

HI-8592 ARINC Line Driver Demonstration Board

1. INTRODUCTION

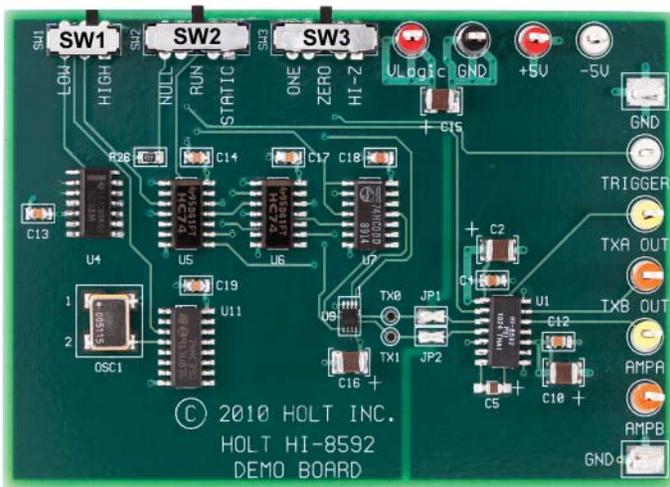
The **HI-8592 Demonstration Board** allows the user to evaluate the different modes of operation of the HI-8592 ARINC 429 line driver.

The HI-8592 includes a negative voltage converter allowing it to operate from a single +5V supply using only two external capacitors. The part also features high-impedance outputs (tri-state) when both data inputs are taken high, allowing multiple line drivers to be connected to a common bus.

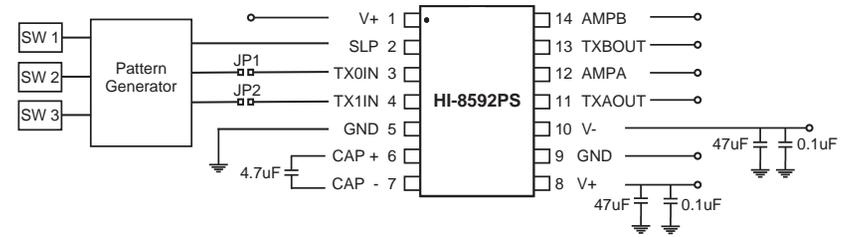
2. DEMONSTRATION BOARD

The demonstration board can generate patterns that drive the HI-8592 in various different ways through a set of 3 switches. The table below describes how to generate signals in high or low speed, in static states of ARINC 429 One, Zero or Null or to hold the outputs in tri-state. With only a single +5V source the HI-8592 will generate a -5V supply in order to produce ARINC 429 specified signals.

The HI-8592 Demonstration Board has test points to measure the -5V generated supply, the TXA/B outputs, along with the alternative AMPA/B outputs and a trigger signal for oscilloscope viewing. If an alternative input source to the TX0/TX1 pins is desired, jumpers 1 and 2 can be opened from the available pattern generator and a user designed generator may bypass that on the Demonstration Board.



(Actual Size)



Value	Part Number	Manufacturer
47μF	LMK325B7476MM-T	Taiyo Yuden
4.7μF	LMK212B7475KG-T	Taiyo Yuden

ESR: Fly cap < 0.5Ω; Hold cap < 0.25Ω.

Material: Ceramic or Tantalum, preferably multilayer. No polarized capacitors.

Dielectric: XR7

Rated voltage: ≥ 10V

