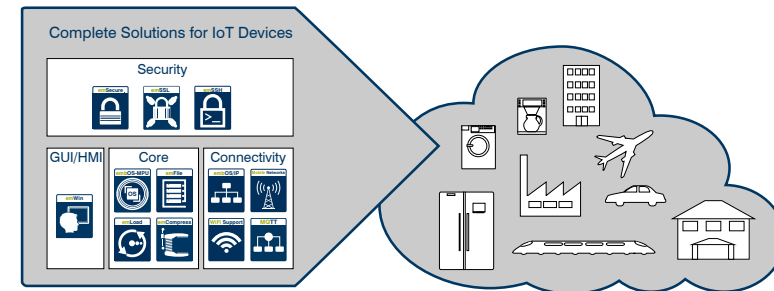# Internet of Things

A broad range of embedded software requirements need to be satisfied when developers are choosing their IoT solution partner. With SEGGER you can accelerate time to market with security, connectivity, reliability and tools that simply work.

- Connect: Ethernet, WiFi, Mobile Networks
- Secure: Shell, Transport Layer, Authentication
- Perfectly suited for single-chip-systems
- Use cloud services such as Dropbox and others

emSSL & emSSH & more

Connectivity

SEGGER's connectivity options include and do not end with USB and IP stacks known for high speed and small memory footprints. In addition to all the important standard protocols, specialties are supported such as:

- IP-over-USB: automatically detects the host system and starts an Ethernet connection via USB without drivers
- SmartMSD: device simulating a USB stick for drag&drop firmware/configuration updates
- USB-Host: Hub and FTDI virtual COM port support

embOS/IP & emUSB

Embedded File System

emFile is a fail-safe file system for embedded applications that can be used on any media. It is a high performance library optimized for minimum memory consumption of RAM and ROM, high speed and versatility.

- Dedicated flash memory drivers with sophisticated static and dynamic wear-leveling algorithms
- Fail-safety on driver, file system and data level
- Support for large NAND flashes with up to 40-bit ECC
- Encryption of individual files or the entire file system

emFile

Debug Probe

J-Link is the market-leading debug probe with more than 500,000 units in the market.

- Ultrafast download speed
- Unlimited breakpoints in flash memory
- Real-Time Transfer technology for extended debug information
- All popular devices are supported
- All popular debuggers are supported
- Cross platform support (Windows, Linux, Mac)

J-Link PRO

More Products from

SEGGER's Embedded Experts

Complementing the products presented, SEGGER's product portfolio contains a range of efficient and powerful tools and software components, all designed to reduce software development time. SEGGER's product portfolio provides a complete environment for fimware engineers to focus on creating their application.

- Development environment — Embedded Studio
- Compression — emCompress
- Bootloader for in-field firmware updates — emLoad
- Modbus — emModbus
- Cyclic Redundancy Checks — emLib CRC
- Encryption — emCrypt
- Real-Time Analysis — SystemView

www.segger.com

The Embedded Experts

It simply works!

Development Tools - Debug Probes - RTOS - File System
Compression - Connectivity - Security - User Interface
In-Field-Upgrades - Production

All in one solution

SEGGER

Real-time Operating System

Tracing/Profiling

Counterfeit Protection

Embedded Graphics Package

Flash Programmer

Embedded Studio PRO is an all-in-one embedded development package. It includes a powerful development environment (Embedded Studio), a complete embedded software suite (RTOS, GUI, USB, TCP/IP, File System), the industry leading J-Link PLUS debug probe, and emPower reference board.

- All-in-one development solution runs out-of-the-box
- All components developed and supported by SEGGER
- High performance software with very small footprint

embOS is the preferred embedded OS choice for engineers all over the world. It offers incomparable ease-of-use and guarantees 100% deterministic real-time operation for any embedded device. Certified by TÜV SÜD, embOS complies with the functional safety standards IEC 61508 SIL 3 and IEC 62304 Class C.

- More than 25 years of continuous development
- Deployed in billions of devices
- Available for all popular cores and development tools
- Certified for functional safety
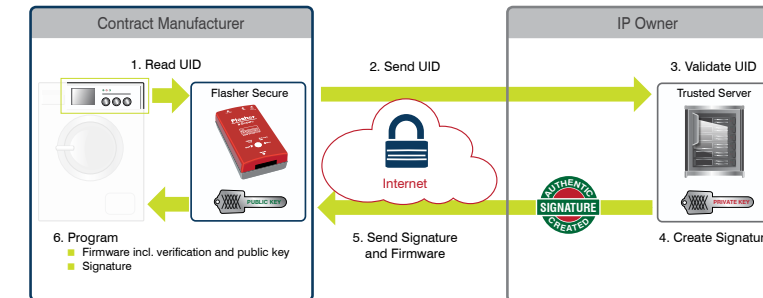- Powerful and easy to use API

J-Trace PRO for Cortex-M is setting a new standard for trace probes. It enables continuous streaming trace via its Gigabit Ethernet interface, lifting the limitations by internal buffers and slow data transmission.

- Supports Streaming Trace
- Live Code Coverage
- Live Code Profiling
- Endless Trace Buffer
- Extended debugging and verification
- Maintain Code Quality

Flasher Secure is a mass production programming system, capable of protecting the vendor's IP regardless of the production site. It provides full control over the programming process at contract manufacturers (CM) and similar environments.

- Authenticated production
- Production volume control
- Prevents production of counterfeit units
- Based on proven algorithms
- Military grade security

emWin is designed to provide an efficient, processor and display controller independent Graphical User Interface (GUI) for any application that operates with a graphics display.

- Multi-language support for script and language
- Optimized for microcontroller based systems
- Simple to configure and integrate
- Visualization, simulation and debug tools
- Multitouch and gesture support

Flasher is a device family for programming flash memories in-circuit via the debug interface.

- Ultrafast programming speed
- Serial number and patch programming
- Voltage monitoring
- Authorized flashing
- Gang Programming (Flasher ATE)

Embedded Studio PRO

embOS

J-Trace PRO

Flasher Secure & emSecure

emWin

Flasher & Flasher Portable