



4x4x4 LED CUBE Using AT89C2051

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This 4x4x4 LED cube for use in science laboratories is very easy to assemble. Its LEDs light up in different patterns, creating mesmerising lighting effects.

Circuit and working

Fig. 1 shows the author's prototype of the 4x4x4 LED cube. The complete circuit is shown in Fig. 2. It is built around an AT89C2051 microcontroller (IC2), a 4-to-16 decoder 74HC154 (IC3), four BC547 transistors (T1 through T4) and a few other components. The power supply section is built around a



Fig. 1: Author's prototype

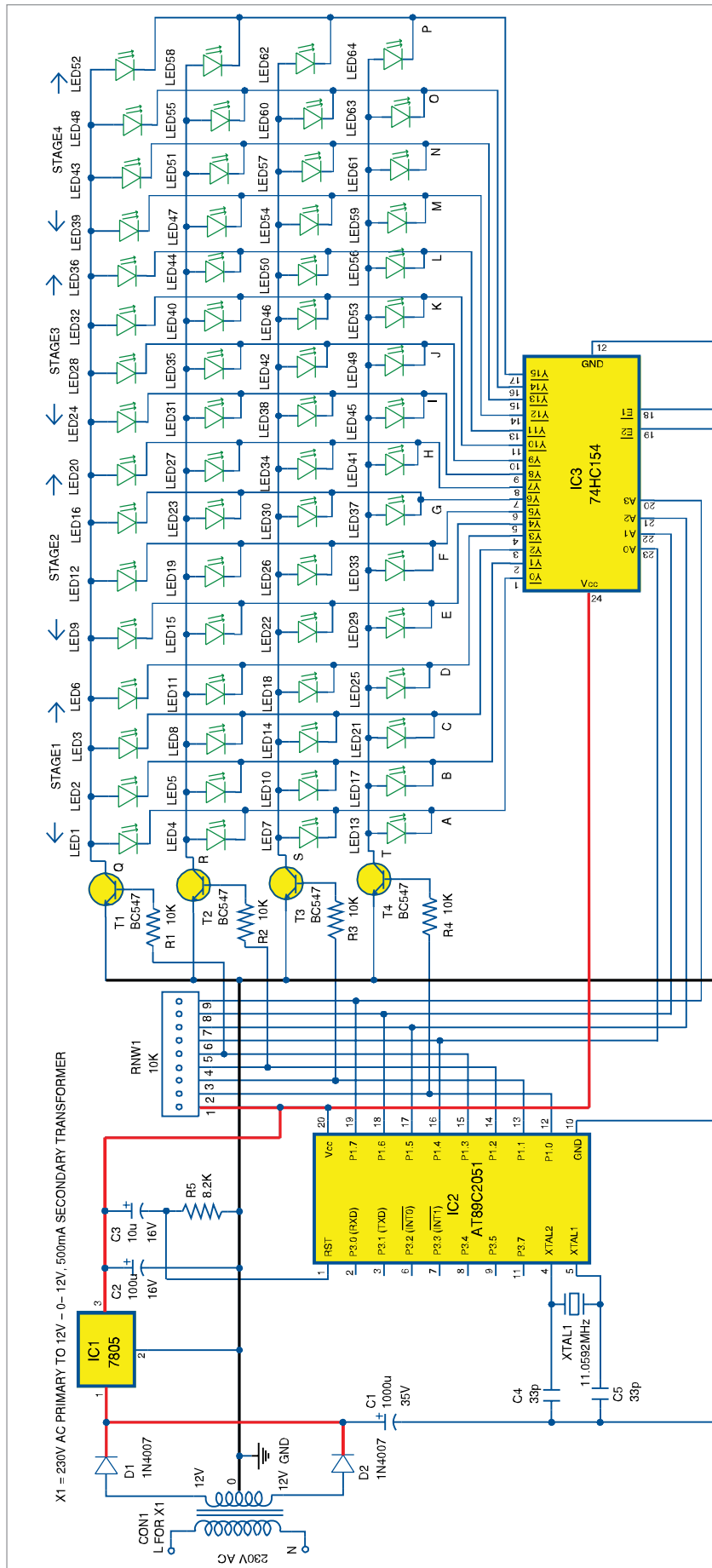


Fig. 2: Circuit diagram of 4x4x4 LED cube using AT89C2051