# **Avionic Databus Cyber Protection**

- Real-time detection of UN-AUTHORIZED TRANSMITTING SOURCES
- Cyber protection against Message Spoofing and DDOS for mission critical avionic systems

## **Real-Time**

Detection (IDS) and Prevention (IPS)

## **Scalability**

Context/Data layer independent

#### Deployment

FPGA IP, I/O card

#### **Supported Networks:**

- MIL-STD-1553
- ARINC429
- ARINC825
- CAN
- CAN-FD

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#### Available for Evaluation

- Real-time detection of
   message spoofing
- Protect the entire network from a single location
- Support after-production modifications
- Fully Upgradable
- SPI Interface to CPU
- C level API

# **Sital's FPS for Avionic Databus Protection**

# The Problem Aircraft internal communication databuses are exposed for message spoofing and DDOS attacks

Legacy protocols for avionic control messages are highly optimized and lack basic capabilities for source message authentication. As a result, all mission critical avionic databuses are exposed to a verity of spoofing and DDOS attacks which **impact flight safety, navigation and weapon utilization and may result in aborted missions, aircraft flight route alterations and life threating events** 

#### The Solution

Sital's FPS (**Finger Printing Sensor**) technology alerts and prevents against various spoofing and DDOS attacks on mission critical avionic data buses. Implemented as FPGA IP, the Sital FPS

passively monitors the communication buses in an aircraft and provides **real-time** detection of message spoofing and DDOS attacks. In addition, the FPS also **prevents** such attacks from propagating between avionic systems and **mitigates** the risk of mission failure due to cyber attacks

#### Key Benefits:

- Seamless Integration FPGA IP
- Support After Market Installations and Modifications
- Validated and tested
- DO-254 compatible
- Support the entire databus with a single installment
- Context and data layer independent
- Support all major control type databus communications

#### Public Cyber Attacks

Wireless Hacking In Flight: Air Force Demos Cyber EC-130



