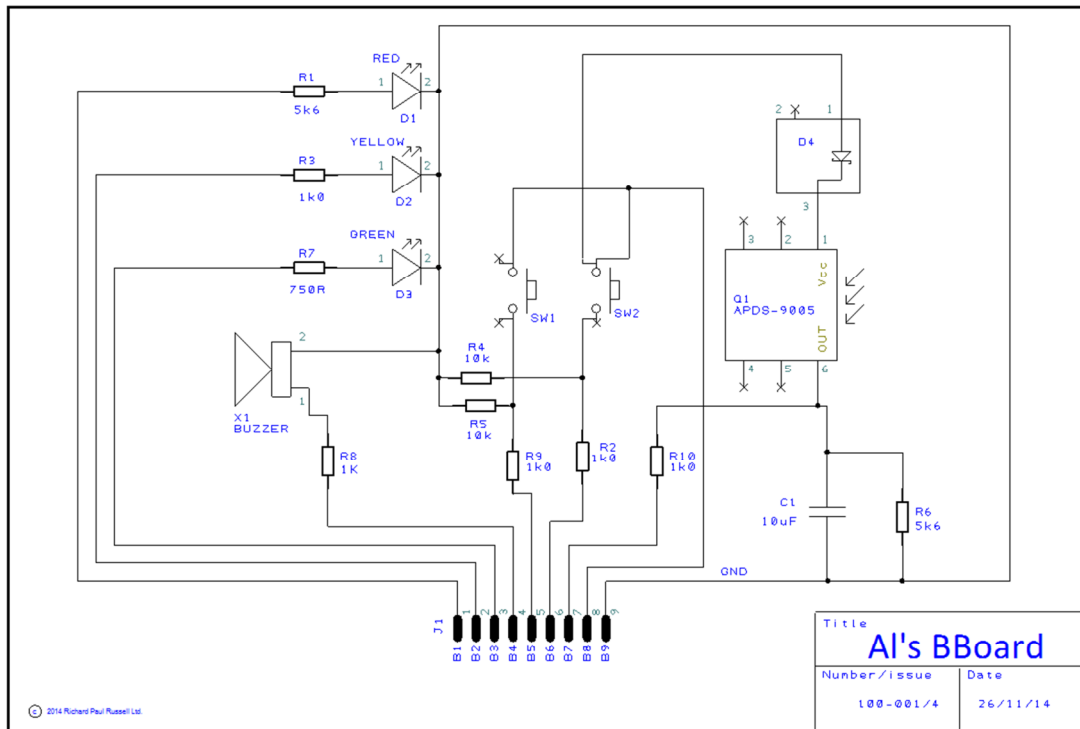


The BBoard has 3 LEDs, buzzer, 2 push button switches and a light sensor which provide the ingredients for a very large number of interesting lessons and projects. It can be used in conjunction with Arduino and Raspberry Pi processors.

Al's Tech Garage at [www.AlsTechGarage.co.uk](http://www.AlsTechGarage.co.uk) provides a number of resources for users of the BBoard including projects and learning material.

Connections	
Pin	Use
B1	Red LED
B2	Yellow LED
B3	Green LED
B4	Buzzer
B5	Switch 1
B6	Switch 2
B7	Light Sensor
B8	+V (5V max)
B9	0V

Specification	
<b>Size:</b>	55mm x 27mm x 9mm
<b>Weight:</b>	7g
<b>Technology:</b>	Surface mount components on FR4 1.6 mm thick PCB
<b>LEDs:</b>	Red Peak Wavelength 550nm Yellow Peak Wavelength 590nm Green Peak Wavelength 574nm
<b>Buzzer:</b>	Piezoelectric Sounder. Sound Pressure Level at 10 cm >75 dB when driven by 3Vp-p, 4kHz, square wave.
<b>Switches:</b>	Surface mount push button switch SPST, N.O. Operating force: 2.25 ± 0.75 Newtons, Life >300,000 operations
<b>Light sensor:</b>	Avago Technologies APDS-9005, analogue-output ambient light photo sensor with a spectral response close to that of human eye.
<b>Connector:</b>	9 way header 2.54mm pitch.
<b>Absolute Maximum Ratings:</b>	Operating Temperature -20°C to +70°C Storage Temperature -30°C to +80°C Voltage on any pin 0 to 5v
<b>Compliance:</b>	CE marked - WEEE Directive 2012/19/EU, RoHS Directive 2011/65/EU



## WEEE Directive

At the end of its serviceable life this product should not be disposed of as household waste. It should be handed over to a collection point for recycling of electrical and electronic equipment or returned to the supplier for disposal.

## Guarantee

The BBoard is warranted for a period of twelve (12) months from the original date of purchase, against defective materials and workmanship. In the event that warranty service is required, please contact Richard Paul Russell Ltd.

This warranty is only valid if, when warranty service is required, a full description of the fault is provided and presented with the original invoice.

Richard Paul Russell Ltd's liability is limited to the BBoard and it does not accept liability for any loss resulting from its use.

This warranty covers none of the following:

- Periodic check-ups, maintenance and repair or replacement of parts due to normal wear and tear.
- Cost relating to transport, removal, or installation of the component.

- Misuse, including failure to use the component for its normal purpose or incorrect installation.
- Damage caused by Lightning, Water, Fire, Acts of God, War, Public Disturbances, incorrect supply voltage or any other cause beyond the control of Richard Paul Russell Ltd.
- Units which have been repaired or units altered by a party other than Richard Paul Russell Ltd's employees or agents without prior written consent from Richard Paul Russell Ltd.

In no event shall Richard Paul Russell Ltd be liable under any circumstances for any direct, indirect or consequential damages, any financial loss or any lost data contained in any product (including any returned product), regardless of the cause of loss. Richard Paul Russell Ltd products are not warranted to operate without failure. Richard Paul Russell Ltd's products must not be used in life support systems or other application where failure could threaten injury or life.

The Customers statutory rights are not affected by this warranty. Unless there is national legislation to the contrary, the rights under this warranty are the customer's sole rights and Richard Paul Russell Ltd shall not be liable for indirect or consequential loss or damage to any other related equipment or material.

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