

Developing Open-Source Circuit Design and Flow Management Software

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Abstract—The need for open-source tools for circuit design for custom silicon hardware has increased since the establishment of the Skywater open-source process design kit (PDK). This project aims to improve and extend existing software tools and scripts that help users with developing circuits; and to migrate the tools, which currently are mostly on the Efabless, Inc. platform, to a platform-independent, open environment. The project’s end goal is to improve the functionality of an existing project manager and provide intuitive software for managing circuit design flows. The flow manager guides users through a specific design process, integrating the PDK and tools and ensuring that all conditions are being met in the process. The project aims to support the analog, design, mixed-signal, and chip assembly flows, each of which has its own unique set of tools and steps.

Index Terms—PDK, open source, EDA tools

REFERENCES

- [1] R. Timothy Edwards, “Open_PDKs PDK Installer for open-source tools,” http://www.opencircuitdesign.com/open_pdk