

QUICK START GUIDE

UCANS32K146

UCANS32K146



GET TO KNOW THE UCANS32K146 BOARD



Figure 1: Front side of UCANS32K146

GET TO KNOW THE UCANS32K146 BOARD



Figure 1: Back side of UCANS32K146

UCANS32K146 BOARD FEATURES

- NuttX RTOS support
- PX4/DroneCode connector standard compliant
- Redundant CAN-FD interfaces
- Latest UAVCAN V1 protocol support.
- RC-PWM output with internal or BEC/ external power
- NFC interface throughout EdgeLock[™] Secure Element
- Programmable user buttons
- UART with 5 V / 3 V configurable logic voltage
- SDK drivers available and FreeRTOS tools within S32DS

RUN A CAN-FD ECHO EXAMPLE INSTRUCTIONS

Test a 4 Mbit/s frame transfer demo between a pair of UCANS32K146 boards. Full details available at: <u>nxp.com/UCANS32K146</u>

1 Download S32 Design Studio

Download and install \$32D\$ IDE at nxp.com/\$32D\$.

2 Import project from repository

Click File -> Import, and select "Projects from Git" and lastly "Clone URI".

Paste the repository link and continue.

3 Plug CAN connectors

Connect two boards with termination resistors CAN-TERM in the CAN0B socket of both boards, and a CAN cable between CAN0A of each one.

Dronecode





4 Connect a 5 V Supply

Plug a 5 V supply to the dedicated power pin headers of the board, or optionally via the CAN connectors.

5 Build, flash and run

Choose the "NODE_A" build configuration in S32DS and flash a board, then select "NODE_B" and flash the remaining one.

A green LED will start blinking each time 2000 have been transferred successfully.