

AFFORDABLE AEROSPACE INTERFACE

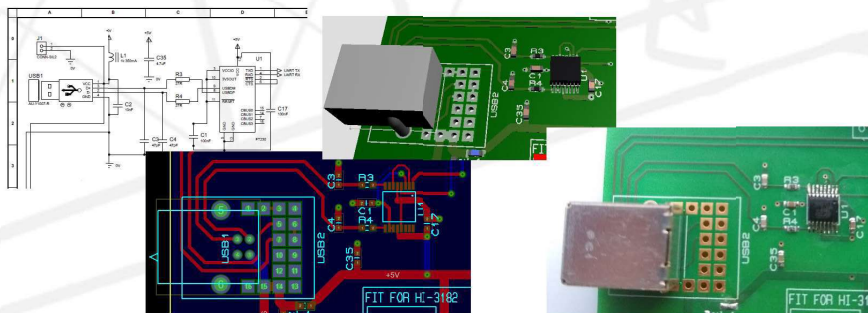
ARINC 429 is a data protocol widely used on aircraft and generation of this data is required while testing avionics equipment. An example of its usage could be a pilots clock being recorded on a black box tens or hundred of meters away. ARINC 429 provides the rugged protocol needed to traverse the length of the aircraft while under potentially large amounts of EMC.



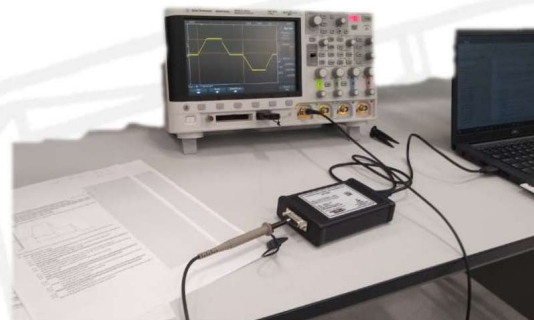
In industry, these interfaces are tested through COTS parts, which can be very complex to use, expensive to purchase and expensive to maintain. This project addresses these issues with its design.

FULL DESIGN CONTROL AND INTERNAL SUPPORT

Internal design provides easy maintenances of design documents, BOM's and manuals. This fulfilled an objective of the project.



VERIFIED TO ARINC429 STANDARD



The solution, once configured provides a quick to use solution to generating ARINC 429 data.

The unit was proven to have compliance to the ARINC429 timings outlined within the specification.

The unit was also verified using a COTS ARINC 429 receiver to verify that the full word could be read sufficiently.

SIGNIFICANT COST SAVINGS FOR APPLICATION

The outcome of the project was an ARINC429 generator which can be manufactured from the design files provided for significantly less cost that the COTS alternative. The solution was also simple to set up and uses sufficient features to meet the specification provided.

A429 Generator Cost

