ADVANCED RADIATION TOLERANT CMOS OSCILLATORS (INTERNAL FUNDS DMP)

DMP

ADMIN DETAILS

Project Name: ADVANCED RADIATION TOLERANT CMOS OSCILLATORS
Principal Investigator / Researcher: Jeffrey Prinzie
Institution: KU Leuven

1. GENERAL INFORMATION

Name of the project lead (PI)
Jeffrey Prinzie

Internal Funds Project number & title
C24E/21/014

2. DATA DESCRIPTION

2.1. Will you generate/collect new data and/or make use of existing data?
We will generate/collect new data. We will not make use of existing data.

2.2. What data will you collect, generate or reuse? Describe the origin, type and format of the data (per dataset) and its (estimated) volume. This may be easiest in a numbered list or table and per objective of the project.

Data type	*Description*	*Format*	*Volume*
Electronic design database	*Design database of integrated circuits: schematics, layout, simulation results*	*Cadence OA proprietary format*	*50-100GB*
Electronic measurements	*Measurement data acquired during electronic tests in lab*	*Format varies depending on equipment. See data storage on how we manage this*	*<1GB*
Irradiation results	*Irradiation results acquired during testbeam campaigns*	*Format varies depending on equipment. See data storage on how we manage this*	*5-10TB*
Reports	*Design/development reports and test repots*	*PDF*	*<1GB*

3. ETHICAL AND LEGAL ISSUES

3.1. Will you use personal data? If so, shortly describe the kind of personal data you will use. Add the reference to the file in KU Leuven's Record of Processing Activities. Be aware that registering the fact that you process personal data is a legal obligation.

No

3.2. Are there any ethical issues concerning the creation and/or use of the data (e.g. experiments on humans or animals, dual use)? If so, add the reference to the formal approval by the relevant ethical review committee(s).

No

3.3. Does your research possibly result in research data with potential for tech transfer and valorisation? Will IP restrictions be claimed for the data you created? If so, for what data and which restrictions will be asserted?

Yes, restrictions will be asserted for the design database.

3.4. Do existing 3rd party agreements restrict dissemination or exploitation of the data you (re)use? If so, to what data do they relate and what restrictions regarding reuse and sharing are in place?

No

4. DOCUMENTATION AND METADATA

4.1. What documentation will be provided to enable understanding and reuse of the data collected/generated in this project?

Data type	*Metadata*
Electronic design database	*Designs are documented following our own internal data management plan: https://iiw.kuleuven.be/onderzoek/advise/dmp*
Electronic measurements	*Raw data is accompagnied with a description file that contains the conditions, setup of the acquired results. An exexutable is stored along the data to reproduce the results as well as a manual how to reproduce the analysis.*
Irradiation results	*Same as "Electronic Measurements"*
Reports	*Reports are stored per date and milestone*

4.2. Will a metadata standard be used? If so, describe in detail which standard will be used. If not, state in detail which metadata will be created to make the data easy/easier to find and reuse.

No

5. DATA STORAGE AND BACKUP DURING THE PROJECT

5.1. Where will the data be stored?

Data type	*storage*
Electronic design database	*Linux storage provided by ESAT (dept. Electrical Engineering). Designs are synced to a github repository.*
Electronic measurements	*Same as Electronic design database*
Irradiation results	*Same as Electronic design database*
Reports	*Project one-drive*

5.2. How will the data be backed up?

Data type	*storage*
Electronic design database	*Linux storage provided by ESAT (dept. Electrical Engineering) with ensured secure backup.*
Electronic measurements	*Same as Electronic design database*
Irradiation results	*Same as Electronic design database*
Reports	*Project one-drive hosted by KU Leuven*

Specific guidelines are found on https://iiw.kuleuven.be/onderzoek/advise/dmp

5.3. Is there currently sufficient storage & backup capacity during the project? If yes, specify concisely. If no or insufficient storage or backup capacities are available, then explain how this will be taken care of.

Yes, ESAT provides storage capability in the department datacenter.

5.4. What are the expected costs for data storage and backup during the project? How will these costs be covered?

Cost is included in the "computer infrastructure" of the proposal and is part of an annual user account fee to ESAT.

5.5. Data security: how will you ensure that the data are securely stored and not accessed or modified by unauthorized persons?

ESAT provides secure access to a by-user storage.

6. DATA PRESERVATION AFTER THE END OF THE PROJECT

6.1. Which data will be retained for the expected 10 year period after the end of the project? If only a selection of the data can/will be preserved, clearly state why this is the case (legal or contractual restrictions, physical preservation issues, ...).

All data.

6.2. Where will these data be archived (= stored for the long term)?

Backup provided by ESAT.

6.3. What are the expected costs for data preservation during these 10 years? How will the costs be covered?
Costs are part of the user account fees.

7. DATA SHARING AND RE-USE

7.1. Are there any factors restricting or preventing the sharing of (some of) the data (e.g. as defined in an agreement with a 3rd party, legal restrictions or because of IP potential)?
No data will be made available because of IP potential.

7.2. Which data will be made available after the end of the project?
None – only upon request and via contractual agreement.

7.3. Where/how will the data be made available for reuse?
NA

7.4. When will the data be made available?
NA

7.5. Who will be able to access the data and under what conditions?
NA

7.6. What are the expected costs for data sharing? How will these costs be covered?
NA

8. RESPONSIBILITIES

8.1. Who will be responsible for the data documentation & metadata?
Jeffrey Prinzie

8.2. Who will be responsible for data storage & back up during the project?
Department of Electrical Engineering – Jeffrey Prinzie

8.3. Who will be responsible for ensuring data preservation and sharing?
Jeffrey Prinzie
8.4. Who bears the end responsibility for updating & implementing this DMP?
Jeffrey Prinzie