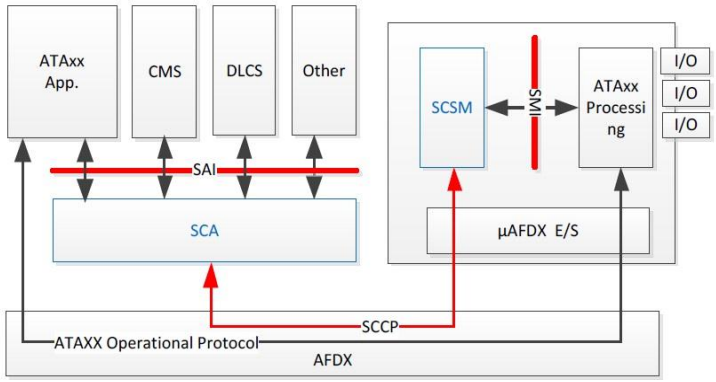
AcQ Inducom participates within ASHLEY in several work packages. This leaflet gives a brief overview of the activities and results. For more information contact us at sales@acq.nl or +31.412.641922.

Smart Component Platform

Universal platform for a Smart Component (Actuator/Sensor) supporting SATI and AFDX. A Smart Component is an electronics module which allows direct AFDX network connectivity and has local processing capabilities to interface and control sensors and actuators (Transducers). SATI allows a CPIOM to control and manage the Smart Component and its Transducers.



µAFDX® End-System VHDL IP-core

µAFDX® is based on past experiences with AFDX®; it is a lighter version of AFDX® which aims to bring AFDX® capabilities to small, less performant systems and to provide a field bus alternative for existing technologies such as CAN and ARINC-429.

AcQ Inducom has developed a VHDL firmware implementation of a scalable, portable µAFDX E/S. The design of the µAFDX E/S components does not use any device specific constructs in order to enhance portability. Where specific hardware resources are desired, portable constructs were used.

A custom MAC was designed to avoid using vendor specific IP blocks and reduce size.

Easy to configure through an XML-based configuration tool.

Passive Optical Sensor Interrogator Blade

The main goal of the Optical Interrogator Blade (OIB) is to capture data from passive optical sensors and provide this data on the AFDX network.

The electronic design of the processor board has been done by AcQ Inducom. The main items on this blade are processing capabilities (ARINC653), AFDX interfaces and a module site to host the optical interrogator module.

The OIB is used in both the Fuel and Landing Gear Demonstrator.

Other partners who contributed to the OIB:
Airbus UK, Oxsensis, SmartFibres, SYSGO, Zodiac