

Adapter deRFtoRCB

ZigBee® / 6LoWPAN / RF4CE

Datasheet

- The adapter deRFtoRCB is intended for fast start-up and stand-alone operation of dresden elektronik's deRFmega radio module range and offers RCB functionality.
- Programming is made over the 10 pin JTAG interface. The 6 pin connector offers a TTL-level UART for serial communication and can be attached directly to a PC using the RS232 level shifter. On the back of the adaptor are two 30 pin I/O-Connectors according to the RCB interface. A possible application is the use with a Sensor Terminal Board.
- All deRFmega radio modules can be simply attached to the 23 pin female connector. For stand-alone operation a battery box for 2 AAA batteries is intended.
- The control and display elements are connected to the appropriate port pins just as at any RCB module.

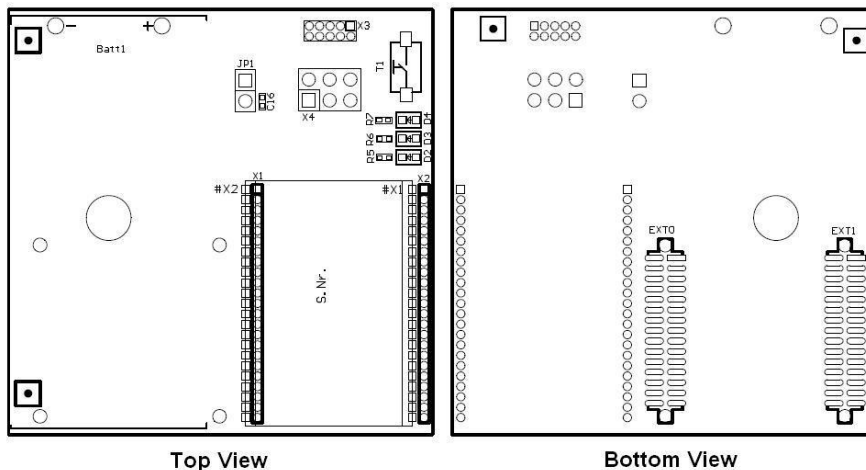


Technical Data

Dimensions	52 x 52 mm
Control and display elements	3 x LED (red) 1 x Button
Power supply	2 AAA batteries (1.8 – 3.6V)
Power consumption	Depending on plugged radio module
Connections	2 x 23 Pin Connector (for deRF radio modules) 2 x 30 Pin I/O Connector (for STB) 1 x 10 Pin Connector (JTAG) 1 x 6 Pin Connector (UART) 1 x JTAG, 1 x UART

Interfaces

Bord Overlay



Technical Data

Overlay

Pin Configurations

X1				X2			
1:	DGND	13	PD7/T0	1:	VCC	13	PF1/ADC1
2:	DGND	14:	PD3/TXD1	2:	DGND	14:	PE6/T3
3:	PB5	15:	PD1/SDA	3:	PE0/RXD0	15:	PF4/TCK
4:	PB7	16:	PG5	4:	PD2/RXD1	16:	PE7
5:	PB4	17:	PD0/SCL	5:	PE1/TXD0	17:	PF5/TMS
6:	PB6	18:	PG2	6:	PD6/T1	18:	PF2/ADC2
7:	PB3/MISO	19:	RSTN	7:	PE2/XCK0	19:	PF6/TDO
8:	PB0	20:	PG1	8:	PE3	20:	RSTON
9:	PB2/MOSI	21:	AREF	9:	PD4	21:	PF7/TDI
10:	CLKI	22:	DGND	10:	PE4	22:	DGND
11:	PB1/SCK	23:	VCC	11:	PF0/ADC0	23:	DGND
12:	PD5/XCK1			12:	PE5		

EXT0				EXT1			
1:	PB6/PCINT6	2:	PB7	1:	PB1 / SCK	2:	DGND
3:	RSTN	4:	Vcc	3:	PE7	4:	PE6
5:	DGND	6:	XTAL2	5:	PE5	6:	PE4
7:	XTAL1	8:	DGND	7:	PE3	8:	PE2
9:	PD0	10:	PD1	9:	PE1 / MISO	10:	PE0/MOSI
11:	PD2	12:	PD3	11:	AGND	12:	AREF
13:	PD4	14:	PD5	13:	PF0	14:	PF1
15:	PD6	16:	PD7	15:	PF2	16:	PF3
17:	PG0	18:	PG1	17:	PF4	18:	PF5
19:	DGND	20:	DGND	19:	PF6	20:	PF7
21:	PC0	22:	PC1	21:	Vcc	22:	DGND
23:	PC2	24:	PC3	23:	PA0	24:	PA1
25:	PC4	26:	PC5	25:	PA2	26:	PA3
27:	PC6	28:	PC7	27:	PA4	28:	PA5
29:	DGND	30:	PG2	29:	PA6	30:	PA7

Connections

Scope of delivery

deRFtoRCB

Order No.

BN-028216

Accessories (optional)

JTAG adapter
RS232 level shifter

BN-027863
BN-028560

Development Boards

Sensor Terminal Board

BN-026533

Development Kit

deRFdevelopment Kit RFmega128

BN-028388

Radio module versions

Radio module deRFmega128-22A00
Radio module deRFmega128-22A02

BN-028182
BN-028498

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

Order Information

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