# mail

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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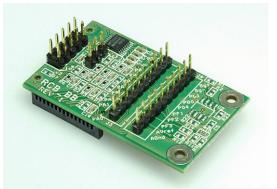
### RCB Breakout Board RCB Breakout Board Light

Datasheet

- The RCB Breakout Board is a general purpose I/O board to interface all types of Radio Controller Boards with custom peripheral hardware.
- Screw terminals and standard pin connectors allow the access to the most important ports of the connected Radio Controller Board.
- For direct PC-communication the board provides a RS232 transceiver which can be disabled for low-power applications. The necessary adapter cable is available as accessory.
- The board is powered by the batteries of the RCB, thus no separate power supply is required.
- The GPIO connections feature a simple signal conditioning and protection circuit.
- For precise analog measurements an onboard instrumentation amplifier is available.
- The RCB Breakout Board Light is a modified, low cost option with full functionality.



**RCB Breakout Board** 



**RCB Breakout Board Light** 

#### **Technical Data**

		Technical
Dimensions:	50 x 30 x 16 mm incl. connector	Data
Operating temperature:	5°C to +55°C without condensation	
Storage temperature:	-10°C to +70°C	
Interfaces:	<ul> <li>1x JTAG AVR (10 pin)</li> <li>1x RS232 (3 pin)</li> <li>2 x 10 Pin Screw terminal or</li> <li>2 x 10 Pin connector for: <ul> <li>9x digital inputs/outputs</li> <li>2x digital Low-Side Switch</li> <li>3x analog inputs</li> <li>1x differential analog input with amplifier</li> <li>Analog reference voltage</li> <li>Analog ground</li> <li>Digital ground and Vcc</li> </ul> </li> </ul>	
Board components:	RS232 Transceiver, Instrumentation amplifier (not for RCB Breakout Board Light), signal conditioning Input protection circuit	
Radio modules:	All Radio Controller Boards (RCB) can be used.	



#### Pin configuration

#### Interfaces

RS232 (X1):	1: RxD (USART1) 2: TxD (USART1) 3: GND	
JTAG (X2):	1: TCK 3: TDO 5: TMS 7: Vcc 9: TDI	2: GND 4: Vcc 6: Reset 8: n.c. 10: GND
Screw terminal or pin connector X3:	1: Vcc 3: GPIO (PortE 5) 5: Vcc 7: GPIO (PortD 7) 9: GPIO (PortB 7)	2: GPIO (PortE 4) 4: GND 6: GPIO (PortD 5) 8: GPIO (PortB 6) 10: GND
Screw terminal or pin connector X4:	1: AREF 3: AIN1 5: AIN3 7: Vcc 9: TxD (USART1)	2: AIN0 4: AIN2 6: AGND 8: RxD (USART1) 10: GND

#### Application with RCB230V3.2 and RS232 Adapter cable





<u>Scope of delivery</u> 1 RCB Breakout Board Or 1 RCB Breakout Board Light	<b>Order No.</b> BN-025310 BN-025589	Order Information
Accessories RS232 Adapter cable	BN-026790	
All Radio Controller Boards (RCBs) e.g. Radio Controller Board RCB230 V3.2 Radio Controller Board RCB231 V4.0.2 Radio Controller Board RCB212SMA V5.3.2	see homepage BN-025227 BN-025230 BN-025232	
Order online: http://www.dresden-elektronik.de		

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