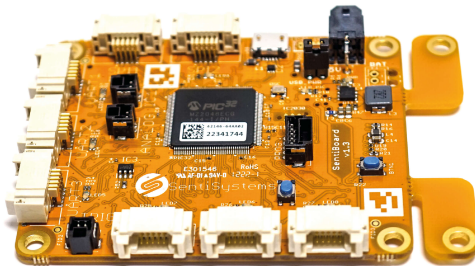




SentiBoard



Introduction

The SentiBoard is an extendable, sensor synchronization and integration platform at the core of the SentiSystems payloads. The SentiBoard can read and synchronize multiple concurrent data streams and accurately generate triggers. The SentiBoard can interface sensors over UART, RS232, RS422 and SPI. The sensor data is packaged on a standardized format and delivered to a host computer over USB.

Payload Summary

The SentiBoard package consists of:

- SentiBoard
- 10 connector cables
- SentiUtils software and libraries for ROS, C/C++, Python and Matlab

SentiSystems Payloads are *sensor agnostic*, refer to Supported Sensors for an overview the sensors and Linux Host computers we have integrated so far.

SentiUtils Summary

The SentiBoard ships with the SentiUtils software. SentiUtils includes sensor parsers, frame-to-trigger synchronization, clock filtering, and sensor monitoring. SentiUtils is a real-time host application connecting the sensors to your favourite middleware. SentiUtils support the following middlewares:

- ROS1
- ROS2
- Dune

SentiUtils can also be integrated with custom frameworks through a socket-based interface carrying SentiSystems Protobuf messages.