analyzed? *Note: CBAP question*	JIRA export with all changes since last SSMGR affecting EOL. All covered in EOL documentation.	SSE Engineering	System Team Leader	NA			YES	Document Updated Approval Pending	Change Management, Activity 6 SW Release, Activity 2
Are all the SEM product CN for this phase changes described, verified from software point of view? *Note: CBAP question*	SW is included in the product CN. SW version is according HW version. Agree on the changes described in the CN	SSE Engineering	SW & System Team Leader				YES		SW Release, Activity 2
Are ALL OEM & Internal Defects (Blockers & Critical) resolved ? If not, customer is aware and do we have a written justification ? Note: approval criteria for software type SW2/SW3/SW4	JIRA export with [LEAR] Defects and [LEAR] OEM Defects, priority in (Blocker,Critical). Solved or accepted by customer	SSE Engineering	System Team Leader	NA			YES		Problem Resolution, Activity 7,8
Are there fixes and/or changes due to field issues included in the SW? If yes, have they been agreed with EPL and SW & System director?	CRDs in Production (attribute "[LEAR]Production Issue" = YES). EPL and SSE Manager/Director have approved the defects	SSE Engineering	SW Team Leader	NA	NA		YES		Problem Resolution, Activity 7,8
Have all customer release documents and approval been provided by the customer? *Note: CBAP question*	SW Release approval from Customer. Format can change depending on customer (mail also accepted)	SSE Engineering	SW Team Leader	NA	NA		YES	Ford has accepted SWAD which list changes	SW and System Project Management
Are the -Process Compliance Index (PCI) > 90% ? -System Quality Index (SyQI) > 90% ? -Software Quality Index (SwQI) > 90% ?	Dashboard: PCI, SyQI and SwQI =100% or >90% combined with Question 39	SSE Engineering	SW & System Team Leader	NA			NA	Not tracked for SDLC	SW and System Quality Assurance, Quality Indicators
Does the project have zero QA Issues for E3 & E4?	Dashboard: zero [LEAR] QA Issues for E3 & E4	SSE Engineering	SW & System Team Leader				YES		SW and System Quality Assurance, Escalation Level
Are the Compiler Warnings and MISRA Rules Violations reviewed and confirmed OK?	Dashboard: "# Compiler Warnings" = 0, # MISRA Rules Violations = 0. If not, document with justifications for deviations required	SSE Engineering	SW Team Leader	NA			YES	All Lear code is OK	SW Implementation, Activity 3
Are ALL systemic tickets assigned to the project reviewed and assessed ?	JIRA export with tickets [LEAR] Issue Origin =Systemic Committee. All analyzed	SSE Engineering	SW Team Leader	NA			YES		Problem Resolution, Activity 6 Change Management, Activity 6
Has the Cybersecurity Signoff (CS990) been completed?	Show evidence if applies	Cybersecurity	Cybersecurity Eng.	NA	NA		NA	No cybersecurity	Cybersecurity Process
Is the FS Release for Production available?	Show the requested information	SSE Engineering	Safety Manager	NA	NA		NA	No functional safety	Functional Safety