



# MCAL: End of Create Phase Audit Report (1.05.00)

Document Version : 5


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## 1 Audit Information

Phase of the Audit	Create
Date of the Audit	 23 Mar 2022
Auditor (Independent Auditor with I3/X2)	Krishna Gopalakrishnan
Auditee	Jack Manbeck, Nikki Shah
Component Leads	Jayapriya J
Notification	Piyali Goswami , Gagan Maur ,Jayant Thakur , Alan Leek

## 2 Audit Checklist

### Create Phase audit checklist

SI #	Audit Checklist	Status (Yes, No, NA)	Links to evidences as applicable	Remarks (Link to Jira Quality Issue)
1	Are all the actions from the Plan Phase closed?	Yes		
2	Is there a test plan including unique test IDs for each defined test with traceability to the software design documentation and architecture document (if required)?	Yes	<a href="#">Test Plans - Processors Platform Software - Confluence (ti.com)</a>	
3	Are all tests of all safety related elements within the SW design and architecture traceable to the safety related requirements within the Software Product Specification (SPS)?	Yes	<a href="#">MCAL Driver Bi-Directional Traceability Reports - Processors Platform Software - Confluence</a>	

4	Has the Test Plan been reviewed and evidence of the review uploaded to Galileo?	No		Test case review reports are not available for 1.05.00 drivers in confluence
5	Have all issues discovered during the Test Plan document review process been documented as actions and tracked to closure?	NA		
6	If the software fits the definition of Class 1 software, is there a Software Architecture Document?	Yes	<a href="#">MCAL Architecture Specification - Processors Platform Software - Confluence</a>	
7	If a Software Architecture Document is required, has it been reviewed and evidence of the review uploaded to Galileo?	Yes	<a href="#">MCAL Architecture Specification Inspection Review - Processors Platform Software - Confluence</a>	
8	Have all issues discovered during the software architecture review process been documented as actions and tracked to closure?	Yes		

9	<p>Has the HSI document been updated by the HW team to create a refined HSI document and has the SW related work products impacted by the updates been updated accordingly?</p> <p>At a minimum, the HSI should contain:</p> <ol style="list-style-type: none"> <li>1.) The Programmers Model for correctly using the IP within the device</li> <li>2.) Partitioning of key diagnostic and/or other functional safety related operations and capability as falling to HW or SW and whether it is an integrator or component level responsibility.</li> </ol>	Yes	<a href="#">MCAL: Hardware-Software Interface (HSI) - Processors Platform Software - Confluence (ti.com)</a>	
10	<p>Is there an FMEA report?</p> <p>Note: This report should include failure modes related to software component dependencies and potential interference of safety related tasks from other components defined within the architecture and/or design documentation.</p>	Yes	<a href="#">MCAL Failure Mode and Effects Analysis (FMEA) - Processors Platform Software - Confluence (ti.com)</a>	
11	Have all design related documents been uploaded to Galileo and baselined?	No		Uploading to Galileo is pending
12	Have all design related documents been reviewed and evidence of the reviews uploaded to Galileo?	No	<a href="#">Design Documents Reviews (MCUSW.1.05.00) - Processors Platform Software - Confluence (ti.com)</a>	Uploading to Galileo is pending

13	Have all issues discovered during the software design document review process been documented as actions and tracked to closure?	Yes		
14	Has the Bi-directional traceability document been updated to add traceability up to and including the test plan. Note: Bi-Directional traceability should include traceability MRD<->SPS<->SW Arch./Design<--> Integration/ Unit Test Plans	Yes	<a href="#">MCAL Driver Bi-Directional Traceability Reports - Processors Platform Software - Confluence</a>	
15	Has the Bi-directional traceability document been reviewed and evidence of the review uploaded to Galileo?	Yes	<a href="#">MCAL Driver Bi-Directional Traceability Reports - Processors Platform Software - Confluence</a>	
16	Have all issues discovered during the review of the Bi-Directional Traceability document been recorded, dispositioned and closed?	Yes	<a href="#">MCAL Driver Bi-Directional Traceability Reports - Processors Platform Software - Confluence</a>	

17	Have all code review and inspection reports been uploaded to Galileo?	No	<a href="#">Code Reviews (MCUSW.1.05.00) - Processors Platform Software - Confluence (ti.com)</a>	Uploading to Galileo is pending
18	Are all issues identified during the code review or inspection process been documented as actions and tracked to closure?	Yes		
19	If there have been updates to any of the baseline documents as captured at the conclusion of the plan phase, have change requests (CRs) been filed and all relevant information to describe the requested change documented.	Yes	<a href="https://galileo.itg.ti.com/cgi-bin/Galileo_UI/galileoHome.cgi?LevelId=11&amp;MenuItemId=52&amp;ItemId=62126">https://galileo.itg.ti.com/cgi-bin/Galileo_UI/galileoHome.cgi?LevelId=11&amp;MenuItemId=52&amp;ItemId=62126</a>	
20	For each of the CRs that have been filed, has there been an detailed impact analysis completed with respect to the requested change?	Yes		
21	Have all CRs been dispositioned by a Change Control Board and approved CRs been implemented including updates to baselined work products impacted by the change? Note: In the case of reviewed work products, a delta review may be required to capture review of the impacted work products.	Yes		

22	Has the CR been fully implemented including updates to all impacted work products prior to the CR being closed?	Yes		
23	If a CR is implemented after a product has been released to market, has the potential customer impact been evaluated and appropriate communication of potential work around or SW update recommendations been initiated?	NA		
24	If the CR introduces new requirements', removes requirements, or identifies missed requirements, has the traceability documentation been updated?	Yes	<a href="#">MCAL Driver Bi-Directional Traceability Reports - Processors Platform Software - Confluence</a>	
25	If the software requires integration of multiple components, does the project include an integration test plan?	Yes	<a href="#">Test Plans - Processors Platform Software - Confluence (ti.com)</a>	
26	Does the test plan include a unit test plan?	Yes	<a href="#">Test Plans - Processors Platform Software - Confluence (ti.com)</a>	



27	Has a static analysis including checks against the MISRA C requirements , been executed and the report uploaded to Galileo? Ensure that the deliverable comply with the EP MISRA C Policy as specified in <a href="#">MISRA-C Compliance</a> .	Yes	<a href="#">MCAL Software Metrics Reports (Static, MISRAC, HIS) - Processors Platform Software - Confluence</a>	
28	Has a dynamic analysis been executed on the software and the subsequent report uploaded to Galileo?	Yes	<a href="#">MCAL Dynamic Analysis Report - Processors Platform Software - Confluence (ti.com)</a>	Approval and baselining is missing
29	Are all the critical and major issues from static analysis and dynamic analysis reports been captured, dispositioned, and closed?	Yes	<a href="#">PSDKRA Static Analysis Policy - Jacinto 7 DRA8x / TDA4x Software - Confluence</a>	
30	Has an updated baseline report been ran and uploaded to Galileo to capture the work products and baseline updates at the conclusion of the create phase? Note: This task is capturing the current state of the safety case as required by the targeted functional safety standards. The safety case is simply the collection of work products generated in the process of developing a functional safety compliant product.	No		Baseline report needs to be generated and uploaded

31	Has the project risk management plan been updated to reflect the current status of earlier identified risks and add newly identified risks if applicable?	Yes		
32	Are the unit test failures logged in the defect tracking tool?	Yes	<a href="#">Test Reports - Processors Platform Software - Confluence (ti.com)</a>	
33	Are the defects from unit testing closed after appropriate actions?	Yes	<a href="#">Test Reports - Processors Platform Software - Confluence (ti.com)</a>	
34	Are the structural coverage metrics collected and analyzed at unit level?	Yes	<a href="#">Test Reports - Processors Platform Software - Confluence (ti.com)</a>	
35	Is there an integration test report?	Yes	<a href="#">Test Reports - Processors Platform Software - Confluence (ti.com)</a>	

36	Are the integration test defects logged in a defect tracking tool?	Yes	<a href="#">Test Reports - Processors Platform Software - Confluence (ti.com)</a>	
37	Are the structural coverage metrics collected and analyzed at integration level?	Yes	<a href="#">Test Reports - Processors Platform Software - Confluence (ti.com)</a>	
38	Are all Create Phase approvals as required by the QSS 024 - 000 and QRAS AP00216 available and archived? NOTE: It is recommended that the Create Phase Review be conducted and approved prior to the Create EOP Audit completion so the phase work products can be reviewed in their entirety.	No		Create phase review for 1.05.00 is missing

### 3 Audit Findings

Insert the Jira filter macro with the query project = "project name"AND issuetype = Quality AND "Phase Found In" = "Asses, Plan, Validate, Create"

Audit Findings						
Key	Summary	Classification	Assignee	Process Area	Phase Found In	Status
<a href="#">MCAL-8196</a>	Uploading to Galileo is pending	S2 - Minor	Nikki Shah	SUP.8 Configuration Management	Create	Closed
<a href="#">MCAL-8195</a>	Create phase review for 1.05.00 is missing	S1 - Major	Nikki Shah	MAN.3 Project Management	Create	Closed
<a href="#">MCAL-8194</a>	Baseline report needs to be generated and uploaded	S1 - Major	Nikki Shah	SUP.8 Configuration Management	Create	Closed
<a href="#">MCAL-8193</a>	Test case review reports are not available for 1.05.00 drivers in confluence	S1 - Major	Nikki Shah	SUP.9 Problem Resolution Management	Create	Closed

### 3.1 Template Revision

Author Name	Description	Version	Date
Krishna Gopalakrishnan	Initial Version to address <a href="#">EPSWDEVCCB-216</a>	1.0	 11 Aug 2020