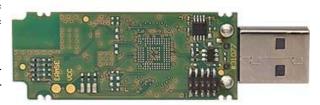
# USB radio stick deRFusb-23E00 JTAG

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# ZigBee® / 6LoWPAN / RF4CE

- The compact designed USB radio stick deRFusb-23E00 JTAG contains a powerful Cortex-M3 microcontroller with 256 kBytes High-Speed Flash and a 2.4 GHz-ISM-band transceiver.
- The transceiver AT86RF231 is intended for ZigBee, IEEE 802.15.4, 6LoWPAN, RF4CE and proprietary ISM applications. It uses an 128-Bit AES encryption.
- With the integrated chip antenna distances of more than 200 m can be reached for line of sight conditions.
- The radio stick is equipped with 3 LEDs for status indication and a 10pin connector for development purposes (JTAG and Debug).





#### **Technical Data**

**Antenna** 

**Dimensions**  $63.5 \times 19.0 \times 9.5 \text{mm}$  **Operating temperature** -20 °C to 70 °C

Control and display elements 3 x LED (red, yellow, green)

Power supply USB powered

**Power consumption** Idle: 45mA TX/RX on: 65mA

Connections

USB Connector Type A
10 Pin Connector

10 Pin Connector
Chip ceramic antenna

Antenna gain +1.3 dBi (Peak), -0,5 dBi (Average)

Antenna diversity no

Range > 200 m (line of sight)

Frequency range 2.4 GHz
Transmitting power +3 dBm
Receiver sensitivity -101 dBm
Communication standard 802.15.4

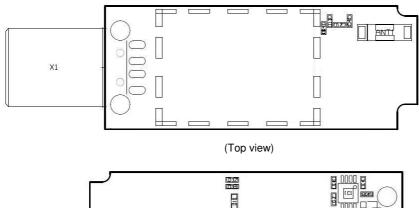
Data rate 250 kBit/s, 500kBit/s, 1MBit/s, 2MBit/s

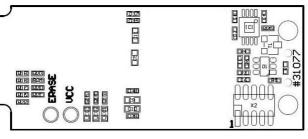
MicrocontrollerATSAM3S4BATransceiverAT86RF231

InterfacesUSB, JTAG and DebugCertificationCE, ETSI, FCC, IC pending

Technical Data

### Pin configuration





(Bottom view - with 10pin)

## **Connections**

9	Order No.
Ē	3N-032310

# Accessories (optional)

Scope of delivery
USB stick deRFusb-23E00 JTAG

SAM-ICE adapter BN-028337

## **Development kits**

deRFdevelopmentKit usb 2,4 GHz	coming soon
deRFdevelopmentKit ZigBee 2.4 GHz	coming soon
deRFdevelopmentKit 6LoWPAN 2.4 GHz	coming soon

#### **Board versions**

USB stick deRFusb-13E00 JTAG coming soon

Scope of delivery / Accessories

Versions

Visit the online shop: http://www.dresden-elektronik.de/shop/cat4.htm

- technical information subject to change without notice -



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Contact