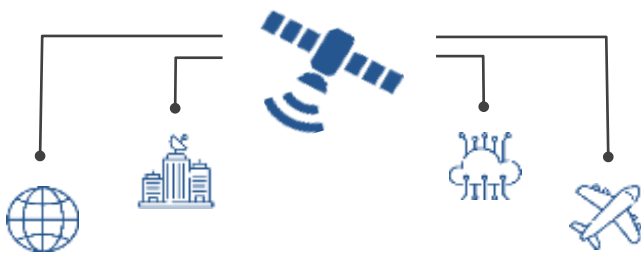# EZiD211 - Oxford 2

Satellite Modem ASIC

Designed for high end satellite broadband applications the EZiD211 implements 2 high-symbol-rate demodulators and a return channel modulator.

The EZiD211 is optimized for GEO and LEO orbits and incorporates all the techniques required for Ka-band, high density multi-spot and beam hopping scenarios.

The EZiD211 integrates Network Clock Recovery for high precision return channel modulation.

The EZiD211 is compliant with the DVB-S2 standard ETSI EN 302 307-2 and implements the latest S2X, adaptive coding and modulation (ACM), Very Low Signal to Noise Ratio (VLSNR) and super frame functionality.


KEY FEATURES & BENEFITS

- o Two high-symbol-rate (HSR) demodulators
    - Maximum baud rate of 500 Msymbol/s
    - Up to three slices each demodulator
    - DVB-S2/S2X
    - Annex M compliant
    - Annex E Super Frame formats 5, 6 and 7
    - Dummy Synchronisation Frame
    - Doppler compensation

- o Dual FEC decode
    - LDPC/BCH
    - 2 x 720 Mbit/s

- o Flexible frame and packet processor
    - Data throughput > 1000Mb/s

- o Single multi standard modulator
    - Flexible IQ streaming engine
    - DVB-S2X
    - DVB-RCS2
- o NCR PLL

KEY APPLICATIONS

- o Consumer broadband modems
- o Small Home Office VSAT applications
- o Feeder and back-haul satellite infrastructure solutions
- o Very high throughput for professional applications
- o Avionics, drone etc.
- o Remote monitoring

EZID211 BLOCK DIAGRAM
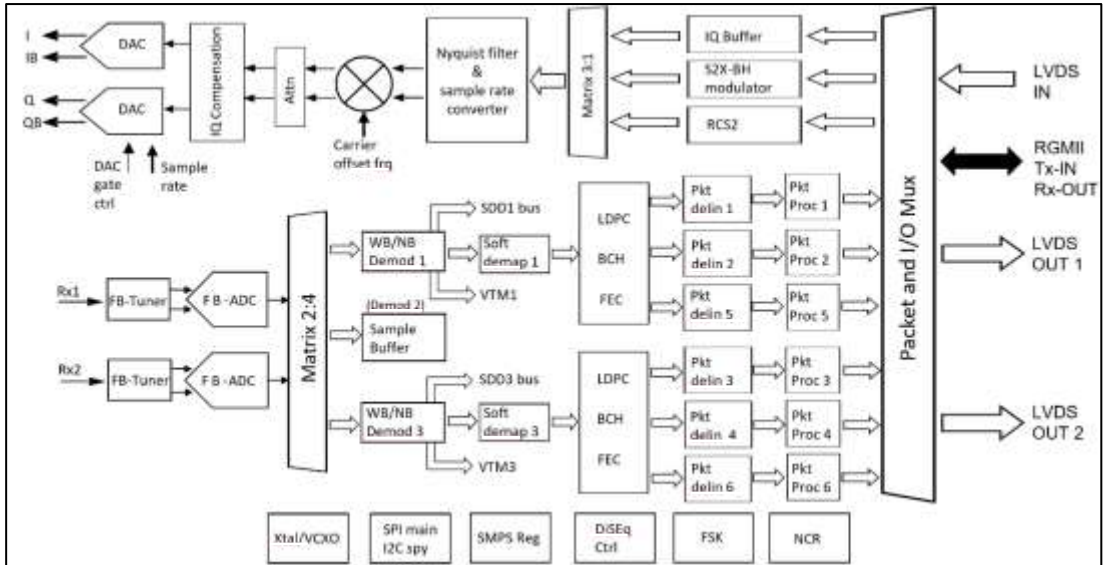
Supplies, power	• Consumption ≤ 5 W • Temperature range: -40°C to +85 °C
IC & Package	164 pin VQFP multi-row, 13 x 13 x 1 mm³ package, RoHS compliant

REFERENCE DESIGN	SOFTWARE DEVELOPMENT KIT
• Schematic – Layout • Evaluation Board	• Graphical User Interface (GUI • Hardware Application Layer (C)

HARDWARE AND SOFTWARE RESOURCES

Order code	Description
EZiD211-ES	Engineering Samples
EZiD211-EVB	Evaluation Board