dresden elektronik

deRFnode
for ARM based radio modules
Datasheet

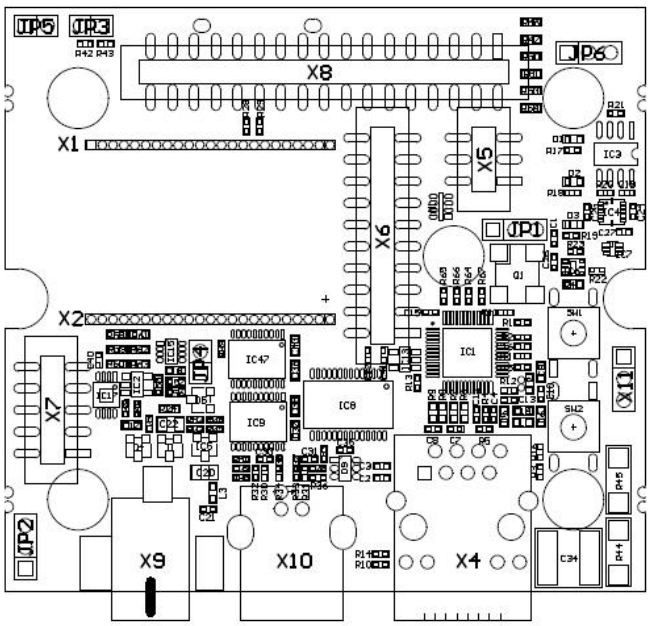
- The deRFnode is a development and application platform optimized for dresden elektronik radio modules based on ARM microcontrollers.
- deRFnode platform supports pluggable dresden elektronik radio modules.
- The native USB interface allows the ARM based radio module communication with a host PC or 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 deRFarm7 radio module I_sleep = 250µA I_idle = 37 mA I_TxRxOn = 55 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
Certification	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

	Order No.
deRFnode-1TNP2-00N00	BN-031632

Accessories (optional)

RS232 level shifter	BN-028560
DC-Power Supply 5V / 1,2A	BN-023431
Suitable case for deRFnode	coming soon

Order Information

Board variants

deRFgateway-1TNP2-00N00	BN-031633
deRFnode-2TNP2-00N00	BN-031634

Variants

More information about the variants are described in detail in the user manual.
Order online: http://www.dresden-elektronik.de/shop/cat4.html

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