

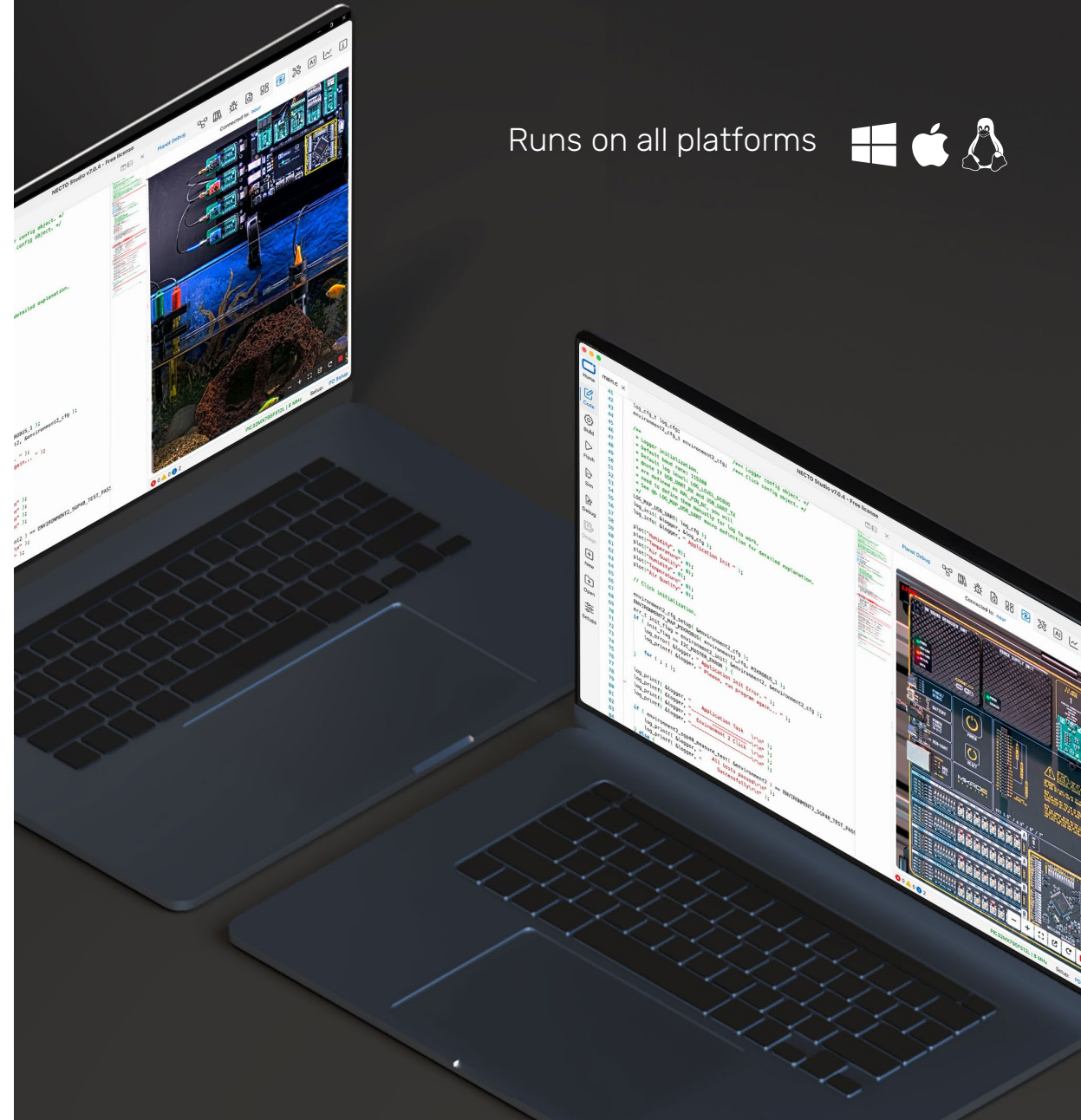


The only development environment you'll ever need

BEST UX,  
MULTI-ARCHITECTURE,  
MULTI-LANGUAGE IDE



Runs on all platforms



## Why NECTO Studio? Here's what sets it apart

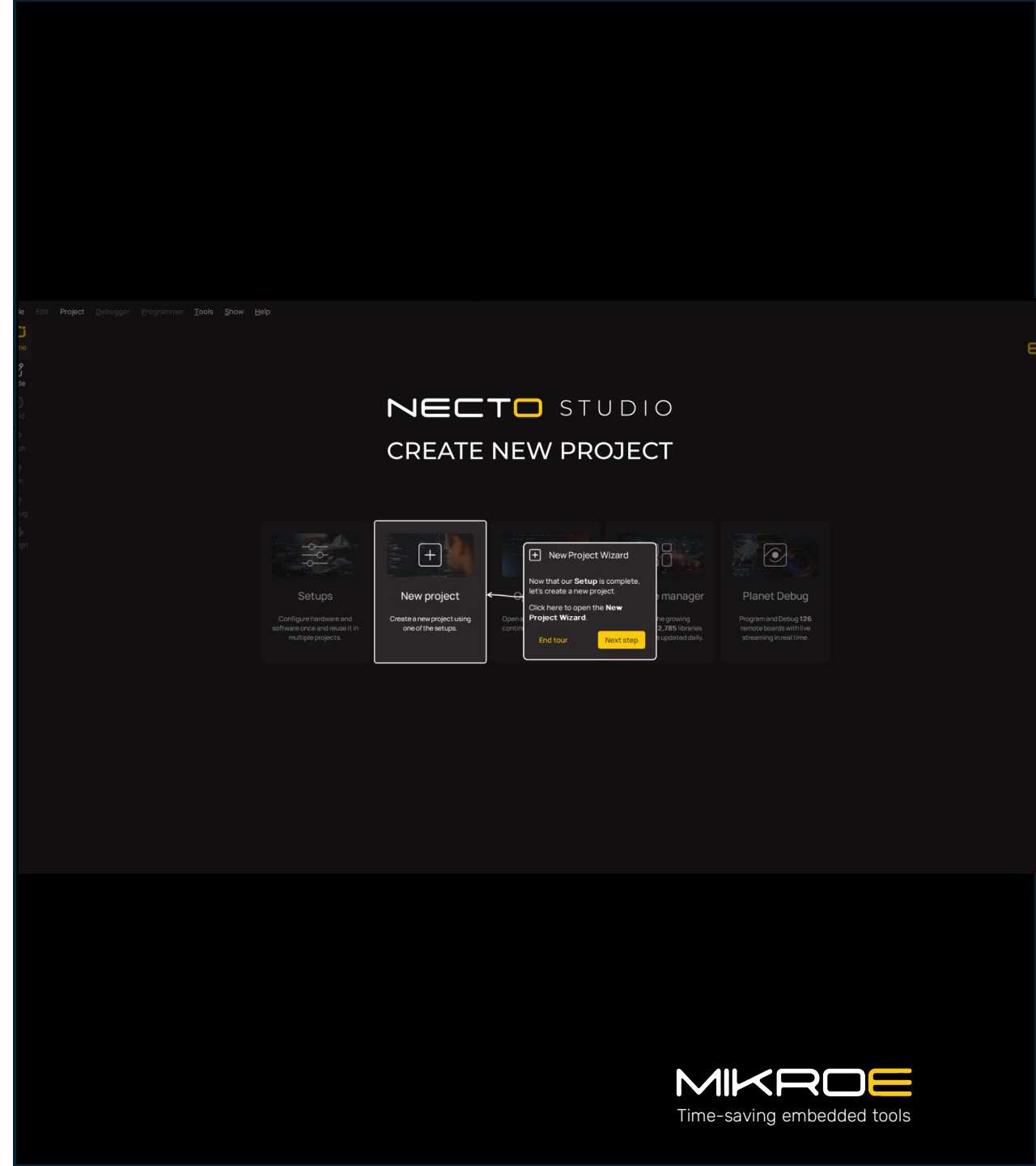
We built NECTO to be the tool we always wished we had

- ✓ Lightning fast - built in C++ for optimal performance on Windows, macOS, and Linux
- ✓ Supports 6 architectures and 12 compilers through a unified SDK
- ✓ 1800+ maintained code examples with new ones added daily
- ✓ 24/7 access to Planet Debug - remote evaluation platform for programming and debugging development boards
- ✓ Create your own personal cloud by fetching data from remote boards with one line of code
- ✓ Guided setup steps for faster project start
- ✓ Built-in GUI development with NECTO Designer and LVGL, including auto-code generation
- ✓ Integrated tools (bootloaders, terminals, converters, etc.) reduce external dependencies
- ✓ Built-In code assistant - merge codebases, understand logic, and write faster with smart suggestions

## Project Management

# Start projects quickly with predefined templates & CMake support

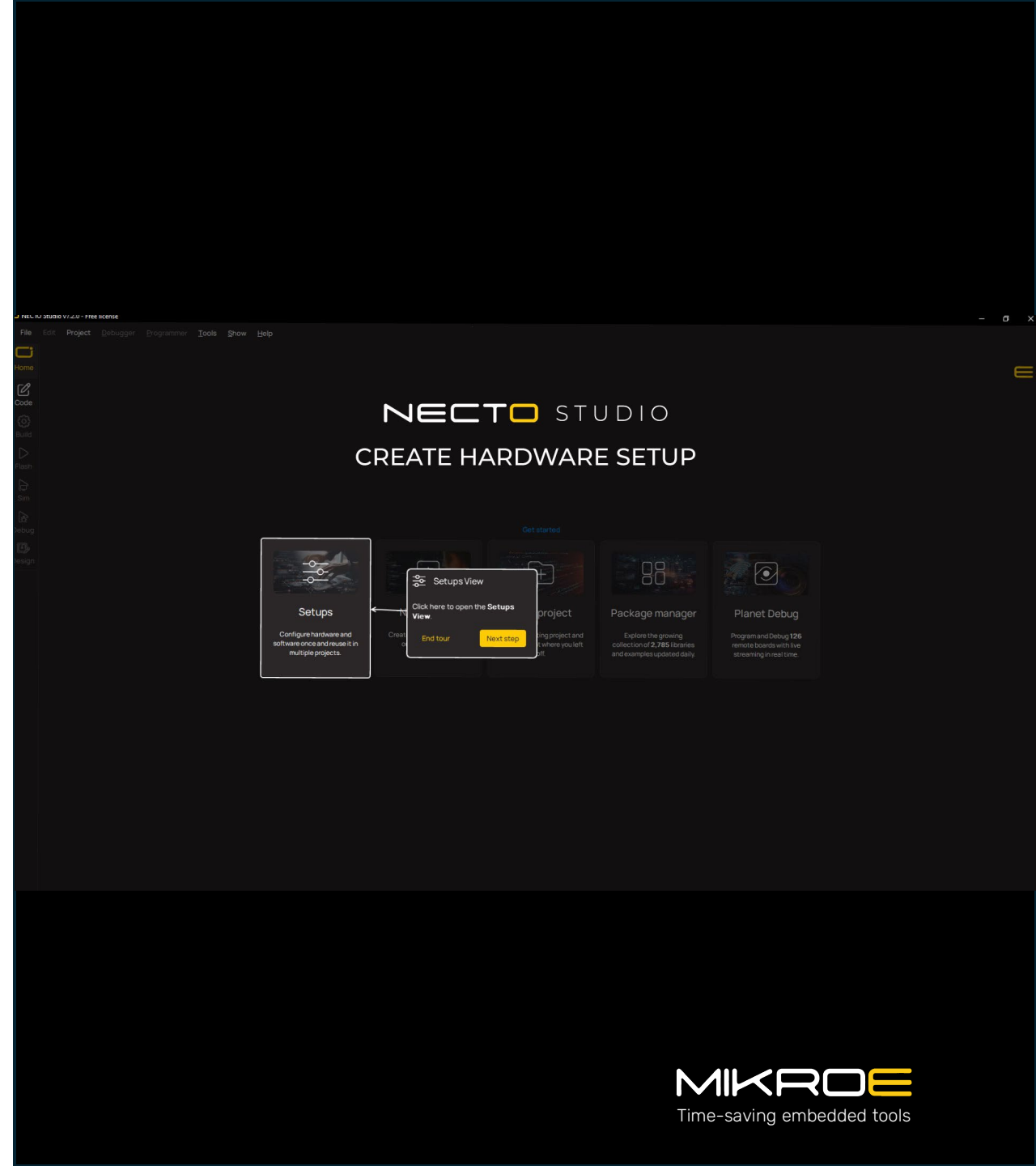
- Start quickly with predefined project types – fully hardware-agnostic thanks to smart Setup handling
- Built-in CMake support aligns with industry standards for professional workflows
- Intuitive design:
  - Add, remove, and rename files in a few clicks
  - Edit CMake cache, targets, and steps visually
  - Color-coded file icons for quick identification
  - Right-click actions tailored to file type and context



## Hardware Setup

# Define the setup once and reuse multiple times

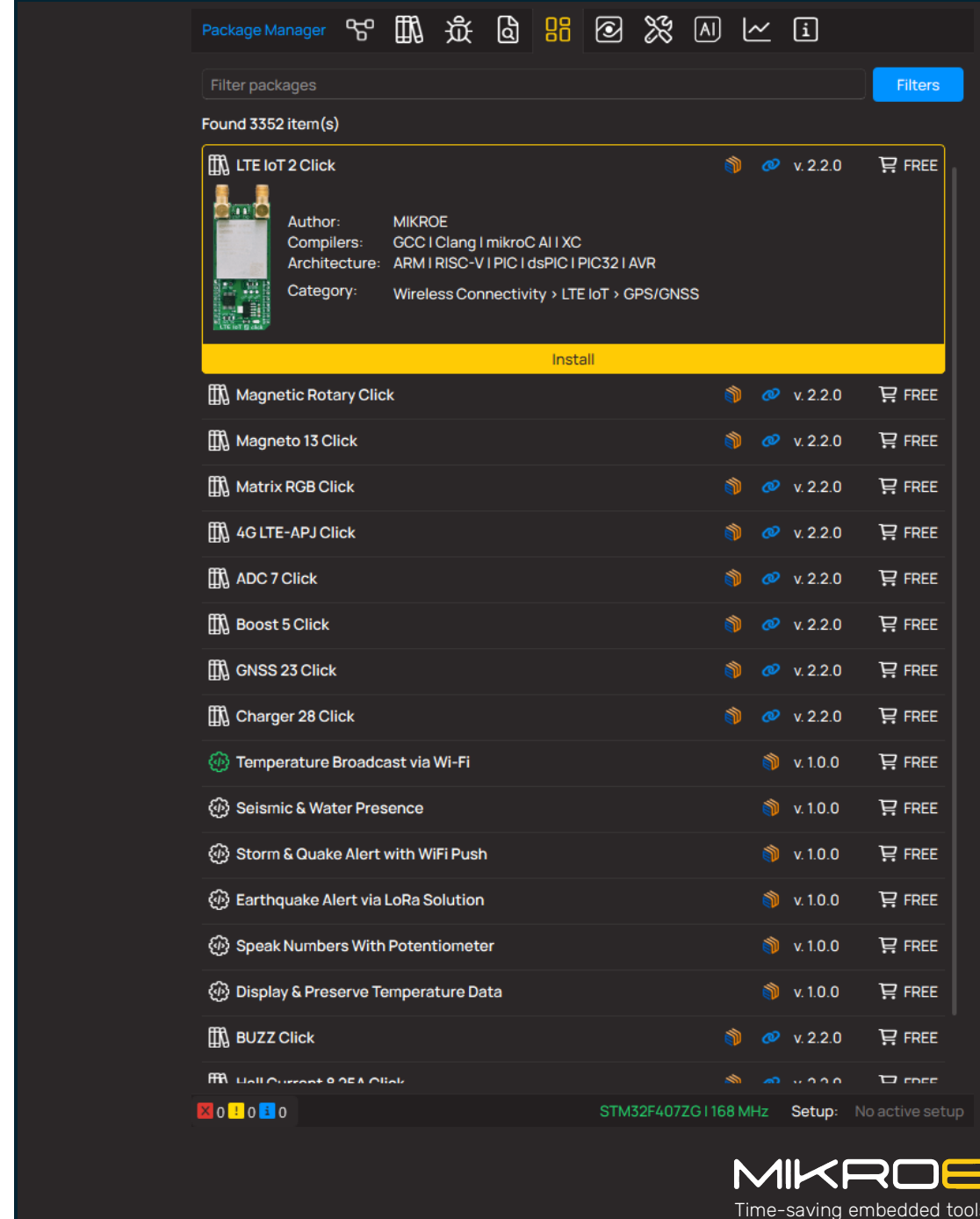
- Intuitive smart setup steps guiding you from start to finish. Once you have defined the setup, you can use it to build and run one or more projects, with just one click
- Every setup consists of:
  - Compiler and compiler settings
  - SDK used to build a project
  - Target board
  - Target MCU and MCU config
  - Target Display
  - Prog/debug settings
  - GDB and LLDB support



## Package Manager

# Daily Update: Fresh libraries & examples each day

- Package Manager enables you to easily integrate libraries, board definitions, examples, and everything else into NECTO Studio projects
- Features 1800+ maintained libraries, board definitions, and examples
- Daily updates: fresh support for peripheral boards, MCUs, boards, complex projects
- Share your own packages and contribute to the NECTO community



## NECTO Designer

# Build great GUIs with NECTO Designer & LVGL

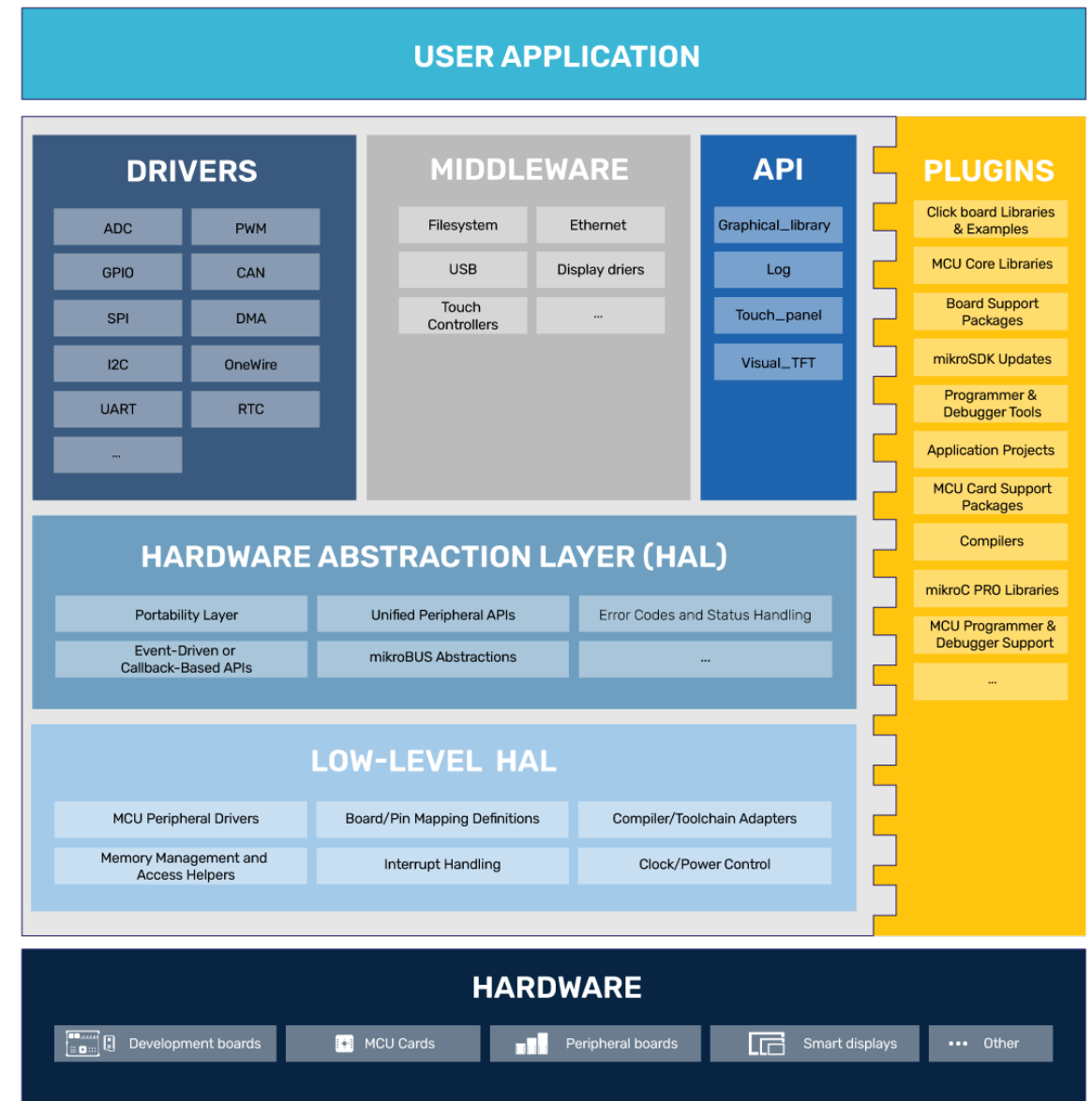
- Automatic code generation and built-in event handling (OnClick, OnPress, OnDown, OnUp) simplify development
- Multi-screen support enables complex, modular apps adaptable to various devices
- Drag & drop from a library of pre-made components, fine-tune every element, customize screen orientation, layout, and background for each UI segment



## NECTO SDK

# Write your code once – deploy anywhere

- NECTO SDK makes application code portable and reusable on many different architectures, with no code changes
- Built on a collection of open-source HAL with a unified API
- Abstract access to hardware functionalities
- Designed for scalability – from 8-bit to 32-bit platforms
- Fully modular, expandable, and open-source



## Smart Cloud

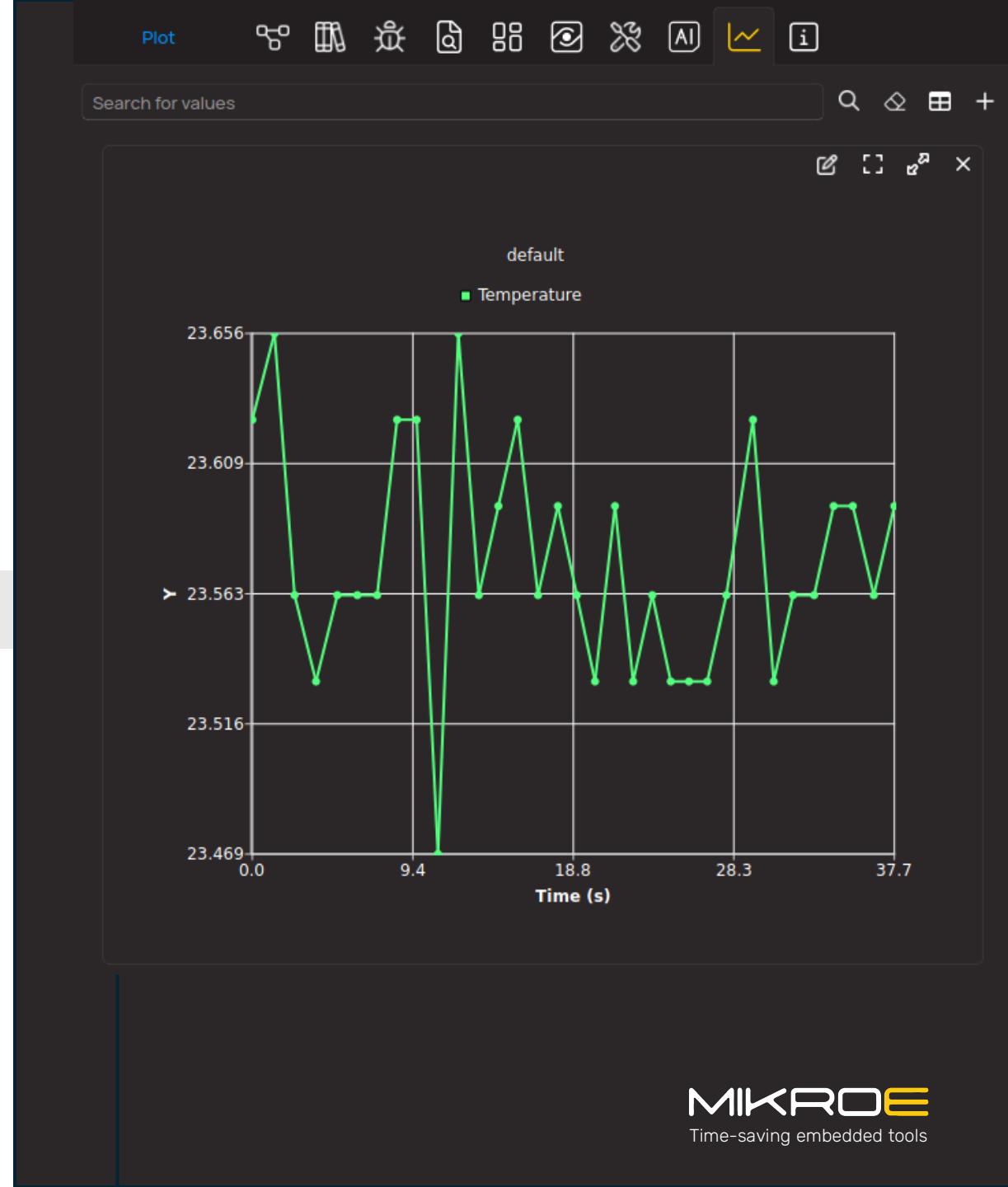
# Fetch your data with one line of code

- Display sensor data, variable values, or any serial output with just **one line of code**

*Add this line in your code:*

```
plot("Temperature", temperature_val);
```

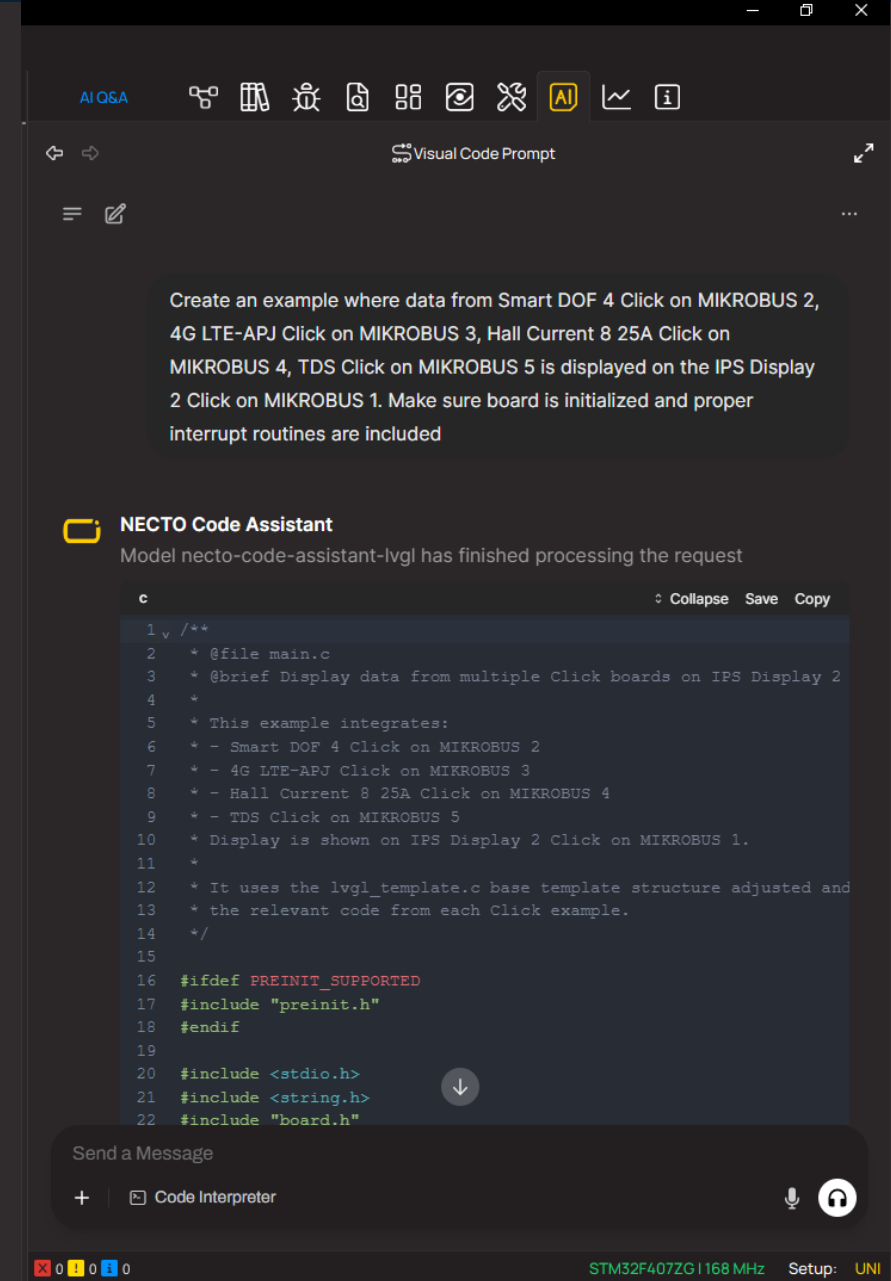
- Program your system in debug mode and run it
- Ideal for prototyping, debugging, trend analysis, and multi-variable comparison



## NECTO Code Assistant

# Time-saving MIKROE trained code assistant

- Incorporates multiple Click boards in a single project – with auto-generated initialization
- Clarifies code functionality and suggests best practices
- Searches datasheets and retrieves relevant technical info based on your code and context



## Planet Debug

# 24/7 remote evaluation platform

- NECTO Studio gives you direct access to real development boards – hosted in remote board farm
- Built on the world's first Wi-Fi-enabled programmer/debugger – CODEGRIP, Planet Debug enables secure, driver-free connections via Wi-Fi
- Live stream inside NECTO Studio – see your code in action: blinking LEDs, refreshing TFTs, changing sensor values. Not a simulation – real results from real devices

Planet Debug

Connected to: Click. Spin. Go. - Renesas RA4M1 Brushless Setup

**LIVE**

PLANET DEBUG

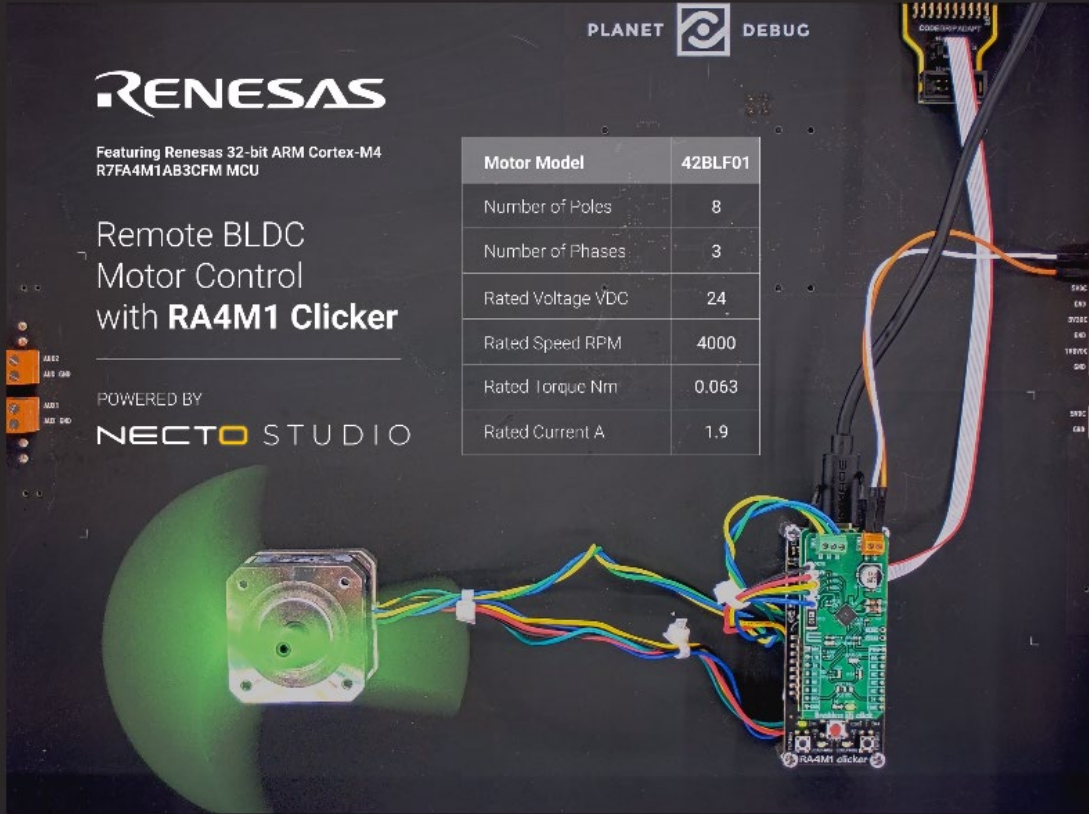
**RENESAS**

Featuring Renesas 32-bit ARM Cortex-M4 R7FA4M1AB3CFM MCU

Remote BLDC Motor Control with **RA4M1 Clicker**

POWERED BY **NECTO STUDIO**

| Motor Model       | 42BLF01 |
|-------------------|---------|
| Number of Poles   | 8       |
| Number of Phases  | 3       |
| Rated Voltage VDC | 24      |
| Rated Speed RPM   | 4000    |
| Rated Torque Nm   | 0.063   |
| Rated Current A   | 1.9     |



PLANET DEBUG

MIKROE  
Time-saving embedded tools

## Corporate environment support

# Built for corporate, academic, and secure lab environments – online or offline

- Fully compatible with corporate firewalls, university networks, and secure lab setups through built-in proxy support – supports both HTTP and HTTPS proxies, including authentication
- In offline mode you can continue working without an internet connection:
  - Create and manage projects
  - Build and flash firmware
  - Debug local hardware
  - Access all installed packages, examples and libraries



## Why choose NECTO Studio?

Because one IDE should do it all

|                                   | General Embedded IDE                                     | NECTO Studio IDE   |
|-----------------------------------|--|--|
| Platform Support                  | Typically Windows-only or limited cross-platform support | Windows, macOS, Linux (full GUI support)                           |
| Architecture Support              | Usually focused on one vendor's MCU line                 | 6 architectures, 12 compilers                                      |
| Ready-to-Use Examples             | Limited examples, often user-contributed or outdated     | 1800+ verified and regularly maintained code examples              |
| GUI Design Integration            | Requires external tools or manual UI coding              | Built-in NECTO Designer with LVGL and auto-code generation         |
| Remote Debugging                  | Not available  | Planet Debug: Fully integrated - remote access via Wi-Fi and USB   |
| Daily Updates via Package Manager | Rare; often requires full version updates                | Yes - new boards, tools, and features daily                        |
| Editor & LSP Support              | Basic editor, often without real-time syntax assistance  | Modern code editor with LSP, AI-based autocomplete, error handling |
| Built-in Tools                    | Separate tools or manual download required               | Bootloaders, terminals, converters, timer calculator, etc.         |
| MCU Vendor Independence           | Tied to specific vendor ecosystems                       | Yes - supports a wide range of vendors                             |
| Click boards Support              | No official support or limited compatibility             | Direct integration   |

Start building with zero limitations

## Open Licensing

# FREE

**(for non-commercial use)**

Perfect for students, professors, and anyone exploring NECTO Studio.

- Fully functional – no features locked
- Includes all compilers, all plugins, and all supported architectures
- Access to the 24/7 remote evaluation platform with 200+ free hardware setups



# \$29.00/monthly

**(for commercial use)**

Designed for professionals, design service companies, startups, and commercial developers.

- Full commercial rights to use NECTO Studio in product development
- Includes 6 architectures & 12 compilers (GCC for ARM, Clang for ARM, GCC for RISC-V, Clang for RISC-V, Microchip XC32, Microchip XC16, Microchip XC8, mikroC AI for ARM, mikroC AI for AVR, mikroC AI for dsPIC, mikroC AI for PIC, mikroC AI for PIC32)

Try it for yourself

# Download NECTO Studio



Version 7.2.2



NECTO Studio for  
Windows

Windows 10 or later



Version 7.2.2



NECTO Studio for  
MacOs

macOS 12 or later



Version 7.2.2



NECTO Studio for  
Linux

Ubuntu 22.0.4 or later

Thank you for your attention.

