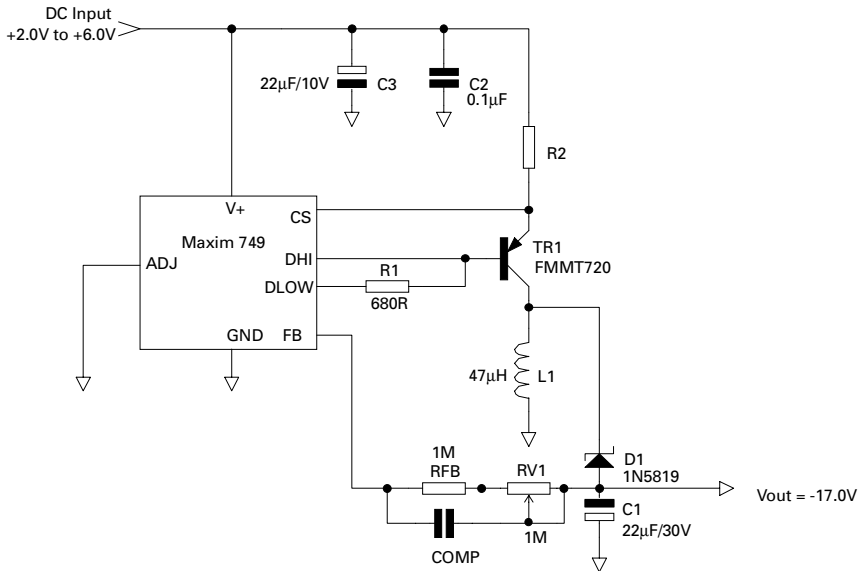


## High Efficiency Converter for LCD Bias Contrast Supplies



### High Efficiency Negative Boost Converter.

A high efficiency power supply based on the Maxim MAX749 for generation of the LCD bias contrast voltage is presented in this design note. The circuit requires an input of +2V to +6V and delivers an output of -17V at 50mA.

It is ideally suited for portable equipment and can be powered by two to five 'AA' size Ni-Cd batteries.

Efficiency in the order of 80% is achieved using the FMMT720 - one of the very low  $V_{CE(sat)}$  SOT23 PNP transistors available from the Zetex SuperSOT series.