Secondment report

Name: ESR4.3 Cemil Cem GÜRSOY
IRP title: **Open-source EDA tools for design quality and reliability automation using zamiaCAD**
From: TUT
To: TUD
Period: January 20 – February 02, 2018

Activities during the secondment

- **Scope and objectives:**
    - Learning about memory (SRAM) architecture and working principles
    - Learning about Bias Temperature Instability (BTI) aging mechanism and required aging mitigation techniques for different parts of SRAM
    - Starting a collaboration with PhD student Daniel Kraak in TUD
- **Activities:**
    - Training on memories and aging mitigation techniques
    - Reading related papers and theses
    - Discussing about research ideas
- **Main results achieved:**
    - Required knowledge to start collaborating on aging mitigation for SRAMs
    - Main idea for collaboration and next steps
- **Next steps:**
    - Evaluate aging of a gate level design using zamiaCAD
    - Select/design an address decoder of a SRAM
- **Optional request for support or a technology/tool available at host:** No

Self-evaluation

Overall score: 5
I consider this secondment successful, with regards to the research objectives achieved, skills developed, supervision quality, diversity of the resources. (Agree = 5 … Disagree = 1)
Optional comments:

Date of the report approval by the supervisor: 10.02.2020