

Integrated Module Configuration Index Document for CPIOM H3

Technical Report

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SUMMARY:

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RELATED DOCUMENTS	

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RECORD OF REVISIONS

ISSUE	DATE	EFFECT ON		REASONS FOR REVISION
		PAGE	PARA	
1.0	17/04/2012	All	All	First issue for B9 clearance with ATA29 HMCA load only.
1.1	13/07/2012	All	All	Rebound to include the V1- FQMS standard only.
1.2	09/11/2012	All	All	Final PWO baseline including FQMS v1.1
2.0	25/02/2013	All	All	MSN001 Station 24s Issue.
2.1	22/04/2013	All	All	MSN001 First Flight
2.2	26/06/2013	-	-	MSN001 First Flight – rebound
		7	§2.2	PN, MP/MOD & CMS updated
		4	Table of References	IGGS DDP [13] up-issued – updated to encompass documentation comments Integration Summary [15] and CIA [14] added to list
2.3	12/08/2013	4	Table of References	FQMS DDP for V2.1.1 LTR/TRA_QC_113
		8	2.4.1	FQMS Part numbers updated for FUELMEAS1 FUELMEAS2
		14-16	4.x	Added section for additional integration activities
2.4		4	Table of References	FQMS DDP for V2.1.1 LTR/TRA_QC_113
		8	2.4.1	FQMS Part numbers updated for: FUELMGMT FUELMEAS_MON FUELBITE FIN Codes corrected for inactive positions on H33 and H34
		4	TofRef	New MSL DDP.
		13	2.6	New MSL P/N, CMS Code and MOD/MP number. New MSL generation compatible with FSA NG 2.1.x.
		14	3	Addition of new MSL P/N and compatibility.
2.5	21/10/2013	All	All	Batch 12 ORC 1 Deviation
		All	All	Update to new IM-CID template
		4	Table of References	Updated References for ATA29 & ATA35 DDPs Inclusion of CPIOM_UG & ATAx USIS references
		11	2.4.4	Update for new HMCA SW: Part Number; CMS; Treatment
		12	2.4.5	Update for new OSCM SW: Part Number; CMS; MON/MP; Treatment
		14	3	Addition of new MSL P/N and compatibility.
		17-25	4.x	Update of sections for additional integration activities with new SW HMCA S2.1 and OSCM S2.1
2.6	20/01/2014	All	All	Update for ORC#2 Deviation clearance. New IM-CID v2.1 template.
		4	Table of References	Updated References for ATA28, ATA35 & ATA47 DDPs & USIS documents. Updated QTR & TRA references
		10	2.4.1	Update for new FQMS SW: Part Number; Treatment
		11	2.4.2	Update for new IGGS SW: Part Number; Treatment

ISSUE	DATE	EFFECT ON		REASONS FOR REVISION
		PAGE	PARA	
		12	2.4.5	Update for new OSCM SW: Part Number; MOD/MP; Treatment
		14	3	Update of compatibility matrix to include new application loads.
		17-25	4.x	Update of sections for additional integration activities with new SW FQMS S2.9, OSCM S2.2 & IGGS S2.9
3.0	26/03/2014	6	1.1	Update to IMA baseline for Batch 16
		6	1.2	Updated issue for Integration Summary
		8	2.2	Updated to CSW S3.0.2
		9	2.3	Update to new MCCT for Batch 16
		10	2.4.3	Update to DSCS S3.0 application
		10	2.3.5	Update to HMCA S3.0 application
		12	2.5	Update for new RBCT for Batch 16
		12	2.6	Update to new MSL load
		13	3	Updated IM compatibility Matrix for new IMA baseline and applications
		16	4	Section 4 populated for compatibility of Batch 15 FQMS, OSCM, IGGS to new IMA baseline.
3.1	03/04/2014	6	1.1	Update for FQMS V2.9.1 clearance
		11	2.4.1	Update to include FQMS V2.9.1
		15	3	Updated IM compatibility Matrix for new IMA baseline and applications
		18	4	Section 4 Updated for FQMS V2.9.1
3.2	17/04/2014	10	2.4.1	Update to include FQMS V3
		11	2.4.2	Update for IGGS V3
		15	3	Updated IM compatibility Matrix for new FQMS and IGGS software
		18	4	Section 4 Updated to remove FQMS v2.9/v2.9.1 and IGGS v2.9 as obsolete
3.3	12/05/2014	18	4	Section 4 Updated to include OSCM S2.2 analysis on IMA B16 baseline for AD01 / CSW S3.0.2
3.4	03/06/2014	13	2.4.5	Oxygen Software have been updated to S3
		15	3	Integrated Module Compatibility Matrix have been updated
3.5	27/06/2014		§3	Updated to authorize OSCM S2.2 and S3 combinations for flight tests with H2.0PC02 and H2.1
4.0	10/07/2014			Update of the template
				Update for new MCCT and RBCT Generation
		7	1.1	Update of Target Configuration for batch 17
		10	2.2	Update Status for CSW
		11	2.3	Integrated Configuration Table Loads Update
		11,12,13	2.4	Update Status for IGGS, DSCS, HMCA, OSCM apps
		14	2.5	Resource BITE Configuration Table Load update
		14	2.6	Update for new MSL Generation
		15	3.0	Integrated Module Compatibility Matrix update
4.1	30/07/2014		ToR	Update for FQSM and IGGS USIS, DDP
		12	2.3	Update for MCCT status
		12	2.4.1	Update for FQMS V3.1
		13	2.4.2	Update for IGGS V3.1
		15	2.5	Update for RBCT status
		15	2.6	Update for MSL

ISSUE	DATE	EFFECT ON		REASONS FOR REVISION
		PAGE	PARA	
		19	3.0	Integrated Module Compatibility Matrix update for FQMS and IGGS applications
4.2	05/09/2014	13	2.4.2 2.4.3	Correction to Active/Inactive FIN description to match MICS
		21	4.0	Addition of section 4 to detail the changes for FQMS and IGGS DDP re-issue and specifics of additional confidence testing
4.3	01/10/2014	6	ToR	Reference update for OSCM DDP
		21	4.2	Addition of subsection 4.2 detailing OSCM DDP changes
4.4	26/08/2015			Updated to capture FQMS V4 Engineering Build Clearance for Flight Test
4.5	02/10/2015			Update for DSCS rebound
		9	1.2	Update for IS version and Integrated Step
		14	2.4.1	Update for FQMS app V3.1
		15	2.4.3	Update for DSCS app S3.1
		19	3	Integrated Module Compatibility Matrix update for FQMS/DSCS applications
4.6	30/10/2015			Update for FQMS V3.1.2 rebound
		9	1.2	Update for IS version and Integrated Step
		14	2.4.1	Update for FQMS app V3.1.2
		19	3	Integrated Module Compatibility Matrix update for FQMS/DSCS applications
		21	4	Addition of section 4 to detail the changes for FQMS V3.1.2 specifics of additional confidence testing
5.0	26/02/2016			Update for HMCA S4 Clearance for “-1000” Power On
		9	1	Update of Baseline and Status
		15	2.4.4	Update for HMCA app S4
		17	3	Integrated Module Compatibility Matrix update for HMCA S4 applications
5.1	04/03/2016			Update for FQMS “V4” Clearance for “-900” Flight Test
		9	1	Update of Baseline and Status
		13	2.4.1	Update for FMQS app V4
		17	3	Integrated Module Compatibility Matrix update for FQMS V4 applications
		22	4	Addition of section 4 to detail the changes for FQMS V4 specifics of additional confidence testing
5.2	31/03/2016			Update for HMCA S4 and FQMS V4 Clearance for “-1000” Ground Test
		9	1	Update of Baseline and Status
		13	2.4.1	Update for FMQS V4
		14	2.4.4	Update for HMCA S4
		17	3	Integrated Module Compatibility Matrix update for FQMS V4 and HMCA S4 applications
		22	4	Update of Additional Integration activities for FQMS V4 and HMCA S4
5.3	31/03/2016			Update for FQMS “V4” Clearance for “-900” Certification
		10	1	Update of Baseline and Status
		14	2.4.1	Update for FMQS V4

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		PAGE	PARA	
		18	3	Integrated Module Compatibility Matrix update for FQMS V4 applications
		23	4	Update of Additional Integration activities for FQMS V4
				Update for HMCA "S4.1" Clearance for MSN70 Station 40 Ground Test
5.4	20/04/2016			Update for HMCA "S4.1" Clearance for MSN70 Station 40 Ground Test
		10	1	Update of baseline and status
		14	2.4.4	Update for HMCA S4.1
		18	3	Integrated Module Compatibility Matrix update for HMCA S4.1 application
		23	4	Update of Additional Integration activities for FQMS V4 and HMCA S4.1
5.5	27/05/2016			Update for HMCA "S4.1" Clearance for "-900/-1000" Flight Test
		10	1	Update of Baseline and Status
		14	2.4.1	Update for HMCA "S4.1"
		18	3	Integrated Module Compatibility Matrix update for HMCA "S4.1" applications
		23	4	Update of Additional Integration activities for HMCA "S4.1"
5.6	20/06/2016			Update for Certification
			1.1	Update of integration baseline
			2.4	Update of applications status
			3	Update of compatibility matrix
				Removal of chapter 4 as an IS is issued
5.7	25/08/2016			Update for Ground Test
			1.1	Update of integration baseline
			2.4.1	Update for FQMS V4.1 EB1
			3	Integrated Module Compatibility Matrix update for FQMS V4.1 application
			4	Update of Additional Integration activities for FQMS V4.1
5.8	27/09/2016			Update for Ground Test
			1.1	Update of integration baseline
			2.4.1	Update for FQMS V4.1 EB2
			3	Integrated Module Compatibility Matrix update for FQMS V4.1 EB2 application
			4	Update of Additional Integration activities for FQMS V4.1 EB2
5.9	24/10/2016			Update for Flight Test
			1.1	Update of integration baseline
			2.4.1	Update for FQMS V4.1 EB3
			3	Integrated Module Compatibility Matrix update for FQMS V4.1 EB3 application
			4	Update of Additional Integration activities for FQMS V4.1 EB3
5.10	30/11/2016			Update for FQMS V4.1 Certification
			1.1	Update of integration baseline
			2.4	Update of applications status
			3	Update of compatibility matrix
			4	Update for FQMS V4.1 Certif

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6.0	02/06/2017			Update for Batch 23 “BITE Improvement”
			1	Update of background information and status
			2.5	RBCT details updated
			2.6	MSL details updated
			3	Update of compatibility matrix
			4	Update of additional integration activities for batch 23 RBCT
6.1	26/06/2017			Update for Certification for Batch 23 RBCT
		27	4.6	Update to testing (full TRA now released)
6.2	22/08/2017			Update for Certification of HMCA S4.2
		14	1	Update of baseline and status
		20	2.4.4	Update to HMCA S4.2
		21	2.5	RBCT Batch 17 added for dual configuration
		21	2.6	RBCT Batch 17 added for dual configuration
		22	3	Matrix updated for issue 6.2 for -1000 TC and -1000 EIS configurations
			4	Update of additional integration activities for HMCA S4.2
6.3	01/02/2018	All	All	Update for Flight Test Clearance of loads: <ul style="list-style-type: none"> FQMS V5 Build 3 IGGS V5.
		1	Cover	Integrated step updated. For FT instead of CERT.
			Ref. Table	Ref. 3, 29, 30 & 41: removed (No longer used) Ref. 14, 17, 19, 22: updated Ref. 42, 43: added
			1	Wording corrected
			1.1	Baseline updated for new FEQMS and IGGS loads, Flight Test
			1.2	Wording modified to refer IGGS v5 and FQMS V5 Build 3 Lab results: QC instead of TRA
			2.4.1	Values updated for FQMS V5 Build 3
			0	Values updated for IGGS V5
			2.4.3	“DSCS – DSCS_A_OPS, DSCS” → “DSCS S3.1– DSCS_A_OPS, DSCS”
			0	“HMCA – HMCA_Y, HMCA_G” → “HMCA S4.2 – HMCA_Y, HMCA_G”
			2.4.5	“OSCM – OSCM_OPS” → “OSCM S3.0– OSCM_OPS” MP/MOD reordered (previously MOD/MP)
			2.5	Updated for RBCT Batch 23
			2.6	Updated for MSL Batch 23
			3	Erreur ! Source du renvoi introuvable.: New column for this issue 2.3 of IM-CID New rows for FQMS and IGGS loads
			4	Current status of IMA Integration activities for FQMS V5 Build 3 and IGGS V5 added. All the subsections in section 4 have been modified.
6.4	29/03/2018	All	All	Update for Flight Test clearance of CSW S3.0.3

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6.5	30/03/2018	All	All	Update for Certification Clearance of loads: <ul style="list-style-type: none"> FQMS V5 IGGS V5.
		1	Cover	Integrated step updated. "Flight Test" → "Certification"
		2	Distribution List	Updated
		12	ToR	Ref. 11, 14, 17, 19, 24, 25, 26, 28: updated. Ref. 29, 30: reused Ref. 31 to 41: deleted Footnote removed.
		14	1.1	New certification baseline.
		15	1.2	Updated for cert. New issue of IS referred.
		18	2.4.1	New FQMS load V5.
		19	2.4.2	New IGGS load V5.
		19	2.4.3	Comments below tables removed.
		20	2.4.4	
		20	2.4.5	
		22	3	Table updated for FQMS V5 & IGGS V5 Certification
			4	Section "Additional Integration Activities" removed as this information is now in the new issue of Integration Summary.
6.6	12/04/2018	All	All	Update for FT clearance for MSN216 with: <ul style="list-style-type: none"> FQMS v5 EB3 IGGS v5
7.0	01/06/2018	All	All	Update for CSW S3.0.3 certification on certified configurations since VH3.23.05
			Refs	References updated and references for previous configurations added to support retrofit
			1.1, 1.2	New baseline
			2	CSW part number added Previous ATAx part numbers added for retrofit
			3	Matrix updated for new configurations to be certified
			4	Section 4 added to justify deltas vs the Integration Summary
8.0	01/10/2018	All	All	Update for Ground Test Clearance of load for FQMS V5.1
			1.1, 1.2	New baseline
			2	PN's updated for HW for Ground test and FQMS application loads
			3	Compatibility matrix update considering FQMS V5.1
			4	Section 4 added to justify deltas vs the Integration Summary
8.1	09/11/2018	All	All	Update for Flight Test clearance of FQMS v5.1
			1	New baseline
			2	New FQMS v5.1 part numbers and clarified engineering builds
			3	Table updated for FQMS v5.1 new part numbers
			4	Section 4 adjusted to match new FQMS v5.1 parts and flight test

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9.0	21/01/2019	All	All 1 2 3 4	Update for Flight Test Clearance of load HMCA S5 Updated for RBCT/MSL Batch 24 Update of baseline and status New HMCA S5 part numbers and clarified engineering builds Table updated for HMCA S5 new part numbers Section 4 adjusted to match new HMCA S5 parts and flight test
9.1	11/02/2019	All	All 1 2.4.1 3	Update for certification of FQMS v5.1 Baseline updated FQMS part numbers updated Matrix updated with new FQMS V5.1 parts
9.2	12/04/2019	All	All 1 2.4.1 3 4	Update for certification of FQMS v5.1.1 Baseline updated FQMS part numbers updated Matrix updated with new FQMS v5.1.1 part numbers Updated with FQMS v5.1.1 justification
9.3	12/06/2019	All	All 1 2.4.4 2.5 2.6 3 4	Update for certification of HMCA S5 and RBCT B24 Updated baseline and status Updated HMCA application details Updated RBCT details Updated MSL details Updated matrix with new configuration Section removed (included in Integration Summary)
10.0	04/11/2021	All	TOR 1.1 1.2 2.4.1 3 4	Update for Flight Test Clearance of FQMS V6 EB3.1 Update [TRA] / [DDP_ATA28_EB3.1]/ [USIS_ATA28_EB3.1] Update of the Integrated Step. Status updated with FQMS EB3.1 Description updated with FQMS V6 EB3.1 Compatibility Matrix updated with FQMS V6 EB3.1 Additional integration activities updated
10.1	04/11/2021	All	TOR 1.1 1.2 2.4.1 3 4	Update for Flight Test Clearance of FQMS V6 with a mix of EB3.1 and EB2.2 Update [TRA] / [DDP_ATA28_EB2.2]/ [USIS_ATA28] Update of the Integrated Step. Status updated with FQMS EB2.2 Description updated with FQMS V6 EB2.2 Compatibility Matrix updated with FQMS V6 EB2.2 Additional integration activities updated
10.2	14/01/2022	All	TOR 1.1 1.2 2.1 2.4.4 3 4	Update for MSN 1 Flight Test Clearance of FQMS V6 with a mix of EB3.1 and EB2.2 Update [TRA] [DDP_ATA29] [USIS_ATA29] [TRA] Add [CIA_B24] [IM_CID_HMCA_B24] [HMCA_COMO 1015] Update of the Integrated Step. Status updated with HMCA S4.2 Proto Hardware Removed Description updated with HMCA S4.2 Compatibility Matrix updated with HMCA S4.2 Additional integration activities updated

ISSUE	DATE	EFFECT ON		REASONS FOR REVISION
		PAGE	PARA	
11.0	09/06/2022			Update for Flight Test Clearance of FQMS V6 EB3.5 for MSN1, MSN 600, MSN 2 and MSN 59
			TOR	Update [TRA] / [DDP_ATA28]/ [USIS_ATA28]
			1.1	Update of the Integrated Step.
			1.2	Status updated with FQMS EB3.5
			2.4.1	Description updated with FQMS V6 EB3.5
12.0	30/01/2023		3	Compatibility Matrix updated with FQMS V6 EB3.5
			4	Additional integration activities updated
				Update for certification of FQMS V6
			TOR	Update [TRA] / [DDP_ATA28]/ [USIS_ATA28]
			1.1	Update of the Integrated Step.
13.0	27/02/2023		1.2	Status updated with FQMS V6
			2.4.1	Description updated with FQMS V6
			3	Compatibility Matrix updated with FQMS V6
			4	Additional integration activities updated
				Update for HMCA S6 flight test
			TOR	[TRA] / [DDP_ATA29] / [USIS_ATA29] / [MICS] update
			1.1	Update of the Integrated Step
14.0	29/08/2023		1.2	Status updated with HMCA S6
			2.4.1	Description updated with FQMS V6
			3	Compatibility Matrix updated with HMCA S6
			4	Additional integration activities updated
			LoD	List of distribution updated
			ToR	Table of references updated
			1.1	Integrated step and Configuration management label updated
			2.1	CPIOM hardware updated for certification
			2.3	MCCT informations updated
			2.4.4	HMCA load updated
			3	Compatibility Matrix updated
			4	Additional integration activities updated

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TABLE OF REFERENCES

N°	TITLE	REFERENCE	ISSUE	DATE	SOURCE	
					SIGLUM	NAME
	IMA Integration Baseline IMA Batch 29 [IIB]	V42SP2204103	1	Feb 2023	1YAKA	J-F RENNESSON
	CPIOM User's Guide [CPIOM_UG]	J54477	[IIB]	-	[IIB]	[IIB]
	Declaration of Design and Performance (DDP) for CPIOM (H2.1 S3.0.3) [CPIOM_DDP]	J57740	[IIB]	-	[IIB]	[IIB]
	Operational Limitation Note [OLN]	V4211RP1215950	15.0	N/A	N/A	N/A
	RBCT Load Accomplishment Summary for CPIOM-H3 [RBCT_AS]	V4210RP1213589	6.1	14/05/2019	EYNRU	D. GOODE
	Declaration of Design and Performance Integrated MCCT / CT [DDP_MCCT]	V4211RP2302295	1.1	Aug 2023	1YAKA	I IBRULJ
	Declaration of Design and Performance RBCT [DDP_RBCT]	V4211RP1901723	2.0	13/05/2019	EYNRU	D. GOODE
	Declaration of Design and Performance MSL [DDP_MSL]	V4211RP1901814	2.0	10/05/2019	EYNRU	D. GOODE
	Integrated Module CID template [IM-CID]	[IIB]	[IIB]			
	CPIOM Integration Summary [IS]	V4210RP1146845	7.0	29/05/2019	EYNRU	A. FARR
	CPIOM Restriction List [CPIOM_RL]	J56238	[IIB]	-	[IIB]	[IIB]
	Declaration of Design and Performance ATA28 [DDP_ATA28]	TM4328-474	BL	04/02/2023	Parker Aerospace	R. MARINI
	Declaration of Design and Performance ATA29 [DDP_ATA29]	621700DDP-11	A	09/2023	Parker	R. MIKLE
	Declaration of Design and Performance ATA35 [DDP_ATA35]	E65250-00DP5	2	15/09/2014	B/E Aerospace	M. BURCHARDT
	Declaration of Design and Performance ATA47 [DDP_ATA47]	TM4328-478	U	03/2018	Parker Hannifin (FSD)	S. DIWAN
	Declaration of Design and Performance ATA52 [DDP_ATA52]	PD1000014348 PD1000014349 PD1000014350	000_06	07/09/2015	Diehl Aerospace	B. BANSA
	ATA28 FQMS CPIOM USIS [USIS_ATA28]	V2851RP1219811	21.0	19/01/2023	1YUCC	P. BRUCE
	ATA29 HMCA CPIOM USIS [USIS_ATA29]	V29D23010268	2.0	30/07/2023	1YCHU	O. TAUSCHER
	ATA29 HMCA CPIOM USIS [USIS_ATA29_S4.2]	V2930RP1204995	7.0	29/08/2017	EYCHU	J. HEIMANN
	ATA35 OSCM CPIOM USIS [USIS_ATA35]	V35RP1420015	2.0	02/06/2014	ECEB3	A. CORDES
	ATA47 IGGs CPIOM USIS [USIS_ATA47]	V4710RP1263488	6.0	10/01/2018	EYUMS	F. ACERO-HERREROS
	ATA52 DSCS CPIOM USIS [USIS_ATA52]	V5271RP1276056	3.0	02/10/2015	ECD2Y	T. KNIJENBURG

N°	TITLE	REFERENCE	ISSUE	DATE	SOURCE	
					SIGLUM	NAME
	Change and Impact Analysis [CIA]	V4211RP1267694	9.0	Feb 2023	1YAKA	Igor IBRULJ
	Test Report Analysis [TRA]	V4211TRA231638	1.0	22/09/2023	1VVAD	M. HELIAU
	IM_CID B28 for CPIOM H3 [IM_CID_FQMS_V6_CERTI F]	V4210RP1146789	12.0	30/01/2023	1YAKA	Jean-François RENNESSON
	V6 Engineering Builds 3.5 Software Equivalency Statements [PARKER_ECM]	A350-PAR-AUK-M- 02266	1.0	15/11/2022	Parker	R. MARINI
	MCCT_AS B29 H3 [MCCT_AS]	V4210RP1145045	7.0	09/2023	1YAKA	Igor IBRULJ
	MICS_VS B29 H3 [MICS_VS]	V42D11026679	11.0	13/02/2023	1YAKA	Franck GUERRERO
	HMCA PN Equivalence COMO [HMCA_EQ_COMO]	A350-29-PA-1781	A	28/09/2023	Parker	R. MIKLE

1 Introduction

This Integrated CPIOM CID identifies all items constituting CPIOM Cluster H3. This identification refers to the module hardware as well as the software loads hosted on the CPIOM module.

CPIOM cluster H3 hosts ATA 28 (FQMS), ATA 29 (HMCA), ATA 35 (OSCM), ATA 47 (IGGS) and ATA 52 (DSCS) applications, as summarised in Figure 1.

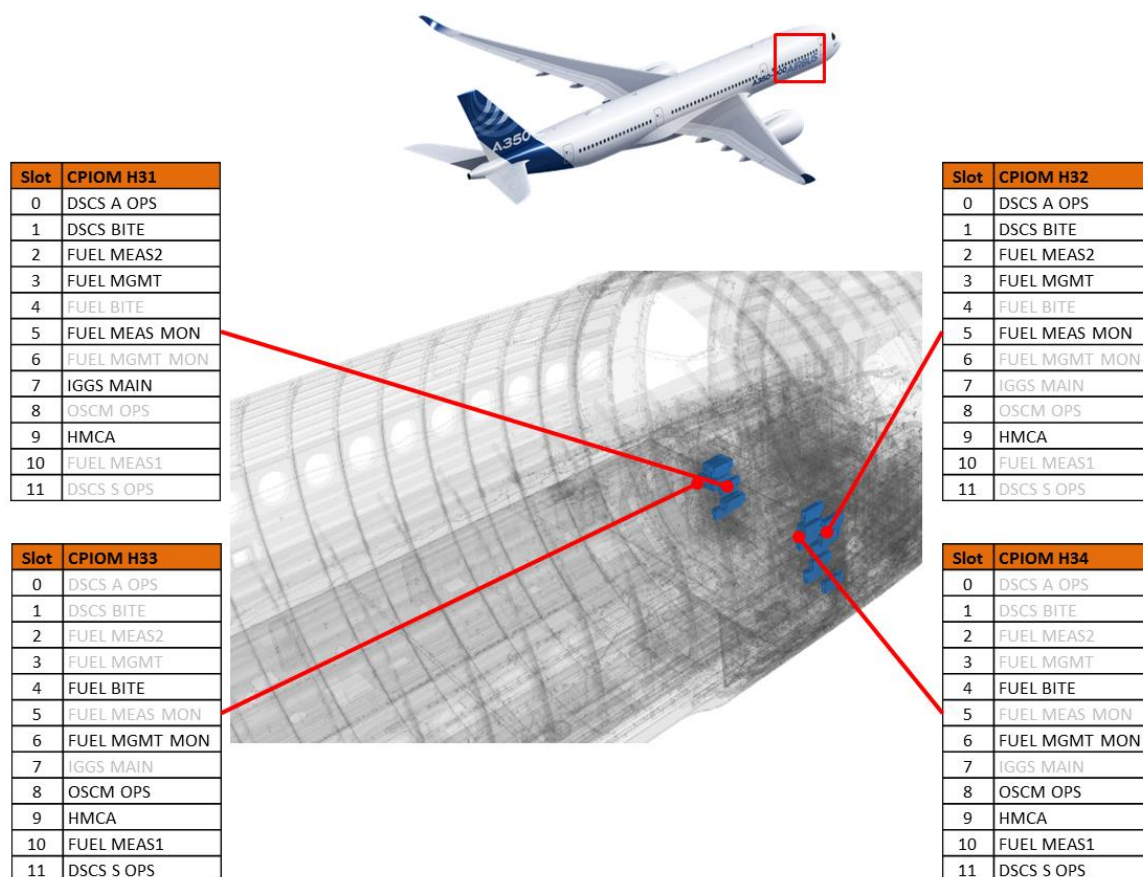


Figure 1: Overview of CPIOM Cluster H3 locations and hosted applications

1.1 Baseline

The baseline for this module is as follows:

Target Configuration	Systems Batch 8
Integrated Step	VH3.23.13.29-00.01
Configuration Management Label / ID	CPIOM-H3E_B29-0_L017

1.2 Status

This version of IM-CID is intended to support the certification clearance of the integrated module with the HMCA S6 with co-hosted certified part numbers.

All validation activities have been performed and the flight test documentation is completed. An integration summary document has been compiled to summarise all the activities performed for the integrated CPIOM-H3 under the scope of Batch 24. The delta analysis between the last certified CPIOM-H3 configuration [IS] and the clearance for this IM-CID is contained in §4

Name	CPIOM-H3 Integration Summary
Reference	V4210RP1146845
Version	7.0
Date	29/05/2019
Integrated Step	VH3.23.11.24-00.28

The signature of this IM_CID provides the formal statement of qualification credit transfer to each of the ATA users between the standards identified in the Integration Summary in section 3 "Baselines used by the Function Supplier qualification" [USIS_ATA28]§3 and [USIS_ATA29]§3 and the standard identified in this IM_CID.

New problems detected since the last Integration Summary [IS] completed by [IM_CID_FQMS_V6_CERTIF] are described and reported in the §4.7

1.3 Abbreviations

ABBREVIATION	
A/C	Aircraft
AGS	Air Generation System
APP	Application
AVS	Avionics Ventilation System
BITE	Built-In Test Equipment
CID	Configuration Index Document
CPIOM	Core Processing Input/Output Module
DDP	Declaration of Design and Performance
FAL	Final Assembly Line
FIN	Functional Item Number
FLS	Field Loadable Software
FT	Flight Test
IMA	Integrated Modular Avionics
MCCT	Module Common Configuration Table
MICS	Module Interface and Configuration Specification
MOD	Modification
MP	MOD Proposal
N/A	Not Applicable
OPS	Operating System Partition
P/N	Part Number
SB	System Bite
STD	Standard
SNMP	Simple Network Management Protocol

TRA	Test Report Analysis
-----	----------------------

2 Current Baseline

2.1 CPIOM Hardware

Name	CPIOM – H
Part Number	C13209DA01 (H/W STD H2.1 serial)
DDP	[CPIOM_DDP]
Valid for FIN position(s)	8TF31 8TF32 8TF33 8TF34
MP / MOD	L42074 /100062 (H/W STD H2.1 serial)
CMS	6V00568300 (H/W STD H2.1 serial)
Status	Certified (H/W STD H2.1 serial)
Description	CPIOM Hardware
Supplier	Thales

2.2 Operating System Software Load

Name	Core Software
Part Number	SXT55K4199AAA05 (CSW S3.0.3)
DDP	[CPIOM_DDP]
Valid for FIN position(s)	831TFSW1 832TFSW1 833TFSW1 834TFSW1
MP / MOD	L43552/112312
CMS	6V04552100
Status	Certified
Description	CPIOM Core Software
Supplier	Thales

2.3 Integrated Configuration Table Loads

Name	MCCT CPIOM Cluster H3
Part Number	ABF2BA6T3ALCE0E
DDP	[DDP_MCCT]
Valid for FIN position(s)	831TFSW2 832TFSW2 833TFSW2 834TFSW2
MP / MOD	L49182/ 120245
CMS	6V06963300
Status	For Certification
Description	Module Common Configuration Table
Supplier	Airbus 1YY - LCSW
Treatment	T55

2.4 Application Loads

2.4.1 Fuel Quantity Management System (FQMS ATA28-51)

Name		FQMS FUELMEAS2 FUELMGMT FUEL_MEAS_MON FUELMEAS1 FUELMGMT_MON FUEL_BITE				
Part Number	FUELMEAS2 FUELMGMT FUELMEAS_MON FUELMEAS1 FUELMGMT_MON FUEL_BITE	PBA2735A0110300 PBA2435A0120300 PBA2535A0130300 PBA2435B0110300 PBA2135B0140300 PBA2035B0150300				
DDP		[DDP_ATA28]				
Valid for FIN position(s)		Part	CPIOM			
			H31	H32	H33	H34
		MEAS 2	5QM1SW1	5QM2SW1	5QM5SW1 ²	5QM6SW1 ²
		MEAS MON	5QM1SW2	5QM2SW12	5QM5SW2 ²	5QM6SW22 ²
		MGMT	5QM1SW3	5QM2SW13	5QM5SW3 ²	5QM6SW3 ²
		MEAS 1	5QM3SW4 ¹	5QM4SW4 ²	5QM1SW4	5QM2SW4
		MGMT MON	5QM3SW5 ²	5QM4SW5 ²	5QM1SW5	5QM2SW5
MP / MOD		BITE	5QM3SW6 ²	5QM4SW6 ²	5QM1SW6	5QM2SW6
MP / MOD		MP No: L06016 / Mod No: 116964				
CMS	FUELMEAS2 FUELMGMT FUELMEAS_MON FUELMEAS1 FUELMGMT_MON FUEL_BITE	6V06099500 6V06099200 6V06099400 6V06099300 6V06098800 6V06098600				
Status		Certified				
Description		Function Supplier Software Load				
Treatment		T054 [USIS_ATA28]				
Supplier		Parker Hannifin (FSD)				
USIS		[USIS_ATA28]				

¹ Inactive in this position

2.4.2 Inert Gas Generation System (IGGS ATA47-52)

Name	IGGS_MAIN				
Part Number	PBA2735A0100200 (v5)				
DDP	[DDP_ATA47]				
Valid for FIN position(s)	Part	CPIOM			
		H31	H32	H33	H34
	IGGS MAIN	1YA1SW1	1YA2SW1 ²	1YA3SW1 ²	1YA4SW1 ²
MP / MOD	L43539 / 112550				
CMS	6V04304900				
Status	Certified				
Description	Function Supplier Software Load				
Treatment	T047 [USIS_ATA47]				
Supplier	Parker Hannifin (FSD)				
USIS	[USIS_ATA47] ³				

2.4.3 Doors System Control System (DSCS ATA52)

Name	DSCS S3.1– DSCS_A_OPS, DSCS_S_OPS, DSCS_SB				
Part Number	A_OPS	DAX570000815350			
	S_OPS	DAX500000815450			
	SBITE	DAX510000815550			
DDP	[DDP_ATA52]				
Valid for FIN position(s)	Part	CPIOM			
		H31	H32	H33	H34
	A_OPS	901MJ1SW1	902MJ2SW1	901MJ2SW1 ²	902MJ1SW1 ²
	BITE	901MJ1SW2	902MJ2SW2	901MJ2SW2 ²	902MJ1SW2 ²
	S_OPS	903MJ2SW3 ²	904MJ1SW3 ²	903MJ1SW3	904MJ2SW3
MP / MOD	L39094/107335				
CMS	A_OPS	6V02206600			
	S_OPS	6V02206700			
	SBITE	6V02206800			
Status	Certified				
Description	Function Supplier Software Load				
Treatment	T038				
Supplier	Diehl Aerospace				
USIS	[USIS_ATA52]				

² Inactive in this position

2.4.4 Hydraulics Monitoring Control and Actuation (HMCA ATA29)

2.4.4.1 HMCA S6

Name	HMCA – HMCA_Y, HMCA_G				
Part Number	PBA596217000008				
DDP	[DDP_ATA29]				
Valid for FIN position(s)	Part	CPIOM			
		H31	H32	H33	H34
	HMCA Y/G	1JY1SW1	1JY2SW1	1JG1SW1	1JG2SW1
MP / MOD	L44428/116830				
CMS	6V07062100				
Status	For certification				
Description	Function Supplier Software Load				
Treatment	T55S003				
Supplier	Parker Hannifin (HSD)				
USIS	[USIS_ATA29]				

2.4.5 Oxygen System Control Monitoring (OSCM ATA35)

Name	OSCM S3.0– OSCM_OPS				
Part Number	BEA30E652500700				
DDP	[DDP_ATA35]				
Valid for FIN position(s)	Part	CPIOM			
		H31	H32	H33	H34
	OSCM OPS	42WR3SW1 ⁴	42WR4SW1 ⁴	42WR1SW1	42WR2SW1
MP / MOD	L60006/100230				
CMS	6V00663200				
Status	Certified				
Description	Function Supplier Software Load				
Treatment	T037				
Supplier	BES				
USIS	[USIS_ATA35]				

⁴ Inactive in this position

2.5 Resource BITE Configuration Table (RBCT) Load

Name	Resource BITE Configuration Table (RBCT) Load
Part Number	ABF4FA6T3ALRF12
DDP	[DDP_RBCT]
Valid for FIN position(s)	831TFSW3 832TFSW3 833TFSW3 834TFSW3
MP / MOD	L48257 / 114077
CMS	6V05316400
Status	Certified
Description	Configuration table including definitions of FMD, SPP, SB memorization, etc.
MIMOS Batch/Treatment	MIMOS T025
Supplier	Airbus EYYWAW - LCSW

2.6 Maintenance System Load (MSL)

Name	Maintenance System Load
Part Number	ABF2FA6FYAL5208
DDP	[DDP_MSL]
Valid for FIN position(s)	70TFSW3
MP / MOD	L48257 / 114077
CMS	6V05316300
Status	Certified
Description	Load hosted by the Centralized Maintenance System (CMS)
MIMOS Batch/Treatment	MIMOS T025
Supplier	Airbus EYYWAW - LCSW

3 Integrated Module Compatibility Matrix

The tables give a complete overview of authorized integrated CPIOM Cluster H3 S/W combinations.

In the columns named “Position”, an “A” indicates if the application is Active on this specific position and an “I” indicated that the application is inactive on this positions. **To highlight the software mixability on different CPIOMs, an “-” indicated that the application must not be uploaded to this module.**

In the other columns (issue of this document) the indication ‘X’ shows which part numbers constitute an authorized Integrated Module.

Three separate configurations are listed for certification with CSW S3.0.3 (column associated with the INTEGRATED Module CID Issue 7.0). This is to enable retrofit of the CSW for aircraft in any certified configuration since step VH3.23.05. Note that the “-1000 TC” configuration exists for administrative purposes only and is not expected to be present on any in-service aircraft, hence this configuration has not been reproduced with CSW S3.0.3.

3.1 Application Compatibility Matrix

			INTEGRATED Module CID Issue				9.1	9.2		[MSN59]	9.3	10.0	10.1	10.2	11.0	12.0	13.0	14.0
IMA Batch							24	24		24	24	27	27	27	27	28	29	29
Status							Valid	Valid		Valid	Valid	Valid	Valid	Valid	Valid	Valid	Valid	Valid
Target Configuration							Systems Batch 6	Systems Batch 6		Systems Batch 7	Systems Batch 6	Systems Batch 7	System Batch 7	MSN1	System Batch 7	System Batch 7	System Batch 8	System Batch 8
Certification							x		x			x				x		x
Flight Test								x		x	x		x	x	x			
Ground Test								x		x	x		x	x	x			
POSITION																		
Type	PN		Standard		8TF31	8TF32	8TF33	8TF34										
HW	C13209DA01PC02		H2		x	x	x	x			x	x		x	x			
	C13209FA01PA01		H2.1 Proto		x	x	x	x			x	x		x	x			
	C13209DA01		H2.1 Serial		x	x	x	x	x	x		x		x	x	x	x	x
CSW	SXT55K4199AAA05		S3.0.3		x	x	x	x	x	x	x	x	x	x	x	x	x	x
MCCT	ABF2FA6T3BLCE0B		B17		x	x	x	x	x	x	x	x	x	x	x	x	x	
	ABF2BA6T3ALCE0E		B29		x	x	x	x									x	x
RBCT	ABF46A6T3ALRE09		B17		x	x	x	x										
	ABF4CA6T3ALRF11		B23		x	x	x	x	x	x					x		x	
	ABF4FA6T3ALRF12		B24		x	x	x	x			x	x	x	x	x		x	x
FQMS	Measurement2	PBA2735A0110210	V5.1		A	A	I	I	x			x						
		PBA2635A0110211	V5.1.1		A	A	I	I		x	x							
		PBA5435A011C300	V6 EB3.1		A	A	I	I				x						
		PBA5535A011B300	V6 EB2		-	A	-	I					x	x				
		PBA5435A011C300	V6 EB3.1		A	-	I	-					x	x				
		PBA5235A011E300	V6 EB3.5		A	A	I	I							x	x		x
		PBA2735A0110300	V6		A	A	I	I								x	x	x
	Management	PBA5535A012A210	V5.1 (build 1)		A	A	I	I										
		PBA2435A0120210	V5.1		A	A	I	I	x	x	x	x	x					
		PBA5535A012A300	V6 EB2		A	A	I	I				x	x	x				
		PBA5035A012D300	V6 EB3.5		A	A	I	I							x	x		x

				INTEGRATED Module CID Issue	9.1	9.2		[MSN59]	9.3	10.0	10.1	10.2	11.0	12.0	13.0	14.0
				IMA Batch	24	24		24	24	27	27	27	27	28	29	29
				Status	Valid	Valid		Valid	Valid	Valid	Valid	Valid	Valid	Valid	Valid	Valid
				Target Configuratio n	Systems Batch 6	Systems Batch 6		Systems Batch 7	Systems Batch 6	Systems Batch 7	System Batch 7	MSN1	System Batch 7	System Batch 7	System Batch 8	System Batch 8
				Certification	X		X		X					X		X
	Measurement Monitor	PBA2435A0120300	V6	A A I I										X	X	X
		PBA5735A013B210	V5.1 (build 2)	A A I I												
		PBA2535A0130210	V5.1	A A I I	X	X	X	X	X	X						
		PBA5735A013B300	V6 EB2	A A I I						X	X	X				
		PBA5035A013E300	V6 EB3.5	A A I I									X	X		
	Measurement1	PBA2535A0130300	V6	A A I I										X	X	X
		PBA2435B0110210	V5.1	I I A A	X			X								
		PBA2535B0110211	V5.1.1	I I A A		X	X		X	X						
		PBA5735B011C300	V6 EB3.1	I I A A						X						
		PBA5635B011B300	V6 EB2	- I - A							X	X				
		PBA5735B011C300	V6 EB3.1	I - A -							X	X				
		PBA5135B011E300	V6 EB3.5	I I A A									X	X		X
	Management Monitor	PBA2435B0110300	V6	I I A A										X	X	X
		PBA2035B0140200	V5 & V5.1	I I A A	X	X	X	X	X	X						
		PBA5335B014B300	V6 EB2	I I A A						X	X	X				
		PBA5535B014D300	V6 EB3.5	I I A A									X	X		X
	FuelBITE	PBA2135B0140300	V6	I I A A										X	X	X
		PBA2035B0150210	V5.1	I I A A	X	X	X	X	X	X						
		PBA5335B015B310	V6 EB2	I I A A						X	X	X				
		PBA5435B015D300	V6 EB3.5	I I A A									X	X		X
		PBA2035B0150300	V6	I I A A										X	X	X
IGGS	PBA2735A0100200		V5	A I I I	X	X	X	X	X	X	X	X	X	X	X	X
DSCS	A_OPS	DAX570000815350	S3.1	A A I I	X	X	X	X	X	X	X	X	X	X	X	X
	S_OPS	DAX500000815450	S3.1	I I A A	X	X	X	X	X	X	X	X	X	X	X	X
	SBITE	DAX510000815550	S3.1	A A I I	X	X	X	X	X	X	X	X	X	X	X	X
HMCA	PBA526217000003		S4.2	A A A A	X	X	X					X		X		
	PBA556217000004		S5 EB	A A A A				X								
	PBA546217000005		S5	A A A A					X	X	X		X		X	
	PBA576217000008		S6	A A A A												X
OSCM	BEA30E652500700		S3.0	I I A A	X	X	X	X	X	X	X	X	X	X	X	X

Table 1 : Integrated module compatibility matrix

3.2 RBCT - MSL Compatibility Matrix

				INTEGRATED Module CID Issue	5.10	6.5	9.3	12	13.0	14.0
				IMA Batch	20	23	24	28	29	29
				Status	Valid	Valid	Valid	Valid	Valid	Valid
				Target Configuratio n	-900/-1000 System Batch 5	-900/ -1000	Systems Batch 6	Systems Batch 7	System Batch 8	System Batch 8
				Certification	X	X	X	X		X
				Flight Test					X	
				Ground Test					X	
				POSITION						
Type	PN	Standard	8TF31	8TF32	8TF33	8TF34				
RBCT	ABF46A6T3ALRE09	B17	X	X	X	X	X			
	ABF4CA6T3ALRF11	B23	X	X	X	X		X		
	ABF4FA6T3ALRF12	B24	X	X	X	X		X	X	X
MSL	ABF22A6FYAL5205	T007	Not Applicable				X			
	ABF20A6FYAL5207	B23						X		
	ABF2FA6FYAL5208	B24						X	X	X

4 Additional Integration activities

The section 4 is dedicated to the documentation of additional Integration activities performed for the HMCA S6 load.

This document completes the Integration Summary [IS] completed by [IM_CID_FQMS_V6_CERTIF] for the parts documented in this section.

4.1 Integrated baseline delta identification

The following table highlights the changes to the previous version of the [IS] completed by [IM_CID_FQMS_V6_CERTIF]

IDENTIFICATION	USIS (ATAXX CHANGE) CIA (ATA42 CHANGE)	DESCRIPTION OF THE CHANGE
HMCA	[USIS_ATA29] [DDP_ATA29]	HMCA S6 Certification
IIB B29v1 CIA	[IIB] [CIA]	Update between IMA B28 and IMA B29

Based on the analysis made by the module integrator the ATAx deviations/limitations/impacts are reported here below:

ID	TYPE	FUNCTION AFFECTED	OPENING DATE	FORESEEN CLOSURE	DESCRIPTION	JUSTIFICATION	MITIGATION MEANS	LINK TO OTHER PR
None	-	-	-	-	-	-	-	-

4.2 Impact analysis of the New ATAx baseline

The [CIA] reports the change of baseline [Batch 28 against Batch 29](#) with respect to RL, RDOS, QINF and baselines.

As stated in the [CIA], the IMA B29 updates have the following impacts on all the previously integrated components:

- RDOS : No change.
So results from [IS] completed by [IM_CID_FQMS_V6_CERTIF] regarding RDOS are not impacted.
- RL : All the PRs listed in the [CIA] have been analyzed in the [IM_CID_FQMS_V6_CERTIF]. PRs created since [IM_CID_FQMS_V6_CERTIF] are analyzed in §4.5.2.
- User Guide has not changed. So results from [IM_CID_FQMS_V6_CERTIF] are still valid
- The MICS has changed for ATA-29 HMCA and ATA 42 partitions to make a slot for the future Cargo Loading application. For ATA-29, the MI has checked that the applicable MICS is taken into account. The new MICS has no impact on other applications.
- ALCS and MCCT have changed to introduce the HMCA S6 There has been no impact found for ATA28, ATA35, ATA47 or ATA52. The ALCS and MCCT for IMA B29 have been described in the CIA. The new ALCS and MCCT have no impact on others hosted applications.
- QINF (See [CIA]§3.2): Although for batch 29, there was no new version of [CPIOM_UG], the information provided in this appendix of the restriction list [CPIOM_RL] supersedes the content of current User's Guide. The impact of the new QINF on all the hosted applications is detailed in §4.4.3.
- IIB changes have no impact on ATAXX SD/FS.
So results from [IS] completed by [IM_CID_FQMS_V6_CERTIF] regarding compliance to the IIB are not impacted.

4.3 Integrated Module WCET and Memory Margins Summary

Hosted function WCET and memory margin analyses are under responsibility of the function suppliers. The following table provides a summary of function supplier's analysis results for its last certified standard:

- HMCA [USIS_ATA29]:

Resources requested	Allocated in the MICS	Margin
CPU (Estimated)	9.9ms	28%
RAM (Actual used)	4,7MB	57%
ROM (Actual used)	4,3MB	45%
WCET (PIT Measured)	9.9ms	28%

4.4 Compliance to the bare module qualification perimeter.

The content of this chapter is similar to the corresponding IS template chapter.

4.4.1 Compliance to automatic usage domain rules

The list of automatic rules to be checked by ATAx SD and ATAx FS is identified in the CPIOM User’s Guide as referred to in the CPIOM DDP [CPIOM_DDP] and are still valid with IMA B29, as explained in §4.2.

The MI has verified that all the automatic rules listed in the [CIA] are covered by:

- The ATA 42 MCCT in the [MCCT_AS].
- The ATA 42 System partition in the [CAS]§5.2.5.
- The ATA 29 HMCA analysis in [USIS_ATA29]
- The ATA 35 OSCM analysis in [IS] completed by [IM_CID_FQMS_V6_CERTIF]
- The ATA 47 IGGS analysis in [IS] completed by [IM_CID_FQMS_V6_CERTIF]
- The ATA 52 DSCS analysis in [IS] completed by [IM_CID_FQMS_V6_CERTIF]
- The ATA 28 FQMS analysis in [IM_CID_FQMS_V6_CERTIF]

and are passed successfully

The MI has verified that all the automatic rules listed in the [CPIOM_UG] are covered by the:

- The ATA 42 RBCT B24 in [RBCT_AS]§3.3.11.

and are passed successfully

The following list summarizes the new identified non-compliances and their analysis:

ID	TYPE	FUNCTION AFFECTED	OPENING DATE	FORESEEN CLOSURE	DESCRIPTION	JUSTIFICATION	MITIGATION MEANS	LINK TO OTHER PR
None	None	None	None	None	None	None	None	None

4.4.2 Compliance to manual usage domain rules

The list of manual rules to be checked by ATA42 MI, ATAx SD and ATAx FS is identified in the [CIA].

There is no new manual usage domain rule.

The MI has verified that all the manual rules listed in the [CIA] are covered by:

- The ATA 42 MCCT in the [MCCT_AS].
- The ATA 42 System partition in the [CAS]§5.2.5.
- The ATA 29 HMCA analysis in [USIS_ATA29]
- The ATA 35 OSCM analysis in [IS] completed by [IM_CID_FQMS_V6_CERTIF]
- The ATA 47 IGGS analysis in [IS] completed by [IM_CID_FQMS_V6_CERTIF]
- The ATA 52 DSCS analysis in [IS] completed by [IM_CID_FQMS_V6_CERTIF]
- The ATA 28 FQMS analysis in [IM_CID_FQMS_V6_CERTIF]

and are passed successfully

The MI has verified that all the manual rules listed in the [CPIOM_UG] are covered by the:

- The ATA 42 RBCT in [RBCT_AS]§3.3.11.

and are passed successfully

This check of coverage encompasses the manual rules listed on the User’s Guide [CPIOM_UG] and rules affected by a limitation.

The following list summarizes the new identified non-compliances and their analysis:

ID	TYPE	FUNCTION AFFECTED	OPENING DATE	FORESEEN CLOSURE	DESCRIPTION	JUSTIFICATION	MITIGATION MEANS	LINK TO OTHER PR
-	-	-	-	-	-	-	-	-

4.4.3 Compliance to module Qualified Information

The list of Qualified Information, contained in User Guide issue AE01 [CPIOM_UG], to be checked by ATA42 MI, ATAx SD and ATAx FS is identified in the [CIA], as explained in §4.2.

The MI has verified that all the QINF listed in the [CIA] are covered by:

- The ATA 29 analysis is provided in the USIS document ([USIS_ATA29] §8.2) in response to [CIA].

These QINF modifications have no impact on RBCT.

For all components except HMCA, QINFs have been analyzed in [IM_CID_FQMS_V6_CERTIF]. The compliance with the new QINFs listed in [CIA] is detailed below.

User’s Guide Item Reference	Covered by
INF-UG-09-82000-xxxx	N/A (Debug mode activation)
INF-UG-09-82020-xxxx	N/A (Debug mode activation)
INF-UG-09-82030-xxxx	N/A (Debug mode activation)
INF-UG-09-92020-xxxx	N/A (Debug mode activation)
QINF-UG-07-0720-xxxx	N/A (Debug mode activation)

All QINF have been assessed and found to have no functional impact. The compliance of HMCA to QINFs listed in [CIA] is included in [USIS_ATA29]

4.5 Assessment of qualification credit transfer from ATAx baseline to the integrated module baseline

4.5.1 Representativity dossier analysis

The HMCA S6 loads have been tested with the qualification IMA baseline (CSW S3.0.3 / HW H1c/ FWK v7.4.2 / MCCT B29). The Aircraft baseline being (CSW S3.0.3 / HW H2.1 / FWK v7.4.2 / MCCT B29), the Representativity Dossier (RDOS) analysis is then limited to Hardware aspects (CPIOM H1c vs CPIOM H2.1).

The MI has verified that all the Representativity Analysis requested by the delta between Function supplier qualification baseline (reported in ATAx USIS §9) and aircraft baseline have been considered:

- The ATA 42 MCCT in the [MCCT_AS].
- The ATA 29 HMCA analysis in [USIS_ATA29]§9
- The ATA 35 OSCM analysis in [IS] completed by [IM_CID_FQMS_V6_CERTIF]
- The ATA 47 IGGS analysis in [IS] completed by [IM_CID_FQMS_V6_CERTIF]
- The ATA 52 DSCS analysis in [IS] completed by [IM_CID_FQMS_V6_CERTIF]
- The ATA 28 FQMS analysis in [IM_CID_FQMS_V6_CERTIF]

Are still valid for this IM_CID (See §4.2).

Conclusion: The RDOS is fully analysed and no anomaly is detected.

4.5.2 Restriction List analysis

The Module integrator ensures that all PRs applicable to HMCA S6 loads in the below Restriction List are checked successfully (refer to [USIS_ATA29] §10).

NAME	REFERENCE	VERSION
Restriction List for CSW S3.0.3	J56238	RL_AE05+Add+PR

The MI has verified that all the PRs from the IMA B29 are covered by the:

- The ATA 42 MCCT in the [MCCT_AS]
- The ATA 42 RBCT B24 in the [IS] completed by [IM_CID_FQMS_V6_CERTIF]
- The ATA 29 HMCA analysis in [USIS_ATA29]
- The ATA 35 OSCM analysis in [IS] completed by [IM_CID_FQMS_V6_CERTIF]
- The ATA 47 IGGS analysis in [IS] completed by [IM_CID_FQMS_V6_CERTIF]
- The ATA 52 DSCS analysis in [IS] completed by [IM_CID_FQMS_V6_CERTIF]
- The ATA 28 FQMS analysis in [IM_CID_FQMS_V6_CERTIF]]

All the PRs were analyzed in [MCCT_AS] / [IM_CID_FQMS_V6_CERTIF]and [USIS_ATA29] except 3 new ones detailed below (Note that these PRs have been opened and classified before the application of AMC 20-189, so they have a CRI-F32 classification) :

PR ref.	PR Title	CRI F-32	Consequences / Constraints for Users	Open on Release(s)	Standard of Closure	Comment / Impact of Correction	Impact FME S	UG	Status	RL AE05		SD/FS Analysis			
												Tracking ATA-XX			
										MI Analysis - Impact on ATA42	MI Analysis - Impact on ATAXXs	Description	ATA-XX PR ID and Classification	Func. Impact	GO / NOGO
ACSDV-11254	[PIT] Verification of modes transition when uploading or in case of detection of uploading troubles not possible	2	[Problem] Incompatibility between simultaneous usage of PIT v2.5.1 and BETSI v1.0 due to concurrent Service VL usage. [Workaround] None	PIT V2.5.1	No correction foreseen		No	None	Open	No assessment requested	No assessment requested	N/A	N/A	N/A	N/A
ACSDV-11255 (1818PR004340)	Temporary freeze of PIT window when cumulative displayed data	2	[Problem] The HMI shows some transient freeze during data update while observing lots of shared resources. [Workaround] None	PIT (all releases)	No correction foreseen		No	None	Open	No assessment requested	No assessment requested	N/A	N/A	N/A	N/A

ACSDV-11270 (1818PR004342)	[PIT] GUI performance issue	2	[Problem] The GUI does not handle the information received from PIT_ISCI.dll fast enough in case several modules are connected, active and send generic access answers. [Workaround] Traces can be used instead of GUI.	PIT (all releases)	No correction foreseen		No	None	Open	No assessment requested	No assessment requested	N/A	N/A	N/A	N/A
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4.6 Confidence Testing

The testing activities related to the HMCA S6 loads are divided into configuration testing and integration testing. CPIOM configuration testing is performed to confirm the correct operation of the CPIOM loaded with the configuration table.

Test reports are documented in the test report analysis [TRA] for integration checks.

Partition	P/N used in QC	Justification
HMCA S6	PBA3F621700X042	Equivalent to PBA596217000008 Evidence supplied in [DDP_ATA29]§6 and [HMCA_EQ_COMO]

The tests were performed under the following configuration:

- CSW S3.0.3 / B29 MCCT / B24 RBCT / IGGS V5 / DSCS S3.1 / HMCA S6 / OSCM S3.0 / FQMS V6

All the test results and analysis are compiled in the [TRA]. All confidence tests have been passed with 2 limitations :

- During OBJ-TIM-03, the CPU load during the scheduling of DL-INSTR partition has exceeded 90%. That is explained due to MAO generating a large AFDX traffic. The MAO function is only activable through PIT tool command and PIT is not installed on A/C. As a consequence, this limitation is considered as acceptable.

- A known issue, already seen with HMCA S5, was detected during the lab test of port creation. All requested sampling and queuing ports can be successfully created, except some HMCA sampling ports.

In that case of port passivation, the IMA Module has to be reset to allow the application to create the ports it is configured to. When using PIT to monitor the port creation data, several ports will be indicated "failed". This is expected behaviour for following reason :

The CPIOM has position pins to allow an application to determine which position the CPIOM is in, therefore HMCA needs to check which one is set. HMCA uses four special ports to determine which role it is running on:

- In_Pos_G1
- In_Pos_G2
- In_Pos_Y1
- In_Pos_Y2

HMCA will attempt to create all four of these ports at initialization (along with all the other ports). It will then determine its role by ensuring that 1 of the 4 ports was created successfully and the other 3 failed.

This issue is tracked in chapter 11 of HMCA CCD (ref V29RP0909607 v9.0):

This defect has been analysed by ATA42 and ATA29 DO. This is a normal behaviour and will never be corrected. It is acceptable for ATA42 DO.

No new limitation has been raised during the confidence testing, other than those previously detailed in the [IS].

REFERENCE-ID	LIMITATION TITLE	LIMITATION DESCRIPTION	ACCEPTABILITY	CRI-F32	IMPACTED INTERFACES SYSTEM(S)	TARGET STANDARD FOR CLOSURE	STATUS
None	None	None	None	None	None	None	None

4.7 Additional Limitations

For the fully detailed list of the limitations already applicable to the Integrated CPIOM behaviour, refer to [IS] section 11

In addition to the limitations already documented in [IS] section 11 the following limitations have been raised during MICS and MCCT production and validation activities

REFERENCE-ID	LIMITATION TITLE	LIMITATION DESCRIPTION	ACCEPTABILITY	CRI-F32/A MC 20-189	IMPACTED INTERFACES SYSTEM(S)	TARGET STANDARD FOR CLOSURE	STATUS
LIM-CPIOM-H3-42-MCCT_AS-128688742	MCCT Pack FLS COMO : Document_reference noncompliant	MCCT_AS chap 2.1.2.1.2 MCCT Pack FLS COMO : Document_reference noncompliant	No functional impact	3B/Life-cycle data	None	Next MCCT PACK FLS COMO	Open/Classified
LIM-CPIOM-H3-42-MICS_VS--806380412	Pin allocation updated for freighter needs before ATAx CCD-W and ICD update	Pin allocation has been updated for freighter needs before ATAx CCD-W update thus there are discrepancies between pin allocation vs CCD and pin allocation vs ICD	No functional impact	3B/Life-cycle data	None	Next ATAx CCD and ICD	Open/Classified
LIM-CPIOM-H3-52-MICS_VS--805545605	Incorrect power supply 1 and 2 in DSCS CCD-W and pin allocation for CPIOM H34	H34 power supply 1 : DC2 EMER and power supply 2 DC2	No functional impact	3B/Life-cycle data	ATA 52 and ATA 42	Next ATA 52 CCD and pin allocation	Open/Classified
LIM-CPIOM-H3-42-MICS_VS--805535211	Incorrect power supply 1 for CPIOM H32 ATA 52 pins in the pin allocation	H32 power supply 1 : DC2 to be corrected in the pin allocation	No functional impact	3B/Life-cycle data	ATA 52 and ATA 42	Next pin allocation	Open/Classified
LIM-CPIOM-H3-35-	Connected Equipment	Connected Equipment	No functional impact	3B/Life-	ATA 35 and 42	Next pin allocation	Open/Classified

MICS_VS-- 805523775	Ressource to be removed from the pin allocation on 3 OSCM pin	Ressource on 3 OSCM spares on pin allocation but not on CCD		cycle data			
LIM-CPIOM-H3-42-MICS_VS-- 805417307	Pin allocation updated for ULR needs before ATAx CCD-W and ICD update	Pin allocation has been updated for ULR needs before ATAx CCD-W update thus there are discrepancies between pin allocation vs CCD and pin allocation vs ICD	No functional impact	3B/Life cycle data	ATAxx and 42	Next ATAx CCD and ICD	Open/Classified
LIM-CPIOM-H3-42-MICS_VS-- 805378887	Incorrect power supply ATA 42 CCD	Power supply to be corrected in ATA 42 CCD	No functional impact	3B/Life cycle data	ATA 42	Next ATA 42	Open/Classified
LIM-CPIOM-H3-42-MICS_VS-- 802572230	Valima issue : double lines in pin allocation	Valima reports an error for pin allocation double lines on shared io tab	No functional impact	3B/Life cycle data	ATAxx and ATA 42	Next pin allocation	Open/Classified
LIM-CPIOM-H3-42-MICS_VS-- 801602316	Two CD_T_XDCR_G2_ANA_CD_TEMP lines are wrongly filled in the pin allocation	CD_T_XDCR_G2_ANA_CD_TEMP lines H33 AA 12K and H34 AA 12H have to be emptied	No functional impact	3B/Life cycle data	ATA 29 and ATA 42	Next pin allocation	Open/Classified

4.8 Conclusion

This document shows that all the activities required for the integration of the CPIOM have been performed.

All deviations have been analysed and justifications are provided where required (no new deviation since the last certification in the frame of batch 28). All deviations are acceptable.

A complete list of the system limitations and associated workarounds of the CPIOM can be found in the [OLN].

There are no restrictions.

This IM-CID **v14.0** is valid for **Certification**, for the following configuration on the CPIOM platform:

- Conf 1: CSW S3.0.3 / **B29 MCCT** / B24 RBCT / IGGS V5 / DSCS S3.1 / **HMCA S6** / OSCM S3.0 / FQMS V6

The Integrated Module described by this document can be used for **Certification** clearance.