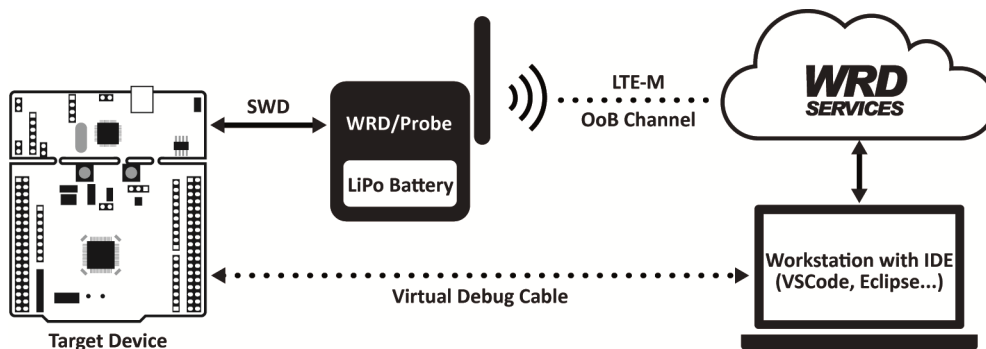


WIRELESS REMOTE DEVELOPMENT

WRD/Probe

Secure wireless remote debugging in real application environments from anywhere

- ✓ Remote debugging, flashing, serial logging and reset of target
- ✓ Power consumption monitoring of target



Developing an IoT device has many challenges: Due to the MCU and embedded OS, sensors, RF communication and often also a battery supply, an IoT device is a complex system that can only be fully tested to a very limited extent within a development environment using simulated environmental parameters and, for the most part, ideal environmental conditions. In this respect, numerous debugging tasks are carried out directly in the application environment as part of a field or end-to-end (E2E) test.

The battery-operated WRD/Probe can be used anywhere in the world and can be connected to a development environment anywhere else in the world via a rendezvous service over the Internet. This creates a virtual debug cable. It uses common standards and provides a GDB interface that integrates seamlessly into your familiar development environment such as VSCode or Eclipse. Starting the build process, setting a breakpoint, inspecting variables etc. remains the same.

And all this without compromising security: the WRD/Probe connects to your workstation via an encrypted end-to-end tunnel established with an out-of-band pairing with a flicker code.

FEATURES

- 1x 20-pin Multi-ICE compatible interface:
 - JTAG & SWD
 - I/O voltage: 1.6-3.7 V
- 1x 10-pin UART interface (with power monitoring)
 - I/O voltage: 1.6-3.3 V
- 1x SMA antenna connector + LTE antenna
- 1x USB-C interface
- 1x Pairing button
- 1x Photodiode
- 1x Power switch
- Security:
 - Handshake via flicker code
 - Transport channel encryption with TLS1.3
 - End-to-end-encryption of transport channel with AES-CCM-256
 - Credentials secured by Arm® CryptoCell-310
- Pre-installed MVNO IoT SIM card
- LTE-M modem:
 - Certified LTE bands: B1-B5, B8, B12, B14, B17-B20, B25-B26, B28 and B66
 - Frequency range: 700-2200 MHz
 - Throughput (DL/UL): 300/375 kbps
 - Output power: up to 23 dBm
 - RX sensitivity: -108 dBm
 - Mode: HD-FDD
- Internal gdbserver supports MCUs from STM, NXP, Nordic, Microchip, Raspberry Pi, Silicon Labs / support for RTT Semihosting
- LiPo battery: 3.7 V, 3200 mAh
- Dimensions: 130 x 105 x 35 mm (without antenna)

DEBUG INTERFACES

