Sensor
Unit

RSK

CONTROL UNIT
CCU02

SENSOR UNIT
CCUS02

RSK

CSK

The sensor unit CCUS02 is designed as a powerful processing board for radar, lidar, or other environmental perception sensors. It fuses data from all connected sensors to refine machine positioning and enable obstacle detection and mappings.

It includes a quad-core i.MX 8M Plus processor, high-speed LPDDR4 memory, and eMMC storage, along with industrial-grade interfaces for sensor and peripheral integration. The system supports WiFi and Bluetooth connectivity, CAN-FD and Ethernet communication. It is equipped with a temperature sensor, accelerometer, and multiple IO channels for flexible deployment.

AUTONOMOUS
MOWER

powered by

SMAUT

CSK

Sensor Unit

SMAUT
SMART AUTONOMOUS TECHNOLOGY

CAMERA SENSOR KIT (CSK)

PSK

CONTROL UNIT
CCU02

SENSOR UNIT
CCUS02

CSK

NAVIGATION UNIT

Description

DESIGNED FOR EMBEDDED ROBOTIC AND AUTONOMOUS SYSTEMS

POWERFUL QUAD-CORE i.MX 8M PLUS PROCESSOR

SUPPORTS SENSOR FOR LOCALIZATION AND OBSTACLE MAPPING

FEATURES A WIDE RANGE OF INTERFACES FOR SENSOR, COMMUNICATION, AND

PERIPHERAL INTEGRATION

COMPATIBLE WITH SMAUT MODULAR SYSTEM DESIGN

Technical parameters

BOARD SIZE	83x59mm
SYSTEM	CPU i.MX 8M Plus ARM Quad Cortex®-A53 processors
	1.6 GHz, ARM QCortex®-M7 CPU up to 800 MHz
	6 GByte LPDDR4 Memory, 32 GByte eMMC Memory
	USB-C (USB 2.0, Host), 2x CAN-FD, 4x universal IO pins
CONNECTIONS	BlueTooth V2.1+EDR/BT v3.0/BT v3.0+HS/BT v4.2
	Wifi 2.4GHz, 150/150 Mbps rates (IEEE 802.11b/g/n/d/e/h/i)
POWER SUPPLY	8-36VDC, 1,5A
WORKING TEMPERATURE	-30 to +65°C

Application possibilities

- ✅ **Autonomous Mowing Machines**
- ✅ **Industrial Mobile Platforms**
- ✅ **Agricultural and Utility Robots**
- ✅ **Construction and Terrain Vehicles**

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