Sierra Aerospace

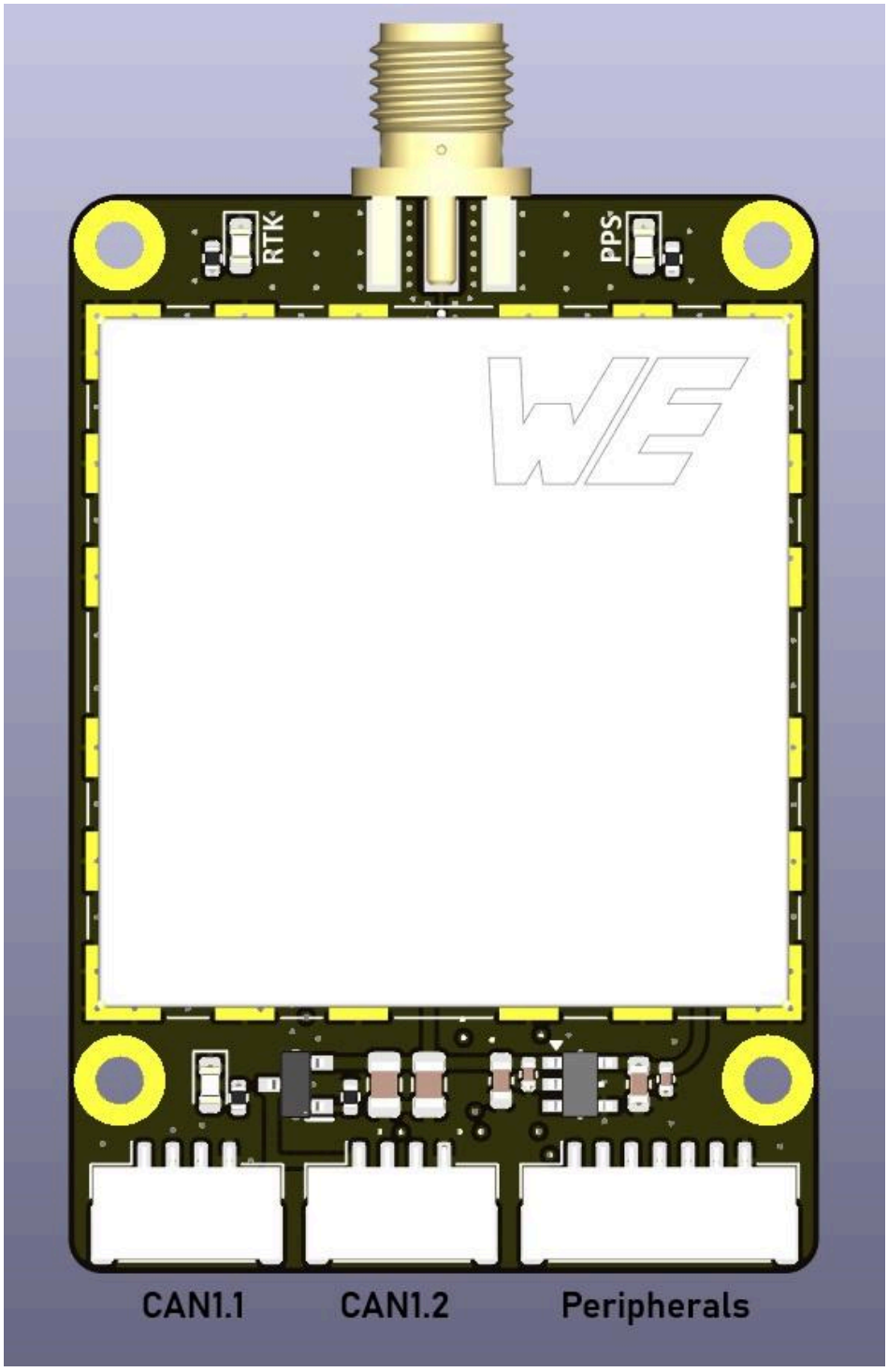
Sierra PrecisionPoint-Pro
Sierra PrecisionPoint-Base

Sierra PrecisionPoint series is a High Precision **L1+L2/ L1+L5/ L1+L2+L5** band Navigation module with 4 concurrent GNSS constellation reception. Communicates to any host device via CANBus and can daisy-chain seamlessly. Integrated with industrial grade IST8310 magnetometer with low drift, precise magnetic field measurements and high accuracy DPS310 barometer.

Features include,

- Ultra low power consumption Cortex®-M4 core with floating point unit
- Ublox F9/F20 with RF front-end design
- Moving Baseline for GPS Heading
- Industrial IST8310 Magnetometer
- DPS368 Barometer
- UAVCAN/DroneCAN communication protocol
- Horizontal accuracy down to 0.01m with RTK
- Max. Power consumption: 5V, 250mA
- Weight: 15g, 33x45mm
- Operating temperature: -20°C to +85°C (Barometer vent needs to be taken care for moisture and icing)
- 2x GPIO with individual timers available for UART, PWM, Relay etc.
- EMI shielding on regulators and RF components of GPS

Interface: PrecisionPoint-Pro



1. CAN ports: CAN 1.1 and CAN 1.2

   Note: Follows exact pinouts as Pixhawk Cube/ Pixhawk standards

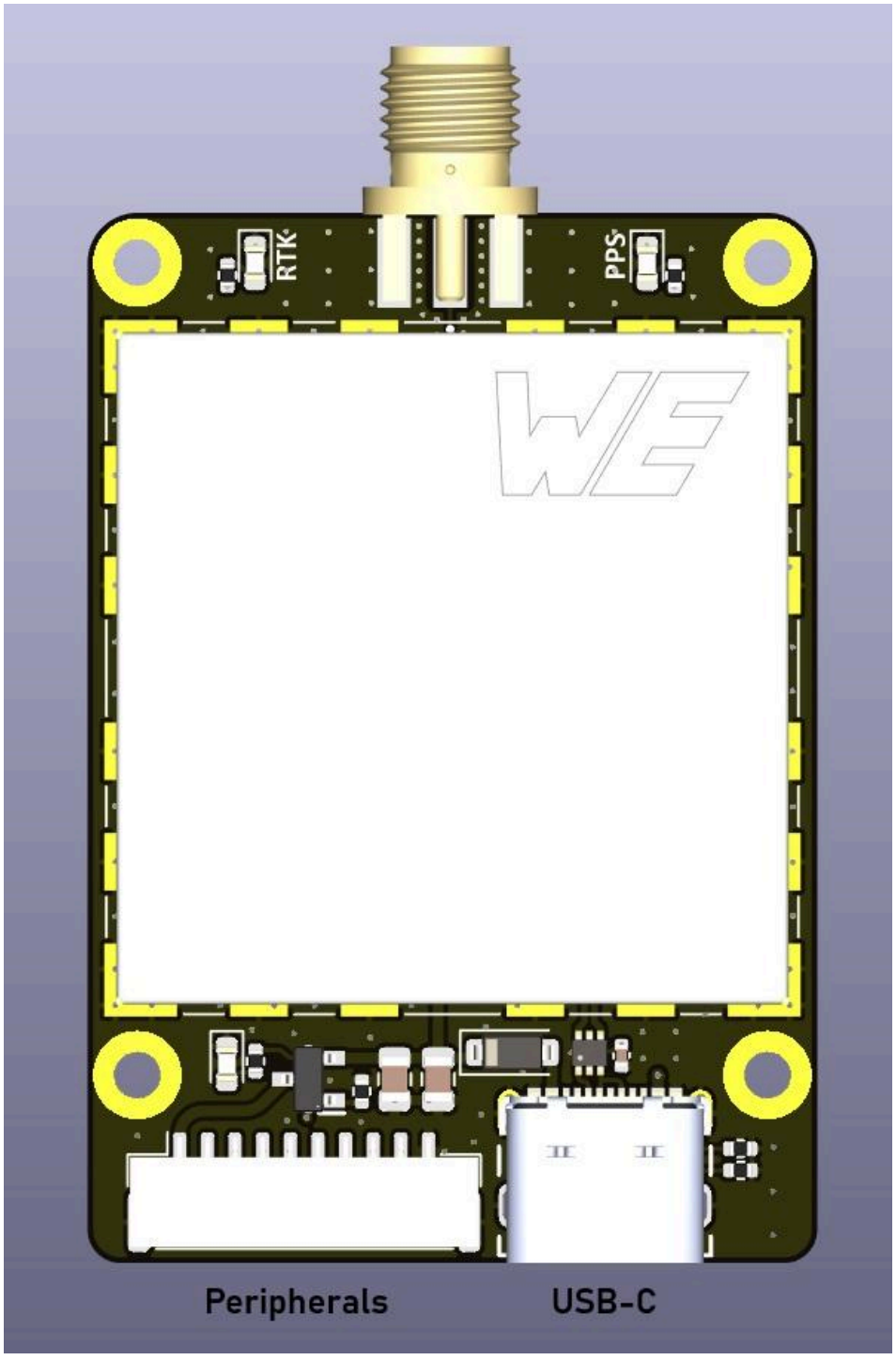
PIN	SIGNAL	VOLTAGE
1	POWER	5V
2	CAN_H	CAN_HIGH
3	CAN_L	CAN_LOW
4	GND	GND

2. Peripherals port:

PIN	SIGNAL	VOLTAGE
1	F9P_TXD2	3.3V
2	F9P_RXD2	3.3V
3	MCU_USART1_TX	3.3V
4	MCU_USART1_RX	3.3V
5	F9P_PPS	3.3V
6	F9P_EXTINT	3.3V
7	GND	GND

3. CAN termination via GPIO: CAN_TERM=1 on DroneCAN parameters.

Interface: PrecisionPoint-Base



1. Peripherals: To FCU

PIN	SIGNAL	VOLTAGE
1	POWER	5V
2	F9P_RXD2	3.3V
3	F9P_TXD2	3.3V
4	I2C_SCL	3.3V
5	I2C_SDA	3.3V
6	F9P_RXD2	3.3V
7	F9P_TXD2	3.3V
8	F9P_EXTINT	3.3V
9	F9P_PPS	3.3V
10	GND	GND

2. USB-C: Direct connection to GNSS USB