Matterhorn 8M AUTOSAR 4.0 MCAL Planning Details RTM 1.0.2

Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Date | Author | Change Description |
| 1.0-D0 | 24-Jul-17 | Matthew Nunez | Initial version |
| 1.0-D0 | 28-Jul-17 | Matthew Nunez | Updated work tickets |
| 1.0-D0 | 08-Aug-17 | Matthew Nunez | Updated work tickets |
| 1.0-D0 | 14-Aug-17 | Matthew Nunez | Updated milestones |
| 1.0-D05 | 29-Aug-17 | Dai Nguyen | Updated requirement baseline |
| 1.0-D06 | 30-Aug-17 | Dai Nguyen | Corrected Motherboard information and updated MAF to 1.5.3 version |
|  |  |  |  |
|  |  |  |  |

Template instructions:

Grey is to be modified, Red is tbd/tbc, yellow is an action item, blue is an important change;

Platform/product name and release type/versions are doc properties used through the template, change the properties (menu File/Properties) and press CTRL+A then F9;

Template version: 1.0-D07

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# Scope

**Project links:**

Project Folder:

* [**http://compass.freescale.net/go/230561400**](http://compass.freescale.net/go/230561400)

**ext** [**http://www.freescale.com/go/230561400**](http://www.freescale.com/go/230561400)

This Document:

* [**http://compass.freescale.net/go/236094392**](http://compass.freescale.net/go/236094392)

**ext** [**http://www.freescale.com/go/236094392**](http://www.freescale.com/go/236094392)

Hardware documentation:

* [**http://compass.freescale.net/go/230559506**](http://compass.freescale.net/go/230559506)

**ext** [**http://www.freescale.com/go/230559506**](http://www.freescale.com/go/230559506)

**Standard Content (Hidden, click ¶):**

**Silicon revision specific BOM (IP version list; including platform BOM), RM, Errata,Data Sheet, HW Marketing Dashboard, ProdcutXref export.**

**Optional: HW Safety Manual, revision delta documentation, Board schematics, other silicon specific information**

**This is a copy collection of hardware documents in the SW project folder under ‘Technical Solution/Hardware Documentation’.**

**The document links next to specific items in the sections below are original HW locations which might not be accessible for everybody.**

**Product Name & Version:**

* **MPC5777M AUTOSAR 4.0 MCAL RTM 1.0.2**

**Release summary:**

* **Implicit Safety RTM release for Matterhorn**
* **Matterhorn Cut2.0B support**

**Release modules:**

(Does not apply for FBR/CCT)

Supported/ delivered modules (all IS capability):

* Build Env, ADC, DIO, FEE, FLS, LIN, MCU, PORT, WDG
* BASE/RESOURCE, MCL, DEM/DET, RTE, ECUM, IF Stubs
* CAN**,** GPT, ICU, PWM, SPI, ETH, FR

**Requirement deviations**

(to provide list of unfulfilled item for common requirement.The information in Comment column is recommended to be used in Remark column in Doors).

|  |  |  |  |
| --- | --- | --- | --- |
| NO. | Requirement IDs | Description | Comment |
| 1 |  |  |  |

Table 1 – Requirement Deviations

**Release notification details:** (for integrators only)

Release package shall be uploaded to Compass locations and email notifications shall be sent to:

* Internal:   
  Email list [aswrel@NXP1.onmicrosoft.com](mailto:aswrel@NXP1.onmicrosoft.com)   
  Upload location <http://compass.freescale.net/go/206135430> in respective subdirectory
* All 3rd parties:

(Does not apply for FBR/CCT)

Elektrobit: [FslReleases@elektrobit.com](mailto:FslReleases@elektrobit.com)

Mentor: [AR\_MCAL\_Users@mentor.com](mailto:AR_MCAL_Users@mentor.com)

Vector: [3rdParty@vector.com](mailto:3rdParty@vector.com)

Upload location <http://compass.freescale.net/go/224069705> in respective subdirectory

* **Direct Customer delivery: (not used if Flexera upload is used)**

|  |  |  |  |
| --- | --- | --- | --- |
| recipient First Name | recipient Last name | recipient Email address | Upload LOCATION |
| <Enter first> | <Enter last> | <Enter email> | <Enter link> |

Table 1 – Customer delivery information

The Release Database (<http://autosw.freescale.net/> ) shall be updated with release details.

**Flexera Details:**

**NOTE**: Delete column **MCAL** if MCAL is IS, delete column **SMCAL** if MCAL is QM, there are only few wich have both (Panther and Caylpso MCAL).

|  |  |
| --- | --- |
|  | SMCAL |
| Product Line | AUTOSW\_SMCAL |
| Catalog ID's | SW5777M-SMCL401S |
| SW5777M-SMCL401E |
| SW5777M-SMCL401F |
| SW5777M-SMCL401L |
| SW5777M-SMCL401P |
| SW5777M-SMCL401V |
| Product ID's | TRESOS-14.2.1 |
| **SW5777M-SMCL401-RTMC-1.0.2** |
| End User License Agreements | EB Tresos Studio v1.1 / Jan 2012 |
| AUTOSW EULA v1.3 |

Table 2 – Flexera IDs

MCAL release deliverables need to be uploaded to Flexera and associated with above MCAL or SMCAL Product ID to be created (There are only few cases where both are needed).

**NOTE**: If both MCAL and SMCAL Catalog items are defined, all deliverable files need to be associated with both MCAL and SMCAL Product IDs (Safety Pack only with SMCAL).

**License Information:**

* **License Group: Metrowrks (18671)**
* **Feature Name: AUTOSAR\_MCAL\_MPC577XM**
* **Version: 4.0**

**Life cycle:**

**The AUTOSAR 4.0 MCAL for MPC5777M is in life cycle phase: OPTIMIZATION**

**Life cycle explanation (Hidden, click ¶):**

**DEVELOPMENT: all up to first RTM**

**OPTIMIZATION: after first RTM**

**MAINTENANCE: after defined maintenance period**

**Maillist:**

**ISO26262 sMCAL-SMCAL** [**SMCAL@freescale.com**](mailto:SMCAL@freescale.com)

# NPI, New Product introduction

## HW NPI information

* **See MPC5777M Program Overview**

[**http://compass.freescale.net/livelink/livelink/Open/235417476**](http://compass.freescale.net/livelink/livelink/Open/235417476)

**NPI information tasks (Hidden, click ¶):**

* Silicon and boards, board distribution (request orders at Program Manager)
* Register new Platform for Inventory database and add new devices (PM)
* Review Tools HW and SW needs (PM)
* Check available NPI information (part numbers, Stakeholders etc.) (request at Program Manager)
* Get TresosID from EB (request at 3rd Party Manager)
* **Section7 (external dependencies)**
* Board and driver/IP bringup (TechLead)
* Technical difference analysis (new IPV, takeover IPV, define origin baselines , debug interface, etc.) (Component Group Owner, TechLead)
* Define components, esp. IPV (Component Group Owner, TechLead)
* Get origin baselines from component owners
* Get confirmation of review for all open ticket onf those origin baselines.  
  (Create a virtual product BLN collecting the origin baselines and use that for new branches ans starting point)
* Prepare CM/CHM (CC branches: Component Group Owner, TechLead); (CQ configs, parts: PM)
* Create CR tickets for new components, and for significant effort changes of takeover components (Component Group Owner)
* Do needed changes on MAF / IOClient , submit to V&V for including to official tools (Tech Lead)
* **Section 7 and 8 (Component/IPV list and dependency + Baselines for derivation)**
* Create LKOB in ARE (only published after Beta) (PM)

## NPI definitions

* **CQ names**
  + Bin**: SMCAL**
  + New config: **“****MPC577XM” done**
  + New components:
  + Baselines/Labels name: **“****SMCAL\_4.0\_ MPC577XM”**
  + Product baseline name: **“MATTERHORN”**
* **CC names**
  + VOB: **SASW**
  + Product specific branches name: **“mcal4.0\_mpc57xxm” for modules common with McKinley**

**Matterhorn branches separate from McKinley: “mcal4.0\_mpc577xm” for the modules:  
MCU/RESOURCE/BUILD\_ENV /BASE/ MCL**

* + Branches are created:

**NPI CHM needs (Hidden, click ¶):**

* New Config needs [COBRA55] in Comments
* New IPV components need [GRP=xxx] definition (in Comments of CQ part definition)
* **ITG**
  + Bin: **VV-TEST-MCAL**
  + VOB: **vnv\_test**
* **Flexera** 
  + Catalog ID’s: see **Table 2 – Flexera IDs**

# Requirements and Versions

**SOW:**

‘doors-20002/Automotive MCU SW/AUTOSAR/sMCAL\_CPR/Release Sepcific Requirements’  
**Req ID: RSR78**

**Doors baseline:** **30.33 INTREQ\_RSR\_SMCAL\_4.0\_MATTERHORN\_RTM\_1.0.2\_I03**  
Doors excel export for Marketing approval:

**SOW\_MPC5777M\_MATTERHORN\_MCAL4.0\_RTM\_1.0.2\_v1.xlsx**

**int:** [**http://compass.freescale.net/go/236082390**](http://compass.freescale.net/go/236082390) **ext:** [**http://www.freescale.com/go/236082390**](http://www.freescale.com/go/236082390)

**cPRT/EA version:**

* ‘doors-20002/Automotive MCU SW/AUTOSAR/sMCAL\_CPR/Common Product Requirements’

**Doors baseline: 15.0 BLN\_CPRT\_SMCAL\_4.0\_01.15.00**

* 'doors-20002/Automotive MCU SW/AUTOSAR/sMCAL\_CPR/sMCAL External Assumptions

**Doors baseline: 10.0 BLN\_EA\_SMCAL\_4.0\_01.08.00**

**gMRD version:**

* 'doors-20002/Automotive MCU SW/AUTOSAR/sMCAL\_CPR/Generic Marketing Requirements’

**Doors baseline: 3.1 BLN\_GMRD\_SMCAL\_4.0\_03.02.00**

**AUTOSAR version:**

* AUTOSAR version 4.0 Rev 003 (4.0.3)

int: <http://compass.freescale.net/go/227260156>   
ext: <http://www.freescale.com/go/227260156>

* For ETH: AUTOSAR version 4.1 Rev 001 (4.1.1)

int: <http://compass.freescale.net/go/228941647>   
ext: <http://www.freescale.com/go/228941647>

* For CAN (FlexCAN): AUTOSAR version 4.2 Rev 001 (4.2.1)

int: <http://compass.freescale.net/go/233742211>   
ext: <http://www.freescale.com/go/233742211>

**Compilers versions:**

* **GHS 6.1.4** **COMPILER 2013.5.4**
* **Windriver DIAB DIAB\_5\_9\_4\_0-FCS\_20140312\_144007**

int: <http://compass.freescale.net/go/220751957>   
ext: <http://www.freescale.com/go/220751957>

**Compiler options:**

(Does not apply for FBR/CCT)

* **Version 19, 11-Jan-16**

Compiler options are described in “SMCAL\_4.0\_Compiler\_Options.xlsx” document under

int: <http://compass.freescale.net/go/230884461>   
ext: <http://www.freescale.com/go/230884461>

This version will be referenced in Doors SOW, by direct link of compass version and document revision:

http://compass.freescale.net/livelink/livelink/230914769/SMCAL\_4.0\_Compiler\_Options.xlsx?func=doc.Fetch&nodeId=230914769&vernum=19

**Tresos Version:**

* **Tresos Studio 14.2.1**(int: <http://compass.freescale.net/go/206886100>   
  ext: <http://www.freescale.com/go/206886100> )

**Tresos IDs:**

* **Architecture “PA” ID: 2; Derivative “MPC5777M “ ID: 36**

**OS Releases and Versions:**

(Does not apply for FBR/CCT)

* **No OS and no OS-MCAL integration for Matterhorn**

**Silicon revisions/package & Boards:**

Silicon for testing and profiling

* **MPC5777M cut 2.0B (maskset 0N50N), 416 BGA package**

Boards:

* **Motherboard: MPC57xx**
* **Matterhorn development minimodule: MPC5777M-416DS and MPC5777M-512DS**

**Documentation that shall be used:**

**MPC5777M Hardware documentation**

* **RM**

**MPC5777M Reference Manual, Rev. 4.2, 07/2016**

[**http://compass.freescale.net/go/230559506**](http://compass.freescale.net/go/230559506)

Next Draft:

Tbd

* **Errata**   
  **cut 2.0B: mpc5777M\_rev2.0B\_0N50N\_CE\_r10, Rev. August 2017**

**Int:** [**http://compass.freescale.net/go/230559506**](http://compass.freescale.net/go/230559506)

* **HW Safety Manual (IS only)  
  Safety Manual for MPC5777M, Rev 1, 15/01/2015**

**Int:** [**http://compass.freescale.net/go/233581307**](http://compass.freescale.net/go/233581307)

**Supported derivatives :**

|  |  |
| --- | --- |
| **DEVICE** | **PACKAGE** |
| **MPC5777M** | **416 MAPBGA** |
| **MPC5777M** | **512 MAPBGA** |
|  |  |

Table 3 – Derivatives

# Build and Test Environment

**Core settings**

* **Required multicore testing (main core: z425).**

**Cache/BTB settings**

used for testing (set in config\_beart.mak)

* D-CACHE = ON
* I-CACHE = ON
* BTB = ON

**Boards/Silicon for Build\_Env:**

See also <http://wiki.freescale.net/display/MSGAutoSW/PM+-+Practices+(Release)>

for review (folder: dev/test/test and dev/test/test/doc/docgen)

* release\_configuration.txt (QP reports, RN)
* **Product Name: MPC5777M AUTOSAR 4.0 MCAL**
* **Release Version: RTM 1.0.2**
* **Date: 22-Sept-2017**
* **Hardware Version: MPC57xx Motherboard**
* **Hardware Version: MPC5777M-416DS MINI-MODULE**
* **Hardware Version: MPC5777M\_8M 416MAPBGA MPC5777M 0N50N Device**
* **Platform rename: 5777M=MPC5777M\_8M**

(Check compiler and versions, same as variables\_common.xml)

* config\_beart.mak   
  (DERIVATIVE macro use for platform rename in release\_configuration.txt; cache enable)

**DERIVATIVE := 5777M**

**PLATFORM := 577XM**

* config\_tpb.mak  
  (VendorID is 43 and Origin is Freescale; ASR versions; release date; copyright macros JDP or non-JDP)
* variables\_common.xml   
  (compare hardware and compiler descriptions as in release\_configuration.txt; dates and versions)

**PLATFORM = MPC5777M**

**CONTROLLER\_NAME = MPC5777M**

<CONTROLLER\_NAME1 = >

**ARCHITECTURE = PA**

**FLASH\_SIZES = MPC5777M\_8M**

**MCU\_DERIVATIVE = MPC5777M**

**STACK\_SIZE\_DERIVATIVE = 5777M**

**PROFILE\_DERIVATIVE = 5777M**

* config\_common\_vars.mak   
  (VendorID is 43 and Origin is Freescale; SW versions; Tresos IDs; VSMD\_TYPE)

**Profiling/Stack measurements compiler# definition** **(Hidden, click ¶):**

* Compiler 1 – GHS Compiler
* Compiler 2 – DIAB Compiler
* Compiler 3 – CW Compiler – not used
* Compiler 4 – Cosmic Compiler – not used
* Compiler 5 – HighTech Compiler – not used
* Compiler 6 – Linaro GCC – not used
* Compiler 7 – ARM DS5 – not used

**V&V testing: (part of ITG plan, Beta/RTM only)**

* **Test Station: Kara/Zugspritze , timeframe 07 Aug 2017 - 22 Sept 2017**(<http://kara.ea.freescale.net/> )

# Release preparation

**Risk Management:**

* **Release Specific Risks:**
* **Version: 1.0,**

MAINT Risk Management “MAINT\_Risk\_management\_2017.xlsx” is document under

[**https://nxp1.sharepoint.com/sites/mcal/\_layouts/15/guestaccess.aspx?guestaccesstoken=SQ9M3aOqhyZef2ExbLHf1%2b8pApqYupob2zSTCDX7N94%3d&docid=2\_1ec38848f878b44a79deb5270b4422d35&rev=1**](https://nxp1.sharepoint.com/sites/mcal/_layouts/15/guestaccess.aspx?guestaccesstoken=SQ9M3aOqhyZef2ExbLHf1%2b8pApqYupob2zSTCDX7N94%3d&docid=2_1ec38848f878b44a79deb5270b4422d35&rev=1)

**Needed Work Tickets:**

(delete sections which are not used)

**A. Tickets for development**

(In SMCAL bin; umbrella tickets will be linked to Release platform baseline except safety manual and safety case. Safety manual and safety case will be linked to SDOC BLN.

Umbrella and clones will be created by Project Manager).

1. **ENGR00392282 clone done for all drivers  
   [ALL\_GENERAL] Perform requirement analysis for Matterhorn RTM 1.0.2 ASR 4.0**

(Communicate with Requirement Manager for latest cPRT, gMRD, EA blns. This ticket should be available at beginning of release at the latest)

NewWork Description:

* + - Analyze requirements for Matterhorn RTM 1.0.2ASR 4.0
    - The AUTOSAR\_MCAL\_<MDL>\_CheckDriverReq.txt needs to be updated in reports folder

Requirement source:

* + - CPRT baseline: 15.0 BLN\_CPRT\_SMCAL\_4.0\_01.15.00
    - GMRD baseline: 3.1 BLN\_GMRD\_SMCAL\_4.0\_03.02.00
    - EA baseline: 10.0 BLN\_EA\_SMCAL\_4.0\_01.08.00
    - SOW Baseline INTREQ\_RSR\_SMCAL\_4.0\_MATTERHORN\_RTM\_1.0.2\_I03

(e.g. cPRD, gMRD, Customer Request, Quality, ASR SWS, RM.pdf, Errata.pdf...)

Proposed solution (Optional):

N/A

1. **ENGR00391759 clone done  
   [ALL\_GENERAL] Review change according to new Reference manual for Matterhorn RTM 1.0.2 ASR 4.0.**

NewWork Description:

* + - Review Reference manual for Matterhorn provided in attachment:

Requirement source:

MPC5777M Reference Manual, Rev. 4.2, 07/2016

<http://compass.freescale.net/livelink/livelink/open/230559506>

(e.g. cPRD, gMRD, Customer Request, Quality, ASR SWS, RM.pdf, Errata.pdf...)

Proposed solution (Optional):

* + - The New Feature ticket used for HW Reference Manual will be closed with Resolved and the result of the HW Reference Manual review shall be recorded in the analysis report, proposed solution section.
    - If a software change need to be implemented, a new ticket (Bug or New Feature) is raised. This new ticket shall contain the New Work CR used for HW Reference Manual review in description for reference.

1. **ENGR00392291 clone done for MCL, SPI, ICU, MCU, GPT, CAN, FLS, ETH, FR, LIN [ALL\_GENERAL] Review change according to new errata document for Matterhorn RTM 1.0.2 ASR 4.0**

(PM needs to create errata review template including all of erratum and attaches to umbrella ticket before clonning)

NewWork Description:

- Review the list of erratum provided in "Log" sheet of each given reviewing template.  
- Fill the errata review template for your module with below rule: keeping only the erratum relating to your module and removing the others (not related to your module). Fill the information to column E, F, G, H, I in the template. Finally, attach the review result to this CR with this naming convention: SMCAL\_Errata\_review\_<module>\_Matterhorn\_cut2.0B  
- The more errata information can be found in errata documents as mentioned in Requirement source.

When moving from old cut to new cut, some of old erratum still exist in lastest cut (see in “Log” sheet of errata review template) but some others have been removed from latest cut (see in “Removed” sheet of errata review template). So, the modules which implemented workaround in code need to be reviewed again to see if we need to keep or remove the workaround.

Requirement source:

**cut 2.0B: mpc5777M\_rev2.0B\_0N50N\_CE\_r10, Rev. August 2017**

[**http://compass.freescale.net/go/230559506**](http://compass.freescale.net/go/230559506)

(e.g. cPRD, gMRD, Customer Request, Quality, ASR SWS, RM.pdf, Errata.pdf...)

Proposed solution (Optional):

* + - The New Feature ticket for reviewing the errata list will be closed with Resolved.
    - The result of the errata review shall be recorded  as an attached filled template file, that will list the errata for all IPs of the module in scope. If any workaround is removed in the code this time, please take a note in “Remark” column to state that information.
    - The analysis result will specify if each erratum impacts the module implementation or not and also the ticket ids for software workaround implementation, if needed.
    - New Bug ticket will be raised for adding the software workaround implementation, containing the following information:
* Headline: shall contain the Errata ID (e.g: [ADC] New errata e4186 implementation for ADC)
* Reporter (role): Developer/Designer
* Link option: Add the New Feature ticket used for review with selection of “is a dependency for”.

(Summary report for all drivers needs to be created and attached to Umbrella ticket by PM)

1. **ENGR00391760 clone done  
   [ALL\_GENERAL] Create quality package for Matterhorn RTM 1.0.2 ASR 4.0**

NewWork Description:

Provide the following documents:

* + - Traceability: AUTOSAR\_MCAL\_<MODULE>\_TraceabilityMatrix.xls
    - Traceability warning report: AUTOSAR\_MCAL\_<MODULE>\_TraceabilityMatrix\_Warnings.xls
    - VSMD report: AUTOSAR\_MCAL\_<MODULE>\_VSMDReport.html
    - Integration manual: AUTOSAR\_MCAL\_<MODULE>\_IM.pdf
    - User manual: AUTOSAR\_MCAL\_<MODULE>\_UM.pdf
    - DOORs DXL check result: AUTOSAR\_MCAL\_<MODULE>\_CheckDriverReq.txt
    - UML design: AUTOSAR\_MCAL\_<MODULE>\_SDD.eap
    - Exclusive area report: AUTOSAR\_MCAL\_<DRIVER>\_EXCLUSIVE\_AREAS.xls
    - CheckDefReport: AUTOSAR\_MCAL\_<MODULE>\_CheckDefsReport.xlsx.

Requirement source:

sMCAL Release criteria document version 5.1

<http://compass.freescale.net/go/228798570>

(e.g. cPRD, gMRD, Customer Request, Quality, ASR SWS, RM.pdf, Errata.pdf...)

Proposed solution (Optional):

N/A

1. **ENGR00391764 – clone done to all drivers.  
   [ALL\_GENERAL] Create driver IS FMEA for Matterhorn RTM 1.0.2 ASR 4.0**

(PM to create peer-review IDs for all groups. Refer to table-6 for reviewer assignment of each group)

NewWork Description:

Create driver IS FMEA for Matterhorn RTM 1.0.2 ASR 4.0.

Requirement source:

sMCAL Release criteria document version 5.1

<http://compass.freescale.net/go/228798570>

(e.g. cPRD, gMRD, Customer Request, Quality, ASR SWS, RM.pdf, Errata.pdf...)

Proposed solution (Optional):

N/A

1. **ENGR00391765 don’t need to clone  
   [SDOCS] Create safety manual for Matterhorn RTM 1.0.2 ASR 4.0**

(Don’t need to clone. This ticket must be linked to SDOC BLN)

NewWork Description:

Create safety manual for Matterhorn RTM 1.0.2 ASR 4.0

Requirement source:

sMCAL Release criteria document version 5.1:

<http://compass.freescale.net/go/228798570>

(e.g. cPRD, gMRD, Customer Request, Quality, ASR SWS, RM.pdf, Errata.pdf...)

Proposed solution (Optional):

N/A

1. **ENGR00391766 don’t need to clone  
   [SDOCS] Create safety case for Matterhorn RTM 1.0.2 ASR 4.0**

(Don’t need to clone. This ticket must be linked to SDOC BLN)

NewWork Description:

Create safety case for Matterhorn RTM 1.0.2 ASR 4.0

Requirement source:

sMCAL Release criteria document version 5.1:

<http://compass.freescale.net/go/228798570>

(e.g. cPRD, gMRD, Customer Request, Quality, ASR SWS, RM.pdf, Errata.pdf...)

Proposed solution (Optional):

N/A

1. **ENGR00391767 cloned done for ICU, PWM, GPT, FEE, ETH, CAN  
   [ALL\_GENERAL] Perform code review against checklist for Matterhorn RTM 1.0.2 ASR 4.0**

(refer to CodeUML\_ReviewTracking\_vx.x on below link to get list of modules to be cloned:

<https://nxp1.sharepoint.com/sites/mcal/Shared%20Documents/Forms/AllItems.aspx#InplviewHashde697e4f-f738-41a3-a66a-49bc059f3891=RootFolder%3D%252Fsites%252Fmcal%252FShared%2520Documents%252FProducts%252FPlanning%252FMCAL%2520PM>

)

NewWork Description:

* Review code against checklist.
* Fill the review result to the checklist.
* The checklist template and coding guideline are enclosed in attachment.

Requirement source:

sMCAL Release criteria document version 5.1:

<http://compass.freescale.net/go/228798570>

Coding guideline verion 5.0 date 19-Jul-2016: <https://www.nxp.com/go/230979668>

Code review checklist verion 4.0, date Nov-2016: [https://www.nxp.com/go/230979668](https://www.nxp.com/livelink/livelink?func=ll&objid=230979668&objAction=browse&sort=name)

(e.g. cPRD, gMRD, Customer Request, Quality, ASR SWS, RM.pdf, Errata.pdf...)

Proposed solution (Optional):

* The result of this activity will be the code review checklist and this ticket is treated as “platform specific”.
* Code Review checklists, both Intermediate and Final, should be added in GIT and attached to this ticket.
* New ticket will be raised for the code modifications resulted for the “code review” activity. This ticket will be used to update code, will be analyzed for all platforms and changes will be integrated for all affected platforms.

1. **ENGR00391768 cloned done for ICU, PWM, GPT, FEE, ETH, CAN  
   [ALL\_GENERAL] Perform UML design review against checklist for Matterhorn RTM 1.0.2 ASR 4.0**

(refer to CodeUML\_ReviewTracking\_vx.x on below link to get list of modules to be cloned:

<https://nxp1.sharepoint.com/sites/mcal/Shared%20Documents/Forms/AllItems.aspx#InplviewHashde697e4f-f738-41a3-a66a-49bc059f3891=RootFolder%3D%252Fsites%252Fmcal%252FShared%2520Documents%252FProducts%252FPlanning%252FMCAL%2520PM>

)

NewWork Description:

* Review UML/design against checklist.
* Fill the review result to the checklist.
* The checklist template and coding guideline are enclosed in attachment.

Requirement source:

sMCAL Release criteria document version 5.1:

<http://compass.freescale.net/go/228798570>

UML design guideline verion 6.0, date Sep-2016: <https://www.nxp.com/go/235285152>

UML design checklist verion 5.0, date Nov-2016: <https://www.nxp.com/go/235285152>

(e.g. cPRD, gMRD, Customer Request, Quality, ASR SWS, RM.pdf, Errata.pdf...)

Proposed solution (Optional):

* The result of this activity will be the review checklist and this ticket is treated as “platform specific”.
* Design Review checklists, both Intermediate and Final, should be added in GIT and attached to this ticket.
* New ticket will be raised for the UML design modifications resulted for the “Design Review” activity. This ticket will be used to update UML design, will be analyzed for all platforms and changes will be integrated for all affected platforms. For deviation from the Design Guideline cases, the ticket type shall be “Bug”.

**B. Tickets for ITG testing team (BETA/RTM)**(In ITG bin VV-TEST-MCAL, umbrella tickets will be linked to TEST platform baseline, TEST platform baseline linked to Release platform baseline)

1. **ENGR00391769 – clone done to all drivers  
   [ALL\_GENERAL] Test release preparation & quality package for Matterhorn RTM 1.0.2 ASR 4.0**

NewWork Description:

* Create wiring connection, wiring test.
* Update configuration files, data test files for Matterhorn RTM 1.0.2 ASR 4.0
* Execute all tests for Matterhorn on local and VnV station
* Execute at least one test for each driver under the supervisor mode
* Create test plan under: <https://nxp1.sharepoint.com/sites/mcal/_layouts/15/guestaccess.aspx?guestaccesstoken=WlsKKZwBFrMA8bdDwM32KZudzaXyymR5h9cACV3gUxE%3d&docid=2_15d3d1fb9b5b741b0ab8a8336fe518755&rev=1>

Create the following documents. Note that some of them might be started earlier in other activities, and scope of this ticket is to centralize the information and ensure all following documents are done on frozen code and available for RRR activity.

* 1. LDRA report (Except BASE, RESOURCE, INT): <MODULE>\_LDRA.zip
  2. Code coverage merged report (Except BASE, RESOURCE, INT): AUTOSAR\_MCAL\_<MODULE>\_CodeCoverageReport.txt
  3. Code coverage summary report (Except BASE, RESOURCE, INT): AUTOSAR\_MCAL\_<MODULE>\_CodeCoverage\_Summary.xlsx
  4. Static analysis report – HIS metric results (Except BASE, RESOURCE, INT): AUTOSAR\_MCAL\_<MODULE>\_StaticAnalysis\_Summary.xlsx
  5. MISRA summary report (Except RESOURCE, INT): AUTOSAR\_MCAL\_<MODULE>\_MisraReport.xlsx
  6. Misra log (Except INT): <Msn>\_misra.zip under test\_<msn>\doc\MISRA\_reports
  7. Profile report (Except BASE, RESOURCE, INT): AUTOSAR\_MCAL\_ADC\_ProfileReport.xlsx
  8. Profiling log <Msn>\_profiling.zip under test\_<msn>\doc\profile\_reports
  9. Code size/stack usage report (Except BASE, RESOURCE, INT): AUTOSAR\_MCAL\_<MODULE>\_SizeReport.xlsx
  10. RAM size report (Except BASE, RESOURCE, INT): AUTOSAR\_MCAL\_MCU\_RamSizeReport.xlsx
  11. Compiler warning report(Except BASE, RESOURCE, INT): AUTOSAR\_MCAL\_Compiler\_Warnings\_Report.xlsx
  12. Test report archive (exception: BASE and RESOURCE): <CompilerX>.zip under: test\_<msn>\doc\test\_reports\
  13. Test summary report for each module (Except: BASE and RESOURCE): AUTOSAR\_MCAL\_<MODULE>\_SummaryTestReport.html
  14. Test Specification (Except BASE, RESOURCE): AUTOSAR\_<MODULE>\_TS.pdf
  15. Test traceability log report (Except: INT): <Module>\_MCAL\_TM\_log.txt
  16. Requirement – Test case mapping (Except: BASE, RESOURCE): <Module>\_MCAL\_TM.txt
  17. Integration (INT) Traceability matrix report (specific for INT only): AUTOSAR\_MCAL\_INT\_TraceabilityMatrix.xls
  18. EqClass Analysis API Report under test\_<msn>\doc\test\_specification

AUTOSAR\_MCAL\_<MODULE>\_API\_EC.xls

* 1. EqClass Analysis API Configuration Report under test\_<msn>\doc\test\_specification

AUTOSAR\_MCAL\_<MODULE>\_CFG\_EC.xls

* 1. Test plan for Matterhorn RTM 4.0 1.0.2 in below link:

<https://nxp1.sharepoint.com/sites/mcal/_layouts/15/guestaccess.aspx?guestaccesstoken=Y2rwJTfKTAmpnOyWTg6L9ks9mKuJwzmjiR8%2f775UU5s%3d&folderid=2_1b7ff5f4a01b3476180668edd1f086a06&rev=1>

Requirement source:

ITG MCAL test release acception procedure, version 1.8, April, 2016  
<https://www.nxp.com/go/228622377>   
sMCAL Release criteria document version 5.1:  
<http://compass.freescale.net/go/228798570>

<https://www.nxp.com/go/228798570>

(e.g. cPRD, gMRD, Customer Request, Quality, ASR SWS, RM.pdf, Errata.pdf...)

Proposed solution (Optional):

N/A

1. **ENGR00391770  
   [ALL\_GENERAL] Run tool report checker for Matterhorn 4.0 RTM 1.0.2**

NewWork Description:

Following internal tool checkers shall be run for each RTM IS/ES release:  
1. AF Checker (Manually check).  
2. BEART Clean checker (Manually check).  
3. BEART Build Checker (Manually check).  
4. BEART Report checker (Manually check).  
5. MAF BIST (Manually check).  
6. Lauterbach profiling reports checker.  
7. Summary test report checker

Requirement source:

ITG MCAL test release acception procedure, version 1.8, April, 2016:  
<https://www.nxp.com/go/228622377>

(e.g. cPRD, gMRD, Customer Request, Quality, ASR SWS, RM.pdf, Errata.pdf...)

Proposed solution (Optional):

**C. Tools Tickets for first release on new platform**

(In V&V BIN (SOVVA), Ticket to be entered by ‘Test Technical Lead’)

1. **ENGR000xxxxxx (not needed)  
   [NewWork] [MAF] IOCLIENT porting for <Platform> <RLS>**

NewWork Description:

* IOCLIENT porting for platform

Expected behavior:

N/A

Requirement source:

N/A

(e.g. cPRD, gMRD, Customer Request, Quality, ASR SWS, RM.pdf, Errata.pdf...)

Proposed solution (Optional):

N/A

(This ticket is the responsibility of the MAF tool owner)

(NOTE: Driver list for cloning tool <http://cqsvc.am.freescale.net/cqbulkclone2/BulkClone.php>

ADC CAN DIO FEE FLS GPT ICU LIN MCL MCU PORT PWM SPI WDG RESOURCE BASE ETH  
FR MCEM)

# Milestones

* **Roadmap slot ww31-ww38 2017**
* **Release ww38 2017**
* **Development team vacation and holidays:**

| **ID** | **NAME** | **DATE** | **OWNED BY** | **DETAILS / DELIVERY** |
| --- | --- | --- | --- | --- |
| 1 | Start of development | 7-Aug-17 | PM | Planning details available.  Standard tickets for both dev and test are available and cloned (exception for RM and errata, req analysis)  Gather the information of autosar version.  Gather the information of Compiler and tresos versions.  Get alignment between MCAL and OS for Compiler option file.  Planned baselines (both release BLN and component BLN) are available.  Get information for cPRT,EA,…blns.  Finish auditing existing hardware and be ready for use .  PM send the change list for requirement to the team.  Having list of CRs planned to be done. |
| 2 | Preliminary Build Environment \* | 8-Aug-17 | TechLead | (INT) First version of build environment for this release, Including BASE/RESOURCE, DEM, DET and STUBS, check for changes, based on planning details provided. |
| MAF Tool Eng. | (PVT) IOCLIENT porting for new platform prelim label (or included in MAF release) |
| ITG Test Monitor | (INT) TEST\_VNV\_CONFIG baseline |
| 3 | Preliminary Component \*(Dev: 1) | 14-Aug-17 | Dev | (INT) new baseline for new platform/ first component implementation  Compliable, configurable component, minimum functionality components for ATE setup (for wiring test)  Components with features with are needed by other drivers need to provide that shared functionality (e.g MCU, PORT, tbd) |
| 4 | Preliminary Test Component \*(Test:1) | 14-Aug-17 | ITG | Send the initiated labels for wiring test. |
| 5 | ATE setup ready | 14-Aug-17 | Station Monitor | (Send ATE Checklist) Starting with first beta release on new Platform. All wiring tests have to be passed. |
| VnV | Finished to set-up AF/ software needed/ plugins on AF  ATE wiring ready to use |
| ITG | (INT) First Test Components (external test components with wiring tests) |
| 6 | Component Internal Release (Test campaign start) \*(Dev: 2) | 21-Aug-17 | Dev | (BLN –internal)Internal BLN for first test cycle. Requirements analysis complete including ITG peer review complete according to ITG acceptance criteria, majority of development done (including porting, integration) and dev tests passing; |
| 7 | FMEA development review complete | 1-Sept-17 | Dev | **IS only** FMEAs dev. review complete, tickets for Ext. Ass. entered; attached to review records for Safety Arch / Mgr. |
| 8 | First Test Cycle complete \*(Test:2) | 25-Aug-17 | ITG | (INT) Test component baseline with final results from first test cycle.  Expectation:   * Standard test plan is created. * Integration from other platforms done. * All existing test cases, except methodology testing. * Misralog/Misra report is available * Compile warning is available * Initial code coverage report, dataflow anomalies, code exposure without code coverage improvement. * Requirement-Test case mapping is available * Test report is available. * All failing tests are investigated and reported |
| 9 | Component Release Candidate \*(Dev: 3) | 28-Aug-17 | Dev | (BLN –internal)Internal BLN Candidate for Platform Release: an internal BLN that will go into the next platform release (most development activities are completed, finish adding new features, only bug fixes).  **Start RC Test Cycle** |
| 10 | External Assumptions / FMEA complete | 11-Sept-17 | Req.Mgr | **IS only**  External Assumptions are in Doors and baselined |
| Safety Arch-Mgr | Safety Arch/ Mgr. approved FMEAs (accepted review records) |
| Dev | Dev created final versions of FMEAs (delivery with next component baseline) |
| 11 | RC Test Cycle complete \* (Test: 3) | 1-Sept-17 | ITG | (INT) Test component baseline with final results from RC test cycle  Expectation:   * All tests are executed at least once- including methodology (systematic) testing, defect and new feature testing. * Code coverage testing are fully implemented and executed. Code coverage report, dataflow anomalies, code exposure are available. * Misra report is available * Compiler warning report is available. * Code stack size, Ram size reports are available. * Profiling report is available (if applicable). * Final requirement-test case mapping is available. * Test report is available. * Almost test cases pass. If there are any cases failed due to driver, they are reviewed/approved by Component owner to be known issues. * 🡺code test is frozen |
| 12 | Component Freeze \*(Dev: 4) | 11-Sept-17 | Dev | (BLN –internal)Internal Release Accepted for Platform Release: code freeze, code review & MISRA updates are finalized. Final testing and QP reports preparation start. **Final Test Cycle start**. |
| 13 | Safety Documents complete | 18-Sept-17 | Tech Lead | **IS only** Final version of Safety Manual (delivery with next BUILDENVbaseline) |
| Safety Architect | Safety Architect approved SM (accepted review records) |
| QE | **IS only/ RTM only** Final version of Safety Case (delivery to Compass) |
| Safety Manager | Safety Manager approved SC (accepted review records) |
| 14 | Final Test Cycle complete \*(Test: 4) | 13-Sept-17 | ITG | (INT) Test component baseline with final results  Quality pack will be taken from this milestone. |
| 15 | Component RRR Ready \*(Dev: 5) | 18-Sept-17 | Dev | (INT) UM, IM and quality documentation complete. Baseline sent for Quality RRR.  All CRs related to deliveries are resolved and the baselines are Staged! Note, the quality package CRs can be closed before actual date to stage baselines. |
| Component RRR Ready \* (Test: 5) | 18-Sept-17 | ITG | (INT) Deliver ITG parts of quality reports (excluding test reports)  All CRs related to deliveries are resolved and the baselines are Staged! |
| Component RRR Ready \*(Test: 6) | 19-Sept-17 | ITG | (INT) Deliver ITG test reports  All CRs related to deliveries are resolved and the baselines are Staged! |
| 16 | RRR Report | 20-Sept-17 | QE | Quality shall deliver the first RRR report  excluding comments in test reports. The comments for test report shall be delivered 1 day after Test: 6 milestone.  Need 3 days to ensure no more findings until Final release. |
| 17 | Component Final Release \*(Dev: 6, Test: 7) | 21-Sept-17 | Dev | (BLN- final) All RRR findings implemented. BLN that will go into the platform release.  **Only after Quality approval! Baselines are Finalized.** |
| ITG | (BLN- final) All RRR findings implemented. BLN that will go into the platform release.  Only after Quality approval! Baselines are Finalized. |
| 18 | Final Release | 22-Sept-17 | Integrator/ QE / PM | (BLN- platform) Full final release baseline. Package creation (Release-, Quality-, Safety-Pack) |

Table 4 – Milestones for MPC5777M AUTOSAR 4.0 MCAL RTM 1.0.2

(Legend

\*(Dev/Test: #): Milestone used with label\_status; (#: label\_status milestone number)

|  |
| --- |
| Dev related detail/milestone |
| ITG/Test related detail/milestone |
| IS/ Safety related detail/milestone |

DATE: Date to be added for each Milestone; relative times are indicators, need to be confirmed by plan; below typical 40 days slot for follow up releases; first time releases might need more time)

# Dependencies / Stakeholder

**Teams and Engineers planned for development**

**IP++ mode:**

* **5 component teams: IP++ allocation:**FPT team allocation.xlsx under

<http://compass.freescale.net/go/228764962>

Version used for this release:  
<http://compass.freescale.net/livelink/livelink/230885457/FPT_team_allocation.xlsx?func=doc.Fetch&nodeId=230885457&vernum=20>

**Training needs for Development/Test team**

* **E.g. process (FBR process used by IP++ dev team), technical training**

**MCAL Component/IPV mapping and internal stakeholders**

|  |  |  |
| --- | --- | --- |
| **COMPONENT, ROLE** | **IPV , ROLE TASK ADDITIONS** | **COMPONENT/ IPV OWNER, ROLE OWNER** |
| ADC | IPV\_ADCDIGV2 , IPV\_SIUL2 | IP++ Group2, Madi Petrareanu  [madi-tatiana.petrareanu@nxp.com](mailto:madi-tatiana.petrareanu@nxp.com) |
| CAN | IPV\_MCAN | IP++ Group5, Valeriu Togan  [valeriu.togan@nxp.com](mailto:valeriu.togan@nxp.com) |
| CANIF | none | IP++ Group5 |
| DIO | IPV\_SIUL2 | IP++ Group2 |
| ETH | IPV\_FEC | IP++ Group5 |
| ETHIF | none | IP++ Group5 |
| FEE | none | IP++ Group4, Livia Firan  [livia.firan@nxp.com](mailto:livia.firan@nxp.com) |
| FLS | IPV\_FLASHV2 | IP++ Group4 |
| MEMIF | none | IP++ Group4 |
| FR | IPV\_FRIPIV10 | IP++ Group5 |
| FRIF | none | IP++ Group5 |
| GPT | IPV\_GTM, IPV\_PIT, IPV\_STM | IP++ Group3, Alin Meleandra [alin.meleandra@nxp.com](mailto:alin.meleandra@nxp.com) |
| ICU | IPV\_GTM | IP++ Group3 |
| LIN | IPV\_LINFlex (no DMA) | IP++ Group1, Vlad Sterian [vlad.sterian@nxp.com](mailto:vlad.sterian@nxp.com) |
| LINIF | None | IP++ Group1 |
| MCL | IPV\_AXBS, IPV\_DMA, IPV\_DMAMUX, IPV\_GTM | IP++ Group4 |
| MCU | IPV\_FLASHV2, IPV\_PLLDIG, IPV\_SSCM, IPV\_STCUV2, IPV\_MCV4, IPV\_SIUL2, IPV\_XOSC, IPV\_PRAM | IP++ Group1 |
| PORT | IPV\_SIUL2 | IP++ Group2 |
| PWM | IPV\_GTM | IP++ Group3 |
| SPI | IPV\_DSPI, (MCL dependency) | IP++ Group1 |
| WDG | IPV\_SWT | IP++ Group4 |
| WDGIF | none | IP++ Group4 |
| ECUM | none | IP++ Group0, Marius Rotaru, [marius.rotaru@nxp.com](mailto:marius.rotaru@nxp.com) |
| BASE | none | IP++ Group0 |
| RESOURCE | none | IP++ Group0 |
| DEM | none | IP++ Group0 |
| DET | none | IP++ Group0 |
| RTE | none | IP++ Group0 |
| BUILD\_ENV | none | IP++ Group0 |
| SAMCAL | - | Integrator |
| SARELCHK | optional | Integrator |
| Tech Lead  (TL) | Board bring-up;  Author for Safety Manual review; | P++ Group0, Marius Rotaru, [marius.rotaru@nxp.com](mailto:marius.rotaru@nxp.com) |
| MCAL Product owner | CCB Moderator; Assigning TechLead and other resources; Managing equipment; | Victor Burlacu  [victor.burlacu-zane@nxp.com](mailto:victor.burlacu-zane@nxp.com) |
| Integrator | UM/IM reviewer for rebranding (MCAL, MCAL4.0 only) | Nicu Dobrostomat  [nicolae.dobrostomat@nxp.com](mailto:nicolae.dobrostomat@nxp.com) |
| Integration Team Manager | Assigning Integrator; | Letitia Dumitrescu [letitia-georgiana.dumitrescu@nxp.com](mailto:letitia-georgiana.dumitrescu@nxp.com) |
| Project Manager (PM) | - | Lionel Gautier  [lionel.gautier@nxp.com](mailto:lionel.gautier@nxp.com) |
| Quality Engineer (QE) | - | Liliana Neacsa  [eugenia.neacsa@nxp.com](mailto:eugenia.neacsa@nxp.com) |
| Quality Team Manager | Assigning QE; | Simona Almajan  [simona.almajan@nxp.com](mailto:simona.almajan@nxp.com) |
| Test Technical Lead | - | Richard Mensik  [richard.mensik@nxp.com](mailto:richard.mensik@nxp.com) |
| ITG Test Team Manager | Assigning ITG resources; Managing FPT equipment; | Minh Nhat Nguyen  [minh.nhat.nguyeb@nxp.com](mailto:minh.nhat.nguyeb@nxp.com) |
| Test Station Admin (Test Monitor) | - | Nguyen Van Hung  [Hung.nguyen@nxp.com](mailto:Hung.nguyen@nxp.com) |
| Safety Architect | FMEA 2nd line reviewer for drivers in IP++ Group3 and Group4;  Safety Manual reviewer;  Author / responsible for content; | David Baca  [david.baca@nxp.com](mailto:david.baca@nxp.com) |
| Safety Manager | FMEA 2nd line reviewer for drivers in IP++ Group1, Group2 and Group5;  BASE FMEA reviewer; | Martin Vlk  [martin.vlk@nxp.com](mailto:martin.vlk@nxp.com) |
| Requirements Manager | TWG moderator; Owner of PRT and MRD; | Marius Rotaru  [marius.rotaru@nxp.com](mailto:marius.rotaru@nxp.com) |

Table 5 – component/IPV table with owner (internal stakeholder)

**External stakeholders and information**

|  |  |  |  |
| --- | --- | --- | --- |
| **ROLE** | **LOCATION** | **NAME** | **CONTACT** |
| HW PM | FSL ATX | Brocklehurst Bill-RVTL60 | bill.brocklehurst@nxp.com |
| HW Apps Eng | FSL ATX | McMenamin David-R62709  Turner Andrew-R28704 | david.mcmenamin@nxp.com  andrew.turner@nxp.com |
| HW prod Mkt | FSL ATX | Pesses Philip-R9AAJX | philip.pesses@nxp.com |
| HW PE | FSL ATX | Yu Yanyao-RA2813  Walker Phil-R13071 | yy.yu@nxp.com  phil.walker@nxp.com |

Table 6 – NPI stakeholders (external)

**NPI Links**

**HW project folder**

<http://compass.freescale.net/go/223184882>

**Marketing folder**

<http://compass.freescale.net/go/225009463>

PDM Information

PDM SOC item cut 1.0: SOC\_MPC5777M\_Matterhorn\_cmos055fg\_6m4x0y1z\_005

* PDM erratas cut 1.0 under item: D\_SSL\_Matterhorn\_Chiptop\_SYN\_005

PDM SOC item cut 2.0: SOC\_MPC5777M\_Matterhorn\_cmos055fg\_6m4x0y1z\_032

* PDM erratas cut 2.0 under item: D\_SSL\_Matterhorn\_Chiptop\_SYN\_032

PDM SOC item cut 2.0: SOC\_MPC5777M\_Matterhorn\_cmos055fg\_6m4x0y1z\_041

* PDM erratas cut 2.0 under item: D\_SSL\_Matterhorn\_Chiptop\_SYN\_041

**External dependencies:**

This section enumerates the list of external dependencies required in order to successfully complete the work for delivery the product.

**MCAL shared equipment (Release generic dependencies):**

IP++ Equipment needs.xlsx under

<http://compass.freescale.net/go/233382362>

Version used for this release:

<http://compass.freescale.net/livelink/livelink/233377880/IP%2B%2B_Equipment_needs.xlsx?func=doc.Fetch&nodeId=233377880&vernum=4>

**Release specific dependencies:**

| **GROUP** | **ID** | **DESCRIPTION** | **QTY** | **OWNER** | **DUE DATE OF AVAILABILITY** |
| --- | --- | --- | --- | --- | --- |
| Board & silicon | MPC5777M-416DS | Matterhorn 416 MAPBGA Development minimodule(profiling) | 24 | Project Manager | **Available** |
| MPC5777M-512DS | Matterhorn 512 MAPBGA Development minimodule | 9 | **Available** |
| MPC5746MMB | Motherboard | 18 | **Available** |
| PPC5777MK0MVU8B | Samples MPC5777M Matterhorn 416 MAPBGA (cut 2.0B mask 0N50H) | 29 | **Available 17 in Roz and Buch, 12 in Hanoi** |
| PPC5777M2MVU8B | Samples MPC5777M Matterhorn 416 MAPBGA (cut 2.0B mask 0N50H | **2** | **Available** |
| SPC5777MMVU8 | Samples MPC5777M Matterhorn 416 MAPBGA (cut 2.0B mask 0N50H | 5 | **Available** |
| Tools | Version see references below | Debugger Patch | **1** | Project Manager | **Available** |
| Documentation | Version see references above | Reference manual | 1 | Project Manager | **Available** |
| Version see references above | Errata sheet | 1 | **Available** |
| Version see references above | Safety Manual | 1 | **Available** |
| OS and license | n/a | AUTOSAR OS | 0 | OS Project Manager | n/a |
| Test System | To be reserved, see planning details | V&V remote test station | 1 | V&V Team Manager | **Available** |
| BEART/ MAF, Versions see planning details | V&V tools , IOCLIENT functions | 1 | Available (in MAF\_1.5.3) |
| LDRA/ Negoiu to be reserved, see planning details | CodeCoverage tool and license/ remote access | 1 | Avaiallbe, provided via V&V service |

Table 7 - external dependencies (Release specific)

(NOTE: Actual Inventory can be checked at <http://vav.freescale.net/hwstock/> )

**Tools versions to be used local (Development)**

* **Tools qualification (IS only):**

**ToolsQualification\_sMCAL.xlsx, version 2.22, 01-Jan-2016**

**ExtToolsQualification\_sMCAL.xlsx, version 1.13, 12-Aug-2015**

[**http://compass.freescale.net/go/226801964**](http://compass.freescale.net/go/226801964)

* **internal tools:**

**BLN\_LABELS\_STATUS\_01.02.03**

**BLN\_RAM\_SIZE\_REPORT\_01.02.01**

**BLN\_AUTO-TOOLS\_01.45.00**

**BEART\_1.4.47**

**MAF\_1.5.3**

* **external tools:**

**Tools links:**

**<http://compass.freescale.net/go/195311659>   
ext** [**http://www.freescale.com/go/195311659**](http://www.freescale.com/go/195311659)

| **TOOL CATEGORY** | **TOOL NAME** | **VERSION / COMMENT / LINK** | **OWNER** |
| --- | --- | --- | --- |
| Process Tool | IBM Clearcase /CCRC | 7.1.2 | QA |
| IBM ClearQuest (web client) | 8.0 | QA |
| Compass (web client) | 9.7.1 | QA |
| Microsoft Office | **2007 and 2013 (Office 365)** | QA |
| Microsoft Project (project planning and tracking) | 2007 | QA |
| ReqTracer | 2011.1.a | QA |
| Doors | 9.5.2  **(**latest available version on server 20002@doors-20002) | QA |
| Enterprise Architect | **9.3** | QA |
| Static and Dynamic Analysis | PCLint | PCLint 9.00J  (requires BLN\_AUTO-TOOLS\_01.19.00 or newer) | Tools team |
| LDRA | **9.4.6** | V&V Team |
| AUTOSAR configuration verification | AMDC | **1.0.14.0**  **(requires BLN\_AUTO-TOOLS\_01.33.00 or newer)** | Tools team |
| EB Tresos | See above | Tools team |
| Debugger | Lauterbach Trace32 | **trace32\_2012august.iso**  **Matterhorn patche:** [**http://compass.freescale.net/go/227824982**](http://compass.freescale.net/go/227824982) | Tech Lead |
| Documentation Tool | Doxygen | v1.7.x (not really a dependency as long as the version is >1.7.1) | Tools team |
| SSDS incl. Docato/Serna/DAPS | SSDS Platform Release 4.6.3.1,  latest available version on server ;  DAPS must be used instead of web interfaces!  SSDS versions not selectable, our tools will be updated on a need basis, always assume to use the latest SSDS/DAPS versions | Tools team |
| Transcend | version 7.2.1 (SSDS/DAPS)  Included in ClearCase under AUTO\_TOOLS label | Tools team |
| Helper Tools | .NET Framework | 4.0 (BLN\_DEFPP) | Tools team |
| Perl | 5.16.1 (VSMD, SSDS/DAPS) | Tools team |
| Cygwin | CYGWIN\_NT-6.1-WOW64 zcz01-3101 1.7.11(0.260/5/3) 2012-02-24 14:05 i686 Cygwin  But GNU Make 3.81 (above package contains make 3.82.90 which creates problems) | Tools team |
| Adobe Reader X | 10.1.2 | Tools team |

Table 8 – external SW tools versions

# Baselines/Labels

**Origin baselines derivation:** (remove this section if not having first time added components)

|  |  |  |
| --- | --- | --- |
| **RELEASE** | **BLN/LABEL** | **ID** |
| **MPC5777M AUTOSAR 4.0 MCAL RTM 1.0.1** | **BLN\_SMCAL\_4.0\_MATTERHORN\_RTM\_1.0.1** | **ENGR00375941** |
| **MPC5777M AUTOSAR 4.0 MCAL RTM 1.0.1 TEST** | **BLN\_TEST\_SMCAL\_4.0\_MATTERHORN\_RTM\_1.0.1** | **ENGR00377299** |

(NOTE: Pls derivate new baselines where required, derivated from previous/origin component release as “First in derived series” ( For the platform dependent ones).

The existing components and platform independent BLN shall be derived “Next in existing series”.)

|  |  |  |
| --- | --- | --- |
| **COMPONENT** | **BLN/LABEL** | **STATE** |
| ADC | BLN\_ADC\_SMCAL\_4.0\_MPC577XM\_01.03.00 | Finalized |
| BASE | BLN\_BASE\_SMCAL\_4.0\_MPC577XM\_01.04.00 | Finalized |
| CAN | BLN\_CAN\_SMCAL\_4.0\_MPC577XM\_01.03.00 | Finalized |
| CANIF | BLN\_CANIF\_SMCAL\_4.2\_01.01.00 | Finalized |
| DEM | BLN\_DEM\_SMCAL\_4.0\_01.03.00 | Finalized |
| DET | BLN\_DET\_SMCAL\_4.0\_01.02.00 | Finalized |
| DIO | BLN\_DIO\_SMCAL\_4.0\_MPC577XM\_01.03.00 | Finalized |
| ECUM | BLN\_ECUM\_SMCAL\_4.0\_01.03.00 | Finalized |
| ETH | BLN\_ETH\_SMCAL\_4.0\_MPC577XM\_01.01.00 | Finalized |
| ETHIF | BLN\_ETHIF\_SMCAL\_4.2\_01.00.00 | Finalized |
| FEE | BLN\_FEE\_SMCAL\_4.0\_MPC577XM\_01.03.00 | Finalized |
| FLS | BLN\_FLS\_SMCAL\_4.0\_MPC577XM\_01.03.00 | Finalized |
| FR | BLN\_FR\_SMCAL\_4.0\_MPC577XM\_01.01.00 | Finalized |
| FRIF | BLN\_FRIF\_SMCAL\_4.0\_01.01.00 | Finalized |
| GPT | BLN\_GPT\_SMCAL\_4.0\_MPC577XM\_01.03.00 | Finalized |
| ICU | BLN\_ICU\_SMCAL\_4.0\_MPC577XM\_01.03.00 | Finalized |
| LIN | BLN\_LIN\_SMCAL\_4.0\_MPC577XM\_01.03.00 | Finalized |
| LINIF | BLN\_LINIF\_SMCAL\_4.0\_01.00.00 | Finalized |
| MCL | BLN\_MCL\_SMCAL\_4.0\_MPC577XM\_01.03.00 | Finalized |
| MCU | BLN\_MCU\_SMCAL\_4.0\_MPC577XM\_01.03.00 | Finalized |
| MEMIF | BLN\_MEMIF\_SMCAL\_4.0\_01.01.00 | Finalized |
| PORT | BLN\_PORT\_SMCAL\_4.0\_MPC577XM\_01.03.00 | Finalized |
| PWM | BLN\_PWM\_SMCAL\_4.0\_MPC577XM\_01.03.00 | Finalized |
| RESOURCE | BLN\_RESOURCE\_SMCAL\_4.0\_MPC577XM\_01.03.00 | Finalized |
| RTE | BLN\_RTE\_SMCAL\_4.0\_01.11.00 | Finalized |
| SPI | BLN\_SPI\_SMCAL\_4.0\_MPC577XM\_01.03.00 | Finalized |
| WDG | BLN\_WDG\_SMCAL\_4.0\_MPC577XM\_01.03.00 | Finalized |
| WDGIF | BLN\_WDGIF\_SMCAL\_4.0\_01.05.00 | Finalized |
|  |  |  |
| **IPV COMPONENT** | **BLN/LABEL** |  |
| IPV\_ADCDIGV2 | BLN\_IPV\_ADCDIGV2\_SMCAL\_4.0\_01.04.00 | Finalized |
| IPV\_AXBS | BLN\_IPV\_AXBS\_SMCAL\_4.0\_01.03.00 | Finalized |
| IPV\_CMU | BLN\_IPV\_CMU\_SMCAL\_4.0\_01.12.00 | Finalized |
| IPV\_DMA | BLN\_IPV\_DMA\_SMCAL\_4.0\_01.34.00 | Finalized |
| IPV\_DMAMUX | BLN\_IPV\_DMAMUX\_SMCAL\_4.0\_01.19.00 | Finalized |
| IPV\_DSPI | BLN\_IPV\_DSPI\_SMCAL\_4.0\_01.29.00 | Finalized |
| IPV\_FEC | BLN\_IPV\_FEC\_SMCAL\_4.0\_01.04.00 | Finalized |
| IPV\_FLASHV2 | BLN\_IPV\_FLASHV2\_SMCAL\_4.0\_01.26.00 | Finalized |
| IPV\_FRIPIV10 | BLN\_IPV\_FRIPIV10\_SMCAL\_4.0\_01.14.00 | Finalized |
| IPV\_GTM | BLN\_IPV\_GTM\_SMCAL\_4.0\_01.03.03 | Finalized |
| IPV\_LINFLEX | BLN\_IPV\_LINFLEX\_SMCAL\_4.0\_01.19.00 | Finalized |
| IPV\_MCAN | BLN\_IPV\_MCAN\_SMCAL\_4.0\_01.04.00 | Finalized |
| IPV\_MCV4 | BLN\_IPV\_MCV4\_SMCAL\_4.0\_01.28.00 | Finalized |
| IPV\_PIT | BLN\_IPV\_PIT\_SMCAL\_4.0\_01.27.00 | Finalized |
| IPV\_PLLDIG | BLN\_IPV\_PLLDIG\_SMCAL\_4.0\_01.20.00 | Finalized |
| IPV\_PRAM | BLN\_IPV\_PRAM\_SMCAL\_4.0\_01.18.00 | Finalized |
| IPV\_SIUL2 | BLN\_IPV\_SIUL2\_SMCAL\_4.0\_01.33.00 | Finalized |
| IPV\_SSCM | BLN\_IPV\_SSCM\_SMCAL\_4.0\_01.15.00 | Finalized |
| IPV\_STCUV2 | BLN\_IPV\_STCUV2\_SMCAL\_4.0\_01.09.00 | Finalized |
| IPV\_STM | BLN\_IPV\_STM\_SMCAL\_4.0\_01.23.00 | Finalized |
| IPV\_SWT | BLN\_IPV\_SWT\_SMCAL\_4.0\_01.22.00 | Finalized |
| IPV\_XOSC | BLN\_IPV\_XOSC\_SMCAL\_4.0\_01.07.00 | Finalized |
|  |  |  |
| **ENVIRONMENT/OTHER** | **BLN/LABEL** |  |
| BUILDENV | BLN\_BUILDENV\_SMCAL\_4.0\_MPC577XM\_01.04.00 | Finalized |
| SAMPLEAPP | BLN\_SAMPLEAPP\_SMCAL\_4.0\_MPC577XM\_01.02.00 | Finalized |
| SARELCHK | (not delivered) | #N/A |
| PDOCS | BLN\_PDOCS\_SMCAL\_4.0\_MPC577XM\_01.01.00 | Finalized |

Table 9 – Origin Baselines

**Planned Release labels / baselines:**

|  |  |  |
| --- | --- | --- |
| **RELEASE** | **BLN/LABEL** | **ID** |
| **MPC5777M AUTOSAR 4.0 MCAL RTM 1.0.2** | **BLN\_SMCAL\_4.0\_MATTERHORN\_RTM\_1.0.2** | **ENGR00375941** |
| **MPC5777M AUTOSAR 4.0 MCAL RTM 1.0.2 TEST** | **BLN\_TEST\_SMCAL\_4.0\_MATTERHORN\_RTM\_1.0.2** | **ENGR00377299** |

(NOTE: Pls derivate new baselines where required, derivated from previous/origin component release as “First in derived series” ( For the platform dependent ones).

The existing components and platform independent BLN shall be derived “Next in existing series”.)

|  |  |  |
| --- | --- | --- |
| **COMPONENT** | **BLN/LABEL** | **STATE** |
| ADC | BLN\_ADC\_SMCAL\_4.0\_MPC577XM\_01.04.00 | Plan |
| BASE | BLN\_BASE\_SMCAL\_4.0\_MPC577XM\_01.05.00 | Plan |
| CAN | BLN\_CAN\_SMCAL\_4.0\_MPC577XM\_01.04.00 | Plan |
| CANIF | BLN\_CANIF\_SMCAL\_4.2\_01.02.00 | Finalized |
| DEM | BLN\_DEM\_SMCAL\_4.0\_01.04.00 | Finalized |
| DET | BLN\_DET\_SMCAL\_4.0\_01.03.00 | Finalized |
| DIO | BLN\_DIO\_SMCAL\_4.0\_MPC577XM\_01.04.00 | Plan |
| ECUM | BLN\_ECUM\_SMCAL\_4.0\_01.04.00 | Finalized |
| FEE | BLN\_FEE\_SMCAL\_4.0\_MPC577XM\_01.04.00 | Plan |
| FLS | BLN\_FLS\_SMCAL\_4.0\_MPC577XM\_01.04.00 | Plan |
| FR | BLN\_FR\_SMCAL\_4.0\_MPC577XM\_01.02.00 | Plan |
| FRIF | BLN\_FRIF\_SMCAL\_4.0\_01.03.00 | Finalized |
| GPT | BLN\_GPT\_SMCAL\_4.0\_MPC577XM\_01.04.00 | Plan |
| ICU | BLN\_ICU\_SMCAL\_4.0\_MPC577XM\_01.04.00 | Plan |
| ETH | BLN\_ETH\_SMCAL\_4.0\_MPC577XM\_01.02.00 | Plan |
| ETHIF | BLN\_ETHIF\_SMCAL\_4.2\_01.01.00 | Finalized |
| LIN | BLN\_LIN\_SMCAL\_4.0\_MPC577XM\_01.04.00 | Plan |
| LINIF | BLN\_LINIF\_SMCAL\_4.0\_01.00.00 | Finalized |
| MCL | BLN\_MCL\_SMCAL\_4.0\_MPC577XM\_01.04.00 | Plan |
| MCU | BLN\_MCU\_SMCAL\_4.0\_MPC577XM\_01.04.00 | Plan |
| MEMIF | BLN\_MEMIF\_SMCAL\_4.0\_01.02.00 | Finalized |
| PORT | BLN\_PORT\_SMCAL\_4.0\_MPC577XM\_01.04.00 | Plan |
| PWM | BLN\_PWM\_SMCAL\_4.0\_MPC577XM\_01.04.00 | Plan |
| RESOURCE | BLN\_RESOURCE\_SMCAL\_4.0\_MPC577XM\_01.04.00 | Plan |
| RTE | BLN\_RTE\_SMCAL\_4.0\_01.18.00 | Plan |
| SPI | BLN\_SPI\_SMCAL\_4.0\_MPC577XM\_01.04.00 | Plan |
| WDG | BLN\_WDG\_SMCAL\_4.0\_MPC577XM\_01.04.00 | Plan |
| WDGIF | BLN\_WDGIF\_SMCAL\_4.0\_01.09.00 | Finalized |
|  |  |  |
| **IPV COMPONENT** | **BLN/LABEL** |  |
| IPV\_ADCDIGV2 | BLN\_IPV\_ADCDIGV2\_SMCAL\_4.0\_01.05.00 | Plan |
| IPV\_AXBS | BLN\_IPV\_AXBS\_SMCAL\_4.0\_01.07.00 | Finalized |
| IPV\_CMU | BLN\_IPV\_CMU\_SMCAL\_4.0\_01.17.00 | Plan |
| IPV\_DMAMUX | BLN\_IPV\_DMAMUX\_SMCAL\_4.0\_01.22.00 | Finalized |
| IPV\_DMA | BLN\_IPV\_DMA\_SMCAL\_4.0\_01.42.00 | Plan |
| IPV\_DSPI | BLN\_IPV\_DSPI\_SMCAL\_4.0\_01.34.00 | Plan |
| IPV\_FEC | BLN\_IPV\_FEC\_SMCAL\_4.0\_01.07.00 | Finalized |
| IPV\_FLASHV2 | BLN\_IPV\_FLASHV2\_SMCAL\_4.0\_01.34.00 | Plan |
| IPV\_FRIPIV10 | BLN\_IPV\_FRIPIV10\_SMCAL\_4.0\_01.18.00 | Plan |
| IPV\_GTM | BLN\_IPV\_GTM\_SMCAL\_4.0\_01.05.00 | Plan |
| IPV\_LINFLEX | BLN\_IPV\_LINFLEX\_SMCAL\_4.0\_01.23.00 | Finalized |
| IPV\_MCAN | BLN\_IPV\_MCAN\_SMCAL\_4.0\_01.06.00 | Finalized |
| IPV\_MCV4 | BLN\_IPV\_MCV4\_SMCAL\_4.0\_01.33.00 | Plan |
| IPV\_PIT | BLN\_IPV\_PIT\_SMCAL\_4.0\_01.32.00 | Plan |
| IPV\_PLLDIG | BLN\_IPV\_PLLDIG\_SMCAL\_4.0\_01.23.00 | Finalized |
| IPV\_PRAM | BLN\_IPV\_PRAM\_SMCAL\_4.0\_01.22.00 | Plan |
| IPV\_SIUL2 | BLN\_IPV\_SIUL2\_SMCAL\_4.0\_01.40.00 | Plan |
| IPV\_SSCM | BLN\_IPV\_SSCM\_SMCAL\_4.0\_01.19.00 | Finalized |
| IPV\_STCUV2 | BLN\_IPV\_STCUV2\_SMCAL\_4.0\_01.11.00 | Finalized |
| IPV\_STM | BLN\_IPV\_STM\_SMCAL\_4.0\_01.29.00 | Plan |
| IPV\_SWT | BLN\_IPV\_SWT\_SMCAL\_4.0\_01.25.00 | Finalized |
| IPV\_XOSC | BLN\_IPV\_XOSC\_SMCAL\_4.0\_01.09.00 | Finalized |
|  |  |  |
| **ENVIRONMENT/OTHER** | **BLN/LABEL** |  |
| BUILDENV | BLN\_BUILDENV\_SMCAL\_4.0\_MPC577XM\_01.05.00 | Plan |
| SAMPLEAPP | BLN\_SAMPLEAPP\_SMCAL\_4.0\_MPC577XM\_01.03.00 | Plan |
| SARELCHK | (not delivered) | #N/A |
| SDOCS | BLN\_SDOCS\_SMCAL\_4.0\_MPC577XM\_01.02.00 | Plan |

Table 10 – planned baselines

# Deliverables

Details see nonJDP Release Criteria **(nonJDP\_MCAL\_Release\_Criteria\_(SASW).xlsx)**

Under <http://compass.freescale.net/go/228798570>

Version used for this release:

<http://compass.freescale.net/livelink/livelink/230720356/nonJDP_MCAL_Release_Criteria_%28SASW%29.xlsx?func=doc.Fetch&nodeId=230720356&vernum=20>

**Below is additional information or exceptions:**

* Product Release Package (Installer)
  + EULA version v1.3 required!  
    <http://compass.freescale.net/go/221945195>
* Quality Package (Not for EAR, in case of Beta the reports are to be delivered internal only) (ZIP file)
* Safety Package (Installer)
  + Not for QM release, not for EAR
* PM delivery (Email/Compass)
* Specific agreements (items which might be delivered in addition or not delivered)

|  |  |  |
| --- | --- | --- |
| **DELIVERY ITEM NAME** | **COMMENT** | **RESPONSIBILITY** |
| ITG Dashboard | Required, Weekly | ITG Lead |
| Quality Matrix,  Test Report Summary | Required, with final release | Quality Engineer |
| Label/Milestone Status Report | Required, daily | automated |

Table 11 – PM Deliverables

(NOTE: Current Label/ Milestone status can be found at <http://10.171.89.58/projects>)