# SUCCESS STORY

**emtrion**
embedded systems

**For a new generation of EMC test equipment with a modern and intuitive user interface as well as a high-performance hardware, the manufacturer EM TEST cooperates with the emtrion GmbH.**

**em test | AMETEK**

EM TEST is an innovative manufacturer of high-quality EMC test equipment and accessories that meet the test requirements of all industries. Hardware reliability and ease of use are significant standards of EM TEST products.

The EM Test engineers set on state-of-the-art technology to guarantee long-lasting performance and first-class quality standards.

## CHALLENGE

A new generation of test equipment is emerging, featuring user-friendly surface design, speed and safety.

According to the requirements, the powerful DIMM-MX6 module with the intuitive Android operating system is chosen for the project.

In kiosk mode, only the customer-specific application should be usable. Typical Android apps should not be available. Furthermore, haptic knobs and buttons should replace or complement the touch controls.

emtrion also develops a baseboard according to specific customer requirements. The connection of the desired interfaces, which are unusual in combination with the Android operating system, is a particular challenge in this case.

## SOLUTION

Special Linux drivers were implemented for the customer-specific protocols.

The communication of the Android application with the expansion modules succeeds by integrating suitable services into the BSP.
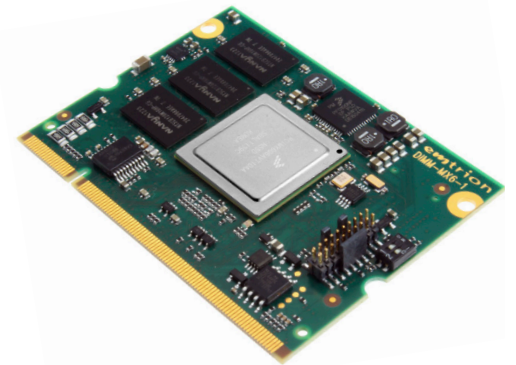Similarly, Google's standard SDK has also been extended to allow easy development of the application with Android Studio.

Taking the dependencies of the services and apps between each other into account, dispensable services and apps were eliminated, thus minimizing the BSP and optimizing the boot times.

The status and navigation bars have been removed. All configuration options are implemented via the customer application, which now replaces the launcher.

This ensures that a reliable and operational system is always available.

The system is operated via touch, buttons and a rotary knob. An easy-to-maintain update procedure via a USB memory stick provides the system update.

DIMM-MX6 Module, emtrion GmbH

www.emtrion.de/en