

# deRFnode for ARM based radio modules

## Datasheet

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- The deRFnode is a development and application platform optimized for dresden elektronik radio modules based on ARM microcontrollers.
- It supports pluggable dresden elektronik radio modules.
- The native USB interface allows the ARM based radio module communication with a host PC or notebook.
- The deRFnode platform can be powered over USB, DC-plug or battery.
- Onboard sensors for transmission of environmental data like temperature, luminosity and acceleration.
- Onboard memory sufficient for data storage and over-the-air firmware updates.

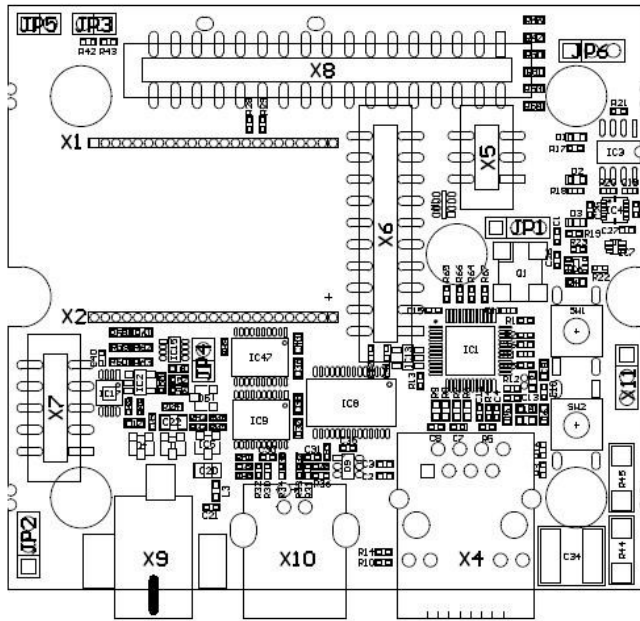


### Technical Data

<b>Dimensions</b>	70 x 68 x 33 mm
<b>IP protection</b>	IP 00
<b>Operating temperature</b>	-40 to +85°C
<b>Control and display elements</b>	2x Buttons and 3x LED
<b>Power supply</b>	DC: 5 VDC USB: 5 VDC over USB Battery: 3 x AA
<b>Power consumption</b>	deRFnode with deRFarm7 radio module I <sub>sleep</sub> = 250 µA I <sub>idle</sub> = 37 mA I <sub>TxRxOn</sub> = 55 mA (TXpwr = +3 dBm)
<b>Interfaces</b>	JTAG (AVR & ARM), Debug, USB, I2C, UART, SPI, ADC
<b>Onboard Sensors</b>	Temperature, Luminosity, Acceleration
<b>Onboard Memory</b>	4 Mbit Serial Flash
<b>Supported Radio Modules</b>	deRFarm7 series (pluggable), deRFsam3 series (pluggable)
<b>Certification</b>	CE

### Technical Data

**Board Overlay**



Top View deRFnode

- X1 & X2: Radio Module
- X4: Ethernet RJ45
- X5: Debug & Trace
- X6: JTAG for ARM
- X7: JTAG for AVR
- X8: 34 Pin User Interface
- X9: DC
- X10: USB Type-B

- JP1: Acc. INT or SW2
- JP2: Bat or DC/USB
- JP3: VBAT monitor
- JP4: RST Supervisor
- JP5: VCC module
- JP6: SW1

**Overlay**

**Scope of delivery**

deRFnode for ARM

**Accessories (optional)**

RS232 level shifter

DC power supply 5 V / 1.2 A

**Board variants**

deRFgateway for ARM

deRFnode for AVR/ARM

**Order No.**

BN-031632

BN-028560

BN-023431

BN-031633

BN-031634

**Order Information**

**Variants**

More information about the variants are described in detail in the user manual.

Order online: <https://shop.dresden-elektronik.de>

**Contact**