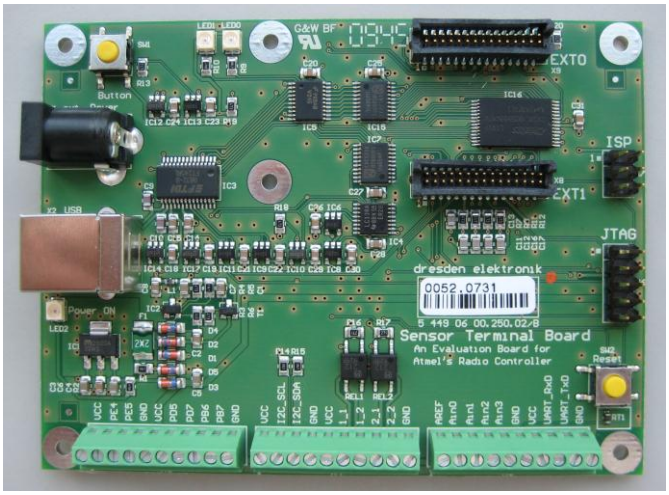
Sensor Terminal Board

Datasheet

- The Sensor Terminal Board is a development platform for Radio Controller Boards (RCB).
- Screw contacts and standard connectors give access to the pins of the attached RCB module.
- For PC-communication an USB interface is available.
- The Sensor Terminal Board contains an on-board temperature sensor, freely programmable LEDs, one button and a 32 Kbyte SRAM memory.



- The components on the board can be addressed without the use of the GPIOs at the RCB.
- The Sensor Terminal Board can be powered over USB, by an external power supply or by the batteries of the RCB.
- A complete kit is also available which contains a Sensor Terminal Board, a power supply, RCB modules, cables and extensive software and documentation on CD.

Technical Data

Dimensions	100 x 75 x 30 mm incl. spacer, RCB and battery holder
Operating temperature	5°C to +55°C without condensation
Storage temperature	-10°C to +70°C
Interfaces	1x ISP (6 pin) 1x JTAG AVR (10 pin) 1x USB 3 x 10 Pin screw coupler for: - Serial interface (UART / 3.3 V digital) - I2C bus - External analog reference voltage - Analog inputs - Digital inputs/outputs - Galvanically separated outputs
Board components	1x on-board temperature sensor 1x button (freely programmable) 2x LEDs (freely programmable) 1x reset button 1x 32kB SRAM
Radio modules	All Radio Controller Boards can be attached.

Pin configuration

USB: Standard USB electric coupler receptacle, Type B

External power supply:

ISP:

1: MISO	2: Vcc
3: SCK	4: MOSI
5: Reset	6: GND

JTAG:

1: TCK	2: GND
3: TDO	4: Vcc
5: TMS	6: Reset
7: Vcc	8: Frei
9: TDI	10: GND

Screw terminal X3:

1: Vcc	2: GPIO (PortE 4)
3: GPIO (PortE 5)	4: GND
5: Vcc	6: GPIO (PortD 5)
7: GPIO (PortD 7)	8: GPIO (PortB 6)
9: GPIO (PortB 7)	10: GND

Screw terminal X4:

1: Vcc	2: SCL (I2C)
3: SDA (I2C)	4: GNC
5: Vcc	6: Rel1 A (potential free contact)
7: Rel1 B	8: Rel1 A (potential free contact)
9: Rel2 B	10: GND

Screw terminal X5:

1: AREF	2: AIN0
3: AIN1	4: AIN2
5: AIN3	6: AGND
7: Vcc	8: RxD (USART1)
9: TxD (USART1)	10: GND

Connections

Application with a RCB module

Scope of delivery

Sensor Terminal Board

Order No.
BN-026533

Accessories

Additional Radio Controller Boards (RCBs)	see homepage
External Power Supply 5VDC/1.2A	BN-023431
USB cable	BN-022466

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

Order Information

dresden elektronik ingenieurtechnik gmbh
Enno-Heidebroek-Str. 12
01237 Dresden | Germany

www.dresden-elektronik.de
E-Mail: wireless@dresden-elektronik.de
Phone: +49 351 – 31 85 0-0 Fax: -10

Contact