

deRFnode for AVR and ARM based radio modules Datasheet

- § The deRFnode is a development and application platform optimized for dresden elektronik radio modules based on AVR and ARM microcontrollers.
- § deRFnode platform supports pluggable dresden elektronik radio modules.
- § designed for low power current consumption.
- § The serial USB interface allows the radio module communication with a host PC or notebook.
- § The 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.

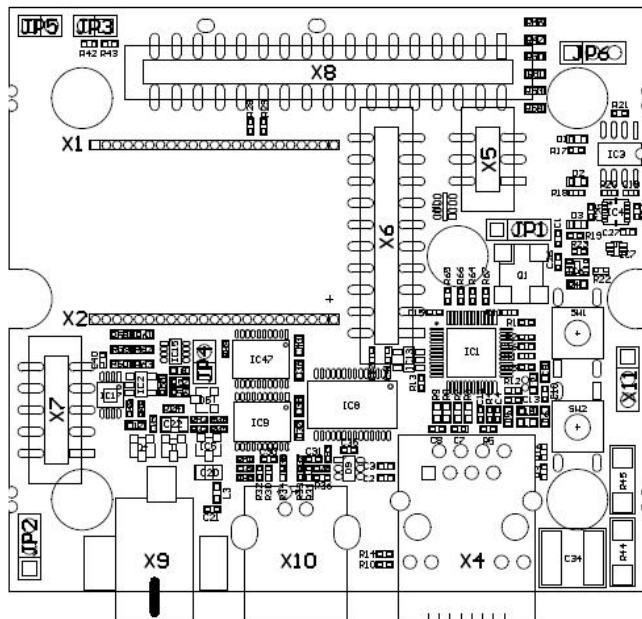


Technical Data

Dimensions	70 x 68 x 33 mm
IP protection	IP 00
Operating temperature	-40 to +85°C
Control and display elements	2x Buttons and 3x LED
Power supply	DC: 5VDC USB: 5VDC over USB Battery: 3 x AA
Power consumption	deRFnode with deRFmega128 radio module I _{sleep} = 10µA I _{idle} = 10 mA I _{TxRxOn} = 28 mA (TXpwr = +3dBm)
Interfaces	JTAG (AVR & ARM), Debug, USB, I2C, UART, SPI, ADC
Onboard Sensors	Temperature, Luminosity, Acceleration
Onboard Memory	4Mbit Serial Flash
Supported Radio Modules	deRFarm7 series deRFmega128 series
Certification	CE

Technical Data

Board Overlay



Top View deRFnode

Overlay

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

Scope of delivery

deRFnode-2TNP2-00N00

Order No.

BN-031634

Accessories (optional)

RS232 level shifter
DC-Power Supply 5V / 1,2A
Suitable case for deRFnode

BN-028560
BN-023431
coming soon

Board variants

deRFgateway-1TNP2-00N00
deRFnode-1TNP2-00N00

BN-031633
BN-031632

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

Order online: <http://www.dresden-elektronik.de/shop/cat4.html>

Order Information

Variants

Contact