Initial Areas of Focus I:

Model Operations

Reliable management, optimization, and deployment of AI models

Opportunities for Collaboration with Group Members

- AI models to optimize IP selection, verification coverage, power/timing predictions
- Integration of AI into EDA tools for smarter design flows
- Sharing optimization and deployment benchmarks to standardize model use in AI application development

Initial Areas of Focus II:

Cloud Tooling

Leveraging cloud infrastructure for scalable AI software development and testing

Opportunities for Collaboration with Group Members

- Cloud-based EDA workflows for simulation, layout, and DFT
- Shared infrastructure for model training and synthetic dataset generation
- Evaluate scalable hybrid cloud environments for AI application development efficiency and AI workload handling

Initial Areas of Focus III:

AI Agents

Purpose-driven AI software agents for development, planning, and productivity tasks

Opportunities for Collaboration with Group Members

- AI-assisted RTL generation, testbench creation, and documentation automation
- Agents that support design trade-off decisions and data summarization
- Sharing pilot use cases where agents are integrated into AI application development

AI agents represent a transformative opportunity to enhance productivity and innovation across the semiconductor design and manufacturing process.