Polychrony is a toolset for the integrated development of embedded applications designed around the polychronous Signal Language.

Technological Breakthrough:
The Polychrony toolset, based on Signal, provides a formal framework:
• to refine descriptions in a top-down approach
• to abstract properties needed for black-box composition
• to assemble predefined components (bottom-up with COTS)
• to validate an application at different levels

Potential application fields:
Process control, Signal processing systems, Avionics, Automotive control, Vehicle control systems, Nuclear power control systems, Defense systems, Radar systems.

Key Words: Synchorous language, multi-clock systems, real-time, GALS, verification proof, architecture, critical systems, optimization, code generation, cosimulation.

Coding and Operating System: C, C++, Java. Linux, Solaris, MacOS, Windows. Integrated in OpenEmbeDD, TopCased, Spacify platforms.

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