



ECHORING™ BASICS

EchoRing™ is a ground-breaking wireless technology designed for applications that require time-critical performance and high-robustness simultaneously. Based on extensive research and the introduction of massive cooperation EchoRing™ enables a deterministic and low-latency wireless communication with a cable-like performance.

The EchoRing™ software runs on standard hardware platforms, making it a cost-effective and highly flexible solution for time-critical communication requirements.

EchoRing™ enables new product concepts. For instance, with EchoRing™ an ordinary industrial robot can develop into a cheaper and lighter product with new mobile and cooperative capabilities.

AGNOSTIC HARDWARE

OSI LAYER 1

DYNAMIC COOPERATION

Massive cooperation is the underlying technology of EchoRing™. Our dynamic cooperation schemes safeguard the guaranteed performance levels.

SEAMLESS ROAMING

Wireless coverage is an important requirement. EchoRing™ offers features to extend the coverage introducing a novel seamless roaming approach.

ADAPTIVE COEXISTENCE

EchoRing™ deals with potential interference scenarios intelligently and adapts its communication pattern dynamically at runtime.

MACHINE LEARNING

Reinforcement learning incorporated in EchoRing™ is used to optimize the system performance at runtime.

FLEXIBLE TOPOLOGY

EchoRing™ is not limited to a fixed set of topologies. In fact, EchoRing™ adjusts automatically to the need of the scenario or application.

EXTENDED SECURITY

Besides standard security measures, EchoRing™ introduces additional encryption and authentication features.

SERVICE LEVEL

EchoRing™ introduces a service-oriented wireless communications link extending the opportunities of the higher layer applications.

FLEXIBLE IMPLEMENTATION

EchoRing™ can either be realized as firmware (high performance) or as a driver (regular performance).



ECHORING™

TRANSPARENT INTERFACES

OSI LAYER 3

ECHORING™ DEMO-KIT

EchoRing™ Demo-Kit is the first wireless communications prototype using our technology EchoRing™. The Demo-Kit can be ordered by contacting us directly and includes the following:

- NUC
- 2 Types of stations:
 - Fix: to be power directly to the power line
 - Mobile: with a power bank integrated
- Cabling
- Web GUI

