

# RX Ecosystem Partner Solution

## IAR Embedded Workbench



### 1. Solution Summary

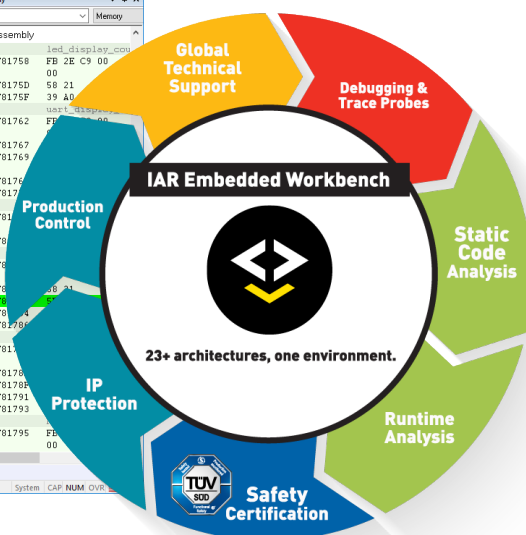
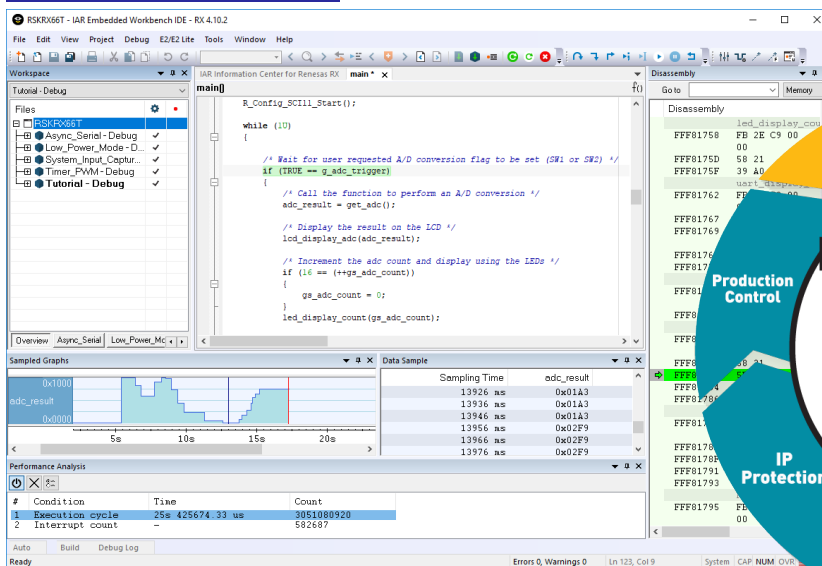
C/C++ compiler and debugger toolchain

IAR Embedded Workbench is a complete development toolchain providing powerful code optimizations and comprehensive debugging features in an easy-to-use integrated development environment that works with [RX MCUs](#). The security development tool C-Trust adds IP protection and production control.

### 2. Features/Benefits

- Complete C/C++ compiler and debugger toolchain
- Outstanding performance through sophisticated optimization technology
- Comprehensive debugger
- User-friendly features and broad ecosystem integration
- Integrated static and runtime code analysis
- Global support services and training
- Functional safety certification: IEC 61508, ISO 26262, IEC 62304, EN 50128, EN 50657

### 3. Diagrams/Graphics

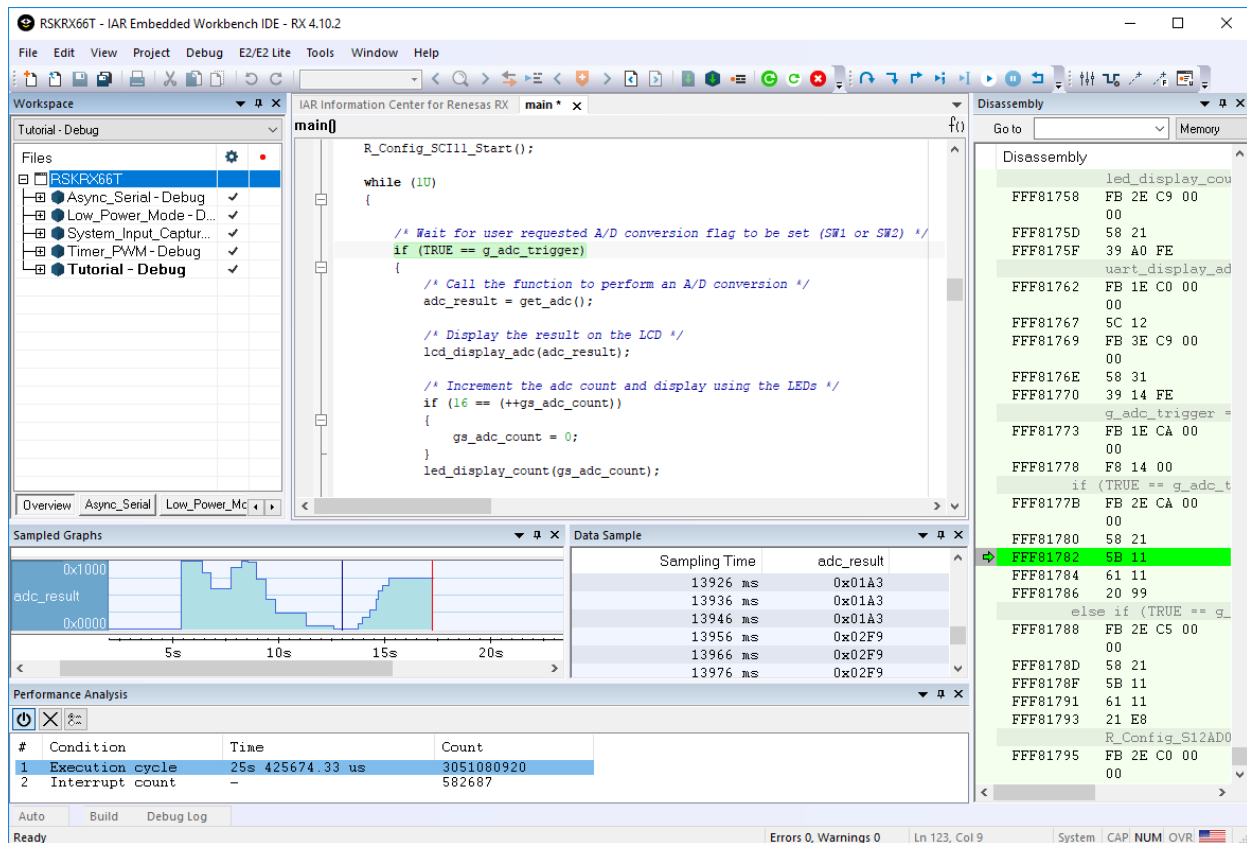


### 4. Target Markets and Applications

- Industrial automation
- Automotive
- Consumer electronics
- Medical technology and wearables
- Smart metering

## More than an ordinary toolbox!

IAR Embedded Workbench is the number one development toolchain – a robust, flexible and complete platform with powerful functionality just a tick box away. The toolchain offers integrated code analysis tools and is certified by TÜV SÜD for Functional Safety development. The security development tool C-Trust works as an extension of IAR Embedded Workbench and enables developers to easily protect an existing or new application without having to master the deeper complexities of security. IAR Systems also provides extensive technical support and training options.



The screenshot displays the IAR Embedded Workbench IDE interface for Renesas RX. The main window shows C code for an ADC conversion loop. Below the code, there are three panels: 'Sampled Graphs' showing a histogram of ADC results, 'Data Sample' table, and 'Performance Analysis' table.

Sampling Time	adc_result
13926 ms	0x01A3
13936 ms	0x01A3
13946 ms	0x01A3
13956 ms	0x02F9
13966 ms	0x02F9
13976 ms	0x02F9

#	Condition	Time	Count
1	Execution cycle	25s 425674.33 us	3051080920
2	Interrupt count	-	582687

### The future-proof supplier of software tools and services for embedded development

IAR Systems and Renesas have had a strong partnership since the 1980's. With more than 4,000 supported Renesas devices, IAR Embedded Workbench supplies exceptional design flexibility for embedded developers working with the extensive Renesas product portfolio. The tools deliver outstanding performance and let customers migrate easily between different architectures, choosing the one best suited for a specific application while using the same development tools, and with the ability to reuse code.

IAR Systems is a Renesas Platinum Partner, and is committed to continue supplying high-class tools for all Renesas MCUs.