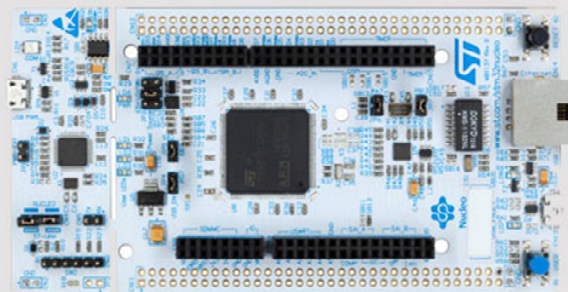# WARWICK CONTROL TECHNOLOGIES

Protocol Stack Kit for NMEA2000, SAEJ1939

```c
if (stacks[handle].sf.free)
{
    /* get a message buffer off the top of the free list */
    *msg = stacks[handle].sf.free;
    stacks[handle].sf.free = ((kvNmea2KMsgPtr)(*msg))->next;
    ((kvNmea2KMsgPtr)(*msg))->next = NULL_MSG_PTR;
}
else
{
    /* there are no message buffers available */
    callStatus = kvNMEA_NO_MSG_BUFFER;
}
break;
```

Benefits include:

- Kit includes everything that you need to start your development
  - Saves time and money
- C Source Code Delivery – Royalty Free
  - Includes all **NMEA2000 mandatory** services
- Example Reference Designs provided for **NMEA2000** and **SAEJ1939**
  - works out of the box and can be used with X-Analyser
  - shows you how to use the C source code.
  - shows you how to implement to 7 to 10 C functions of the embedded HAL and it will help you write your own HAL for your chosen micro
  - Passes **NMEA2000** Certification Test out of the box
- User documentation
- Includes X-Analyser Professional CAN, SAE J1939, NMEA2000 analyser which is
  - useful for your continual software development &
  - eases support to you from Warwick Control
- Use a Virtual Kvaser CAN channel for debugging without hardware
  - HAL for Kvaser CAN lib support Kvaser real and virtual CAN channels
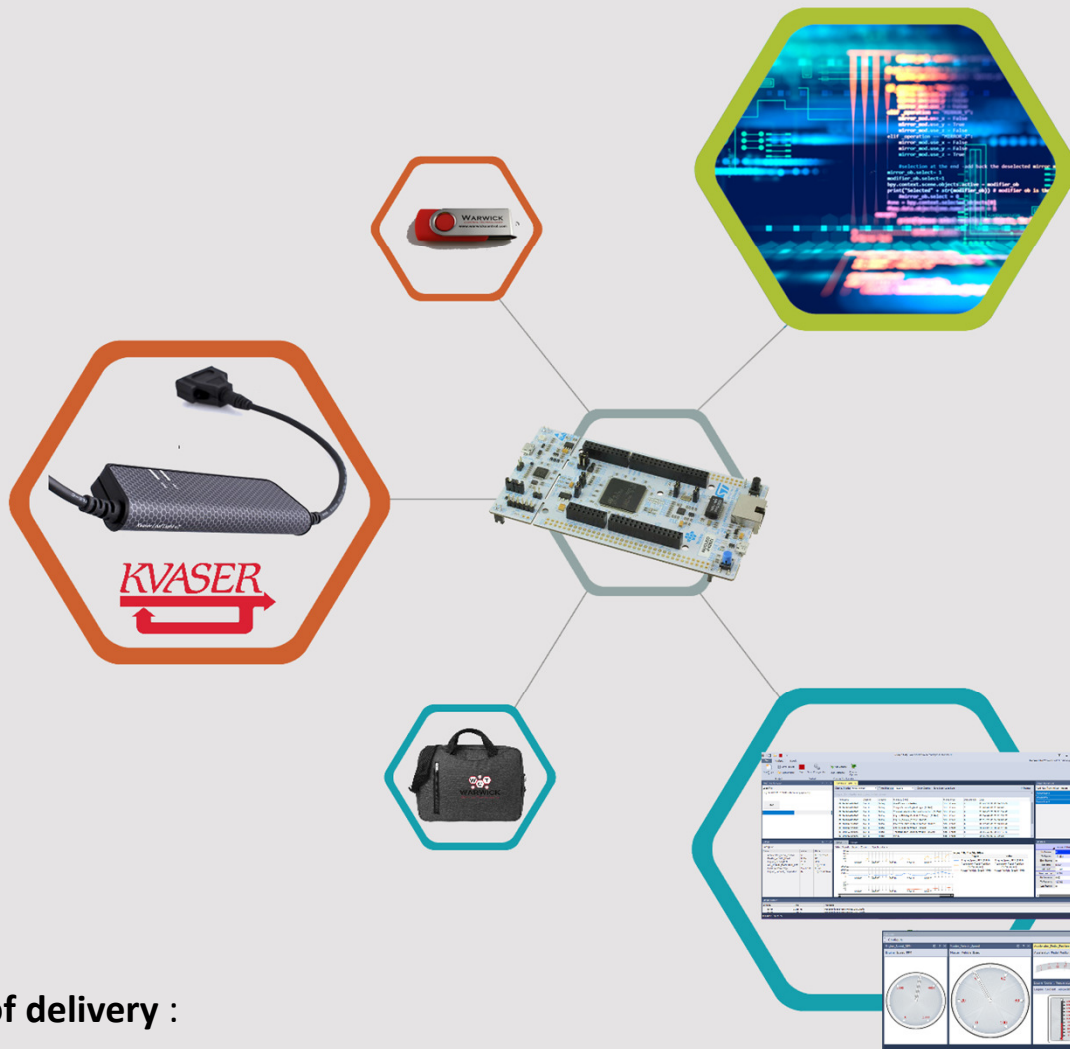- 365-days email support

NMEA2000

SAE J1939

Scope of delivery :

- Protocol Stack (C Source Code)
- STM32 Nucleo development board and CAN shield with example application
- Reference design CAN driver for STM32
- X-Analyser CAN/NMEA2000/SAEJ1939 Analyser
- Kvaser CAN Interface
- Protocol stack CAN driver for Kvaser interface
- Documentation and Examples
- 365-days email support
- Site or project license for stack with no further royalties

- **PGN** Libraries also available as add-on packages of C source code

Last updated 9th December 2022