SCCharts – Sequential Constructive Charts

Synchronous Program Classes

SCG-normalized SCCharts

Fundamental Concepts

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HW + SW Compiler Stack

Core Transformations

Dependency Types

- True
- False
- Read Dependency
- Write Dependency
- Raw Data Dependency
-全依赖关系

Synchrony Hypothesis

- Sequentially organized
- Consistent serial order of execution
- Only concurrent data dependencies matter
- Natural sequencing prescribes deterministic scheduling
- Novelty: Distinguish between relative and absolute writes
- Novelty: Sequential data dependencies do not lead to rejection
- Novelty: Prescriptive (not descriptive like Esterel/SyncCharts)

Core SCCharts with During Actions

Extended SCCharts with Signals

Core SCCharts only

Extended SCCharts only (optimized)

External Funding:

- German Research Foundation, PRETSY Project
- DFG Foundation
- National Instruments

Further Information:

http://www.informatik.uni-kiel.de/rtsys/kieler

Further Information:

http://www.gdi.uni-bamberg.de/

Christian Motika, Steven Smyth, Reinhard v. Hanxleden 2013