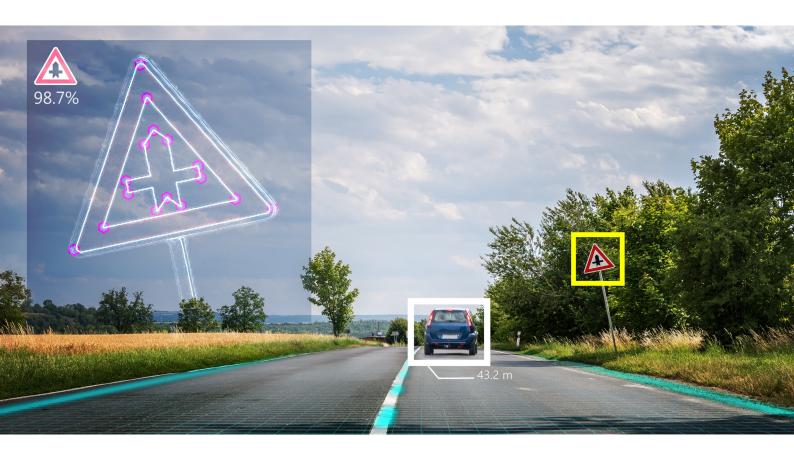
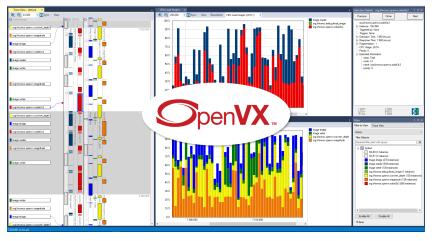
Tracealyzer for OpenVX & Synopsys EV6x



- Visualize execution of OpenVX vision and Al applications
- 30+ detailed graphical views
- Study timing, pipelining and scheduling
- Find bottlenecks and optimize performance
- Works with Synopsys ARC® MetaWare EV
 Development Toolkit and EV6x processors;
 support for other OpenVX platforms is planned.



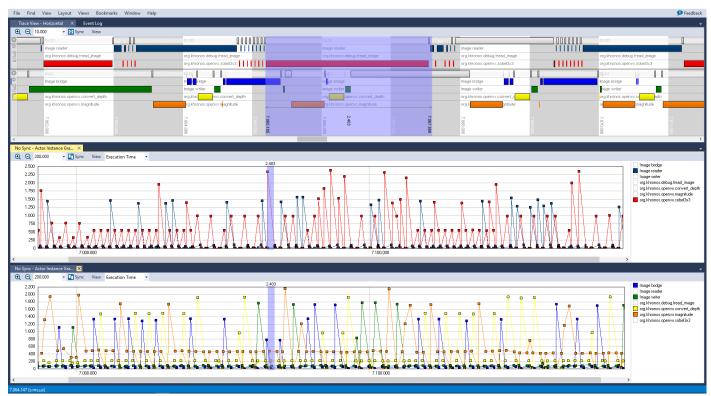
hen developing embedded vision applications, performance is crucial since the resulting data is needed by critical system functions, often with hard real-time requirements. For instance, the performance of your vision processing can greatly impact control system performance. More frequent inputs, with less latency, means better control and reduced cycle times.



Today's powerful vision processors and GPUs allow for great performance, but how do you ensure your solution really makes efficient use of the hardware? Perhaps some node requires much more processing time than expected and overloads a core, while the other cores are mostly idle? Perhaps you have tried to improve performance by adding more compute resources, but the gain is less than expected? Fixing bottlenecks like these may yield vast improvements in performance, but to achieve this you need good insight into the runtime system.

Percepio Tracealyzer for OpenVX allows you to visualize the execution of OpenVX vision and Al applications, and identify bottlenecks. Tracealyzer provides a variety of graphical views showing different perspectives of the recorded behavior, ranging from a detailed trace view to high-level overviews and statistics. The trace view, shown on the left side in the screenshot above, displays a timeline of the OpenVX graph execution on the available cores and accelerators, so you can study the scheduling, pipelining and timing in great detail.

Tracealyzer for OpenVX is initially available for Synopsys EV6x processors, leveraging the built-in trace support in Synopsys ARC® MetaWare EV Development Toolkit.



This screenshot from Tracealyzer shows the execution times of various OpenVX tasks, correlated to the trace view.