STREAMS

Smart Technologies for eneRgy Efficient Active cooling in Advanced Microelectronic Systems

H2020-ICT-2015-688564

STREAMS

Smart Technologies for eneRgy Efficient Active cooling in advanced Microelectronic Systems

Start date of the project: 01/01/2016
Duration: 36 months

Deliverable D7.2

Data Management Plan

WP	7	Exploitation & Dissemination
Task	7.1	Innovation management and exploitation roadmap

Dissemination Level[1]	PU
Nature[2]	R

Due Delivery Date	M6
Actual Delivery Date	29/06/2016

Lead beneficiary	CEA
Contributing beneficiaries	ALL
Author	Guillaume SAVELLI

[1] Dissemination level: **PU** = Public, **PP** = Restricted to other programme participants (including the Commission services), **RE** = Restricted to a group specified by the consortium (including the JU), **CO** = Confidential, only for members of the consortium (including the Commission services).

[2] Nature of the deliverable: **R** = Report, **D** = Demonstrator, **O** = Other.

Document version	Date	Author	Comments[3]
v1	29/06/2016	Contributing Authors: Guillaume SAVELLI (CEA), Jean-Philippe COLONNA (CEA), Sabrina DA LUZ (HSG), Jérôme BARRAU (UdL), Matthias KELLER (IMTEK), Luc FRECHETTE (LN2)	Creation

[3] Creation, modification, final version for evaluation, revised version following evaluation, final.

Deliverable abstract

As participant of the Open Research Data Pilot, the STREAMS consortium members will grant access to data sets generated.
Thus, this deliverable presents the Data Management Plan elaborated by all partners, which will have to be updated regularly.

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0 - Header	
DMP version, date	DMP V1, 01/06/2016
Date of the first version	01/06/2016

1 - Information on the project	
Identification of the project call	H2020-ICT25-2015
Topic	ICT-25-2015
Grant agreement number	688564
Research program	ICT (Information and Communication Technologies)
Project acronym	STREAMS
Project title	Smart Technologies for eneRgy Efficient Active cooling in advanced Microelectronic Systems
Goals of the project	The aim of STREAMS is to bring Europe into the new leading thermal management paradigm and maintain EU position at the forefront of ICT development. STREAMS will develop a generic active cooling thermal management solution to keep nanoelectronic devices and systems performances at their best, while meeting IC future challenges.
Keywords	Semiconductors, components, systems, Thermal management, active liquid cooling, thermoelectrics, microfluidic, Si based interposer, thermal sensor, energy harvesting, microchannel, self-adaptive fins, microvalves, variable flow-rate pump
Coordinator	CEA – Commissariat à l'Energie Atomique et aux Energies Alternatives
Project leader	Guillaume Savelli guillaume.savelli@cea.fr

2 - Responsibility for the data	
Person in charge of data management during the project	Guillaume Savelli guillaume.savelli@cea.fr
Data property	Property of results (data, knowledge or information) is defined in the STREAMS Grant Agreement. See article 26: 26.1 - Ownership by the beneficiary that generates the results 26.2 - Joint ownership by several beneficiaries

3 - Datasets	
Number of datasets	10

Dataset #1	
4.1 - Data description	
Reference and name of data set	Properties of thermoelectric materials
Nature of data	Excel document
Reuse of data	No
Method of production of data	Measurements results
Data standard	.xlsx
4.2 - Storage, access and security during the project	
4.2.a - Storage and recording	
Medium of data	Electronic file
Projected volume	~ 5 Mo
Data hosting	CEA internal server
4.2.b - Access to data	
Data reading	Windows
Access procedures	CEA internal
Data sharing	STREAMS consortium diffusion
4.2.c - Data security	
Risks or threats to data	Low risk, securized server of CEA
Data privacy	Public
4.3 - Dissemination at the end of the project	
4.3.a - Data sharing, diffusion and reuse	
General principle of diffusion	Diffusion rules described in the STREAMS GA #688564
Type of license	Described in the STREAMS GA and CA
Potentiel for reuse	Potential for industrial reuse (industrial transfer)
Existing publications related to the data	Yes (to come)
Data repository and access	CEA internal server & access
4.3.b - Protection of sensitive data	
Identification of sensitive data sets	Public
Justification for the exception to the general principles of diffusion	No
Embargo period	See STREAMS GA & CA

Dataset #2	
3.1 - Data description	
Reference and name of data set	Properties of thermoelectric sensors
Nature of data	Excel document
Reuse of data	No
Method of production of data	Measurements results
Data standard	.xlsx
3.2 - Storage, access and security during the project	
3.2.a - Storage and recording	
Medium of data	Electronic file
Projected volume	~ 2 Mo
Data hosting	CEA internal server
3.2.b - Access to data	
Data reading	Windows
Access procedures	CEA internal
Data sharing	STREAMS consortium
3.2.c - Data security	
Risks or threats to data	Low risk, securized server of CEA
Data privacy	STREAMS confidential
3.3 - Dissemination at the end of the project	
3.3.a - Data sharing, diffusion and reuse	
General principle of diffusion	Diffusion rules described in the STREAMS GA #688564
Type of license	Described in the STREAMS GA and CA
Potentiel for reuse	Potential for industrial reuse (industrial transfer)
Existing publications related to the data	No
Data repository and access	CEA internal server & access
3.3.b - Protection of sensitive data	
Identification of sensitive data sets	Data need protection to guarantee industrial exploitation
Justification for the exception to the general principles of diffusion	Industrial know-how, Expertise
Embargo period	See STREAMS GA & CA

Dataset #3	
3.1 - Data description	
Reference and name of data set	Process flow & layout
Nature of data	Power point document
Reuse of data	No
Method of production of data	Thinking
Data standard	.pptx
3.2 - Storage, access and security during the project	
3.2.a - Storage and recording	
Medium of data	Electronic file
Projected volume	~ 2 Mo
Data hosting	CEA internal server
3.2.b - Access to data	
Data reading	Windows
Access procedures	CEA internal
Data sharing	STREAMS consortium
3.2.c - Data security	
Risks or threats to data	Low risk, securized server of CEA
Data privacy	STREAMS confidential
3.3 - Dissemination at the end of the project	
3.3.a - Data sharing, diffusion and reuse	
General principle of diffusion	Diffusion rules described in the STREAMS GA #688564
Type of license	Described in the STREAMS GA and CA
Potentiel for reuse	Potential for industrial reuse (industrial transfer)
Existing publications related to the data	No
Data repository and access	CEA internal server & access
3.3.b - Protection of sensitive data	
Identification of sensitive data sets	No
Justification for the exception to the general principles of diffusion	No
Embargo period	See STREAMS GA & CA

Dataset #4	
4.1 - Data description	
Reference and name of data set	Versatile microfluidic PoC
Nature of data	Excel document
Reuse of data	No
Method of production of data	Measurements results
Data standard	.xlsx
4.2 - Storage, access and security during the project	
4.2.a - Storage and recording	
Medium of data	Electronic file
Projected volume	1 Mo
Data hosting	UdL Internal server
4.2.b - Access to data	
Data reading	Windows
Access procedures	UdL internal
Data sharing	STREAMS consortium diffusion (mail, presentation)
4.2.c - Data security	
Risks or threats to data	Low risk, securized server of UdL
Data privacy	Public
4.3 - Dissemination at the end of the project	
4.3.a - Data sharing, diffusion and reuse	
General principle of diffusion	Diffusion rules described in the STREAMS GA #688564
Type of license	Described in the STREAMS GA and CA
Potentiel for reuse	Potential for industrial reuse (industrial transfer)
Existing publications related to the data	Yes
Data repository and access	UdL internal server & Access
4.3.b - Protection of sensitive data	
Identification of sensitive data sets	Data need protection to guarantee industrial exploitation
Justification for the exception to the general principles of diffusion	Industrial know-how, Expertise
Embargo period	See STREAMS GA & CA

Dataset #5	
4.1 - Data description	
Reference and name of data set	Characterization of self adaptive fins
Nature of data	Excel document
Reuse of data	No
Method of production of data	Measurements results
Data standard	.xlsx
4.2 - Storage, access and security during the project	
4.2.a - Storage and recording	
Medium of data	Electronic file
Projected volume	1 Mo
Data hosting	UdL Internal server
4.2.b - Access to data	
Data reading	Windows
Access procedures	UdL internal
Data sharing	STREAMS consortium diffusion (mail, presentation)
4.2.c - Data security	
Risks or threats to data	Low risk, securized server of UdL
Data privacy	STREAMS confidential
4.3 - Dissemination at the end of the project	
4.3.a - Data sharing, diffusion and reuse	
General principle of diffusion	Diffusion rules described in the STREAMS GA #688564
Type of license	Described in the STREAMS GA and CA
Potentiel for reuse	Potential for industrial reuse (industrial transfer)
Existing publications related to the data	Yes
Data repository and access	UdL internal server & Access
4.3.b - Protection of sensitive data	
Identification of sensitive data sets	Data need protection to guarantee industrial exploitation
Justification for the exception to the general principles of diffusion	Industrial know-how, Expertise
Embargo period	See STREAMS GA & CA

Dataset #6	
4.1 - Data description	
Reference and name of data set	Pump module algorithm
Nature of data	Electrical plan
Reuse of data	Annual report, adaptation of existing process flow
Method of production of data	Software, measurement results
Data standard	.docx or .pdf
4.2 - Storage, access and security during the project	
4.2.a - Storage and recording	
Medium of data	Electronic file
Projected volume	Megabyte
Data hosting	Company data storage
4.2.b - Access to data	
Data reading	Microsoft office, Adobe Acrobat reader
Access procedures	Company internal
Data sharing	No, STREAMS consortium discussion (not detailed)
4.2.c - Data security	
Risks or threats to data	Low risk, secured server of company
Data privacy	Confidential
4.3 - Dissemination at the end of the project	
4.3.a - Data sharing, diffusion and reuse	
General principle of diffusion	Diffusion rules described in the STREAMS GA #688564
Type of license	Described in the STREAMS GA and CA
Potential for reuse	Reuse for similar fields of technology
Existing publications related to the data	No
Data repository and access	STREAMS sharepoint tool (not detailed)
4.3.b - Protection of sensitive data	
Identification of sensitive data sets	Data need protection to guarantee industrial exploitation
Justification for the exception to the general principles of diffusion	Industrial know-how
Embargo period	See GA & CA

Dataset #7	
4.1 - Data description	
Reference and name of data set	Flow sensor measurement range and modulation
Nature of data	Word, Excel
Reuse of data	Annual report, adaptation of existing process flow
Method of production of data	Measurement results
Data standard	.docx or .xlsx
4.2 - Storage, access and security during the project	
4.2.a - Storage and recording	
Medium of data	Electronic file
Projected volume	Megabyte
Data hosting	Company data storage
4.2.b - Access to data	
Data reading	Microsoft office
Access procedures	Company internal
Data sharing	STREAMS consortium discussion
4.2.c - Data security	
Risks or threats to data	Low risk, secured server of company
Data privacy	STREAMS confidential
4.3 - Dissemination at the end of the project	
4.3.a - Data sharing, diffusion and reuse	
General principle of diffusion	Diffusion rules described in the STREAMS GA #688564
Type of license	Described in the STREAMS GA and CA
Potential for reuse	Potential for industrial reuse for dosage system
Existing publications related to the data	No
Data repository and access	STREAMS sharepoint tool
4.3.b - Protection of sensitive data	
Identification of sensitive data sets	Public
Justification for the exception to the general principles of diffusion	Non relevant
Embargo period	See GA & CA

Dataset #8	
4.1 - Data description	
Reference and name of data set	Data on electronic circuits
Nature of data	Data files containing schematics, layouts and simulation results of the ASIC (application specific integrated circuit) and its sub-circuits designed using software from Cadence
Reuse of data	Project meetings, annual reports, publications, follow-up proposals
Method of production of data	Circuit design, simulations, measurements, documentations
Data standard	docx., .xlsx, .pptx, .pdf, .jpeg, .psf
4.2 - Storage, access and security during the project	
4.2.a - Storage and recording	
Medium of data	Electronic files
Projected volume	Information not yet available
Data hosting	File server of the Fritz Huettinger Chair of Microelectronics, file server of the project consortium
4.2.b - Access to data	
Data reading	Microsoft Office (Word, Excel, Power Point), PDF reader, Cadence Software
Access procedures	File server
Data sharing	STREAMS / project consortium
4.2.c - Data security	
Risks or threats to data	Typical risks (any file server may be hacked…)
Data privacy	STREAMS confidential
4.3 - Dissemination at the end of the project	
4.3.a - Data sharing, diffusion and reuse	
General principle of diffusion	Diffusion rules described in the STREAMS GA #688564
Type of license	Described in the STREAMS GA and CA
Potential for reuse	Reuse for similar research projects & follow-up proposals
Existing publications related to the data	Not yet
Data repository and access	File server of the Fritz Huettinger Chair of Microelectronics, file server of the project consortium
4.3.b - Protection of sensitive data	
Identification of sensitive data sets	Public
Justification for the exception to the general principles of diffusion	Not applicable
Embargo period	See GA & CA

Dataset #9	
4.1 - Data description	
Reference and name of data set	Microfluidic design
Nature of data	Word document
Reuse of data	No
Method of production of data	Analytical modeling
Data standard	.docx
4.2 - Storage, access and security during the project	
4.2.a - Storage and recording	
Medium of data	Electronic file
Projected volume	~ 1 Mo
Data hosting	3IT server
4.2.b - Access to data	
Data reading	Windows, Microsoft Office
Access procedures	3IT internal, limited access to authorized users
Data sharing	STREAMS sharepoint, access by consortium members
4.2.c - Data security	
Risks or threats to data	Low risk
Data privacy	STREAMS confidential
4.3 - Dissemination at the end of the project	
4.3.a - Data sharing, diffusion and reuse	
General principle of diffusion	Diffusion rules described in the STREAMS GA #688564
Type of license	Described in the STREAMS GA and CA
Potentiel for reuse	Reuse for similar fields of technology
Existing publications related to the data	No
Data repository and access	3IT internal server and access
4.3.b - Protection of sensitive data	
Identification of sensitive data sets	Data need protection to guarantee industrial exploitation
Justification for the exception to the general principles of diffusion	Industrial know-how, expertise
Embargo period	See GA & CA

Dataset #10	
4.1 - Data description	
Reference and name of data set	Valves
Nature of data	Word document
Reuse of data	No
Method of production of data	Analytical modeling and experimental characterization
Data standard	.docs
4.2 - Storage, access and security during the project	
4.2.a - Storage and recording	
Medium of data	Electronic file
Projected volume	~ 1 Mo
Data hosting	3IT server
4.2.b - Access to data	
Data reading	Windows, Microsoft Office
Access procedures	3IT internal, limited access to authorized users
Data sharing	STREAMS sharepoint, access by consortium members
4.2.c - Data security	
Risks or threats to data	Low risk
Data privacy	STREAMS confidential
4.3 - Dissemination at the end of the project	
4.3.a - Data sharing, diffusion and reuse	
General principle of diffusion	Diffusion rules described in the STREAMS GA #688564
Type of license	Described in the STREAMS GA and CA
Potentiel for reuse	Reuse for similar fields of technology
Existing publications related to the data	Yes
Data repository and access	3IT internal server and access
4.3.b - Protection of sensitive data	
Identification of sensitive data sets	Data need protection to guarantee industrial exploitation
Justification for the exception to the general principles of diffusion	Industrial know-how, expertise
Embargo period	See GA & CA