

Windows 10 IoT Software Services for Manufacturing



Application Scenario: Robotic Arm Controllers



- Location: factories
- **Product**: SOM-2569 computeron-module
- Background:

The customer was looking for a reliable and maintainable solution for their robotic arms. The solution needed to sustain stable operation for a long time in an unmanned factory, with less maintenance expense and greater operational efficiency.



Bluetooth Wireless Connectivity Integrated EWM-W308 Wi-Fi 802.11 & Bluetooth Designed for Security TPM2.0 & UEFI Secure Boot for best system protection

Window 10 IoT OS & API Applications

• Windows 10 IoT Enterprise

Microsoft Windows 10 IoT Enterprise can connect to Azure and is supported by Azure IoT Edge.

SUSI API: Hardware Monitoring

Via SUSI API, the sensor in the robot arm can get access to hardware data and utilize it. For example, when the temperature of a robot arm is too high, the system will alert the user.

SUSI API: I²C

The customer can use I²C of SUSI API to read motor information, such as speed and operation time to troubleshoot any issues or potential problems of the robotic arm.



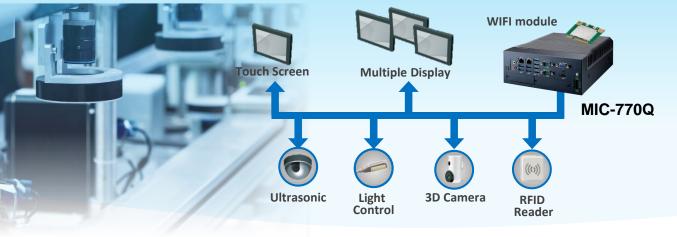
Application Scenario: Intelligent Assembly Technology



🕂 Windows 10

- Location: factories, component manufacturing and inspection stations
- **Product**: MIC-770Q fanless system & HDMI module x 2
- Background:

During the manufacturing process, operators are able to use this working station to facilitate component placing and inspection.



Window 10 IoT OS Applications

• USB Device Policy

By enabling of the USB device policy in Windows IoT 10, customers can block all the USB storage devices to enhance the security of the IPC in production line. However, USB devices which do not have storage function still work, such as keyboard and mouse.

Unified Write Filter

UWF protects your system by remaining in the setting. After users finish customization on the operating system, UWF keeps all the changes as temporary. When the system reboots, all settings go back to the original status. This prevents the system from being modified while working in the factory.