

HI-8596

The HI-8596 is a line driver designed in accordance with the ARINC 429 bus specification. The part includes a dual polarity voltage doubler, allowing it to operate from a single +3.3V supply using only four external capacitors.

The HI-8596 demonstration board (QSG-8596) was used to qualify the HI-8596 to RTCA/DO-160G (Section 21). This board allows the user to evaluate the different modes of operation of the HI-8596 ARINC 429 line driver.

The DO-160G compliance test was performed to evaluate the electromagnetic interference of the HI-8596 in its anticipated operating environment in aeronautical operations. The HI-8596 was tested against Section 21, radiated and conducted emissions and category 'P', where equipment and associated wiring are located in areas close to high frequency, VHF or GPS radio receiver antenna, or where the aircraft structure provides little shielding.

Hardware used

To qualify to DO-160G (Section 21, Category P) the HI-8596 demonstration board was equipped with an LC Filter at its power supply (VDD pin 8). Figure 1 shows the filter circuit connection.

The devices used:

- L = Murata BLM18PG221S
- C = Murata LLL219R70J105MA01

For capacitor information pertaining to the voltage doublers please see QSG-8596.

For more information regarding the qualification of HI-8596 please refer to report number D10121Q1, completed by Compatible Electronics.

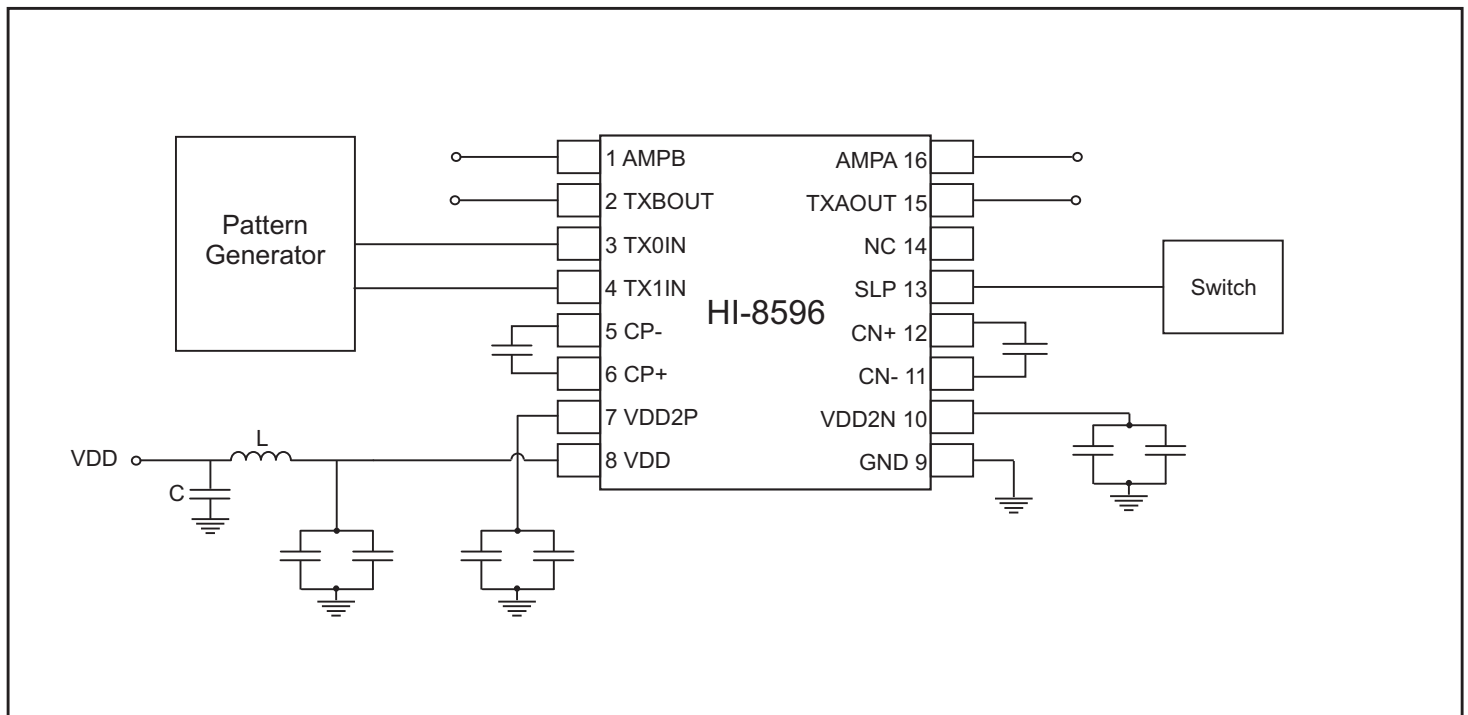


Figure 1: Example circuit used to qualify HI-8596 to DO-160G (Section 21).