

RA Ecosystem Partner Solution

Percepio Tracealyzer®



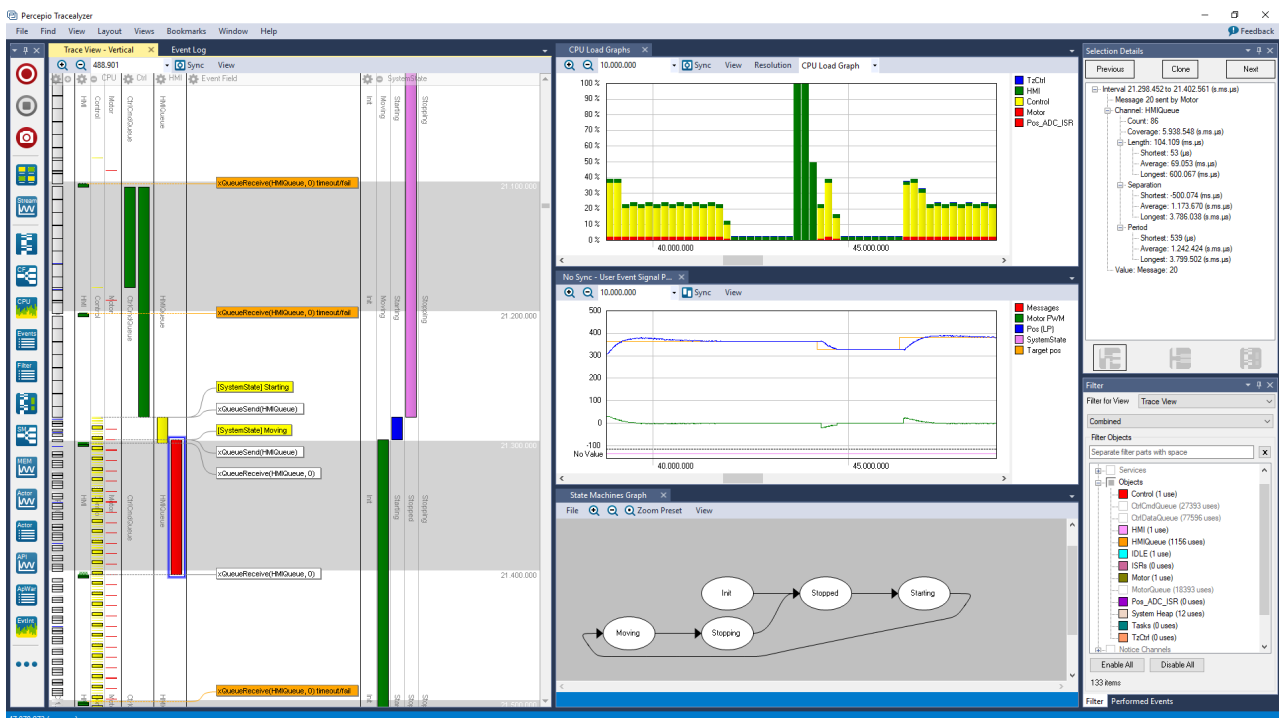
Solution Summary

Tracealyzer is the premier solution for visual trace diagnostics for developers of RTOS- or Linux-based embedded software systems. State-of-the-art software tracing and trace visualization, developed since 2004, is designed to make it easier to spot and understand bugs, find solutions and verify them. Out-of-box support is now available for the [RA family of MCUs](#).

Features/Benefits

- **Over 30 views of the run-time behavior**
- **Custom logging of “User Events”** to see states and variables over time
- **Profiling views** to show you what parts of the system use the most resources
- **No special trace hardware is required.** Tracealyzer relies on efficient software instrumentation with minimal overhead.
- **Multiple RTOS and Linux platforms are supported**, including FreeRTOS, Amazon FreeRTOS, SafeRTOS, Micrium µC/OS, ThreadX, Keil RTX5 and VxWorks

Diagrams/Graphics



All views are interconnected in clever ways, so you can click on a data point in one view and see the corresponding location in another related view. Moreover, all timeline views can be synchronized, so you can scroll and zoom them side-by-side. This way, you can benefit from multiple perspectives at the same time and better understand the trace.

For more information, check out: <https://percepio.com>



The Leader in Visual Trace Diagnostics

Why Visual Trace Diagnostics?

Today's smart products rely on advanced embedded processors with special-purpose software, often with vast amounts of C/C++ code and multithreading. Increasing complexity makes it really hard for developers to fully understand how all their code works in practice, especially when several tasks need to share data and hardware resources. As a result, firmware development is often painfully slow and error prone. Debugging and testing often requires more than 50% of the firmware development effort, but many bugs are still missed. Despite all efforts, these bugs reach customers. This damages the user experience and sometimes lead to security vulnerabilities.

Visual Trace Diagnostics provides high-level visual overviews from multiple perspectives that reveal anomalies in the system behavior. This also allows you to verify that the system executes as intended at a high level.

Tracealyzer®

Visual Trace Diagnostics for debugging complex embedded applications

DevAlert®

Cloud-based Anomaly Reporting for connected device software. Awareness and diagnostics for rapid OTA updates.



We believe software tracing has a large untapped potential for improving firmware development productivity and quality. By providing application developers with actionable insights and better overall understanding of their system, they get better means for coping with increasing system complexity. This way, smart products can be developed faster and at lower cost, with more competitive features and fewer bugs.