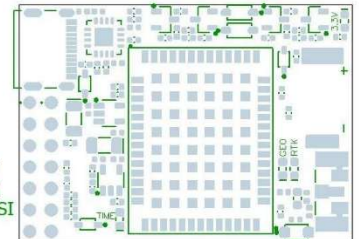## Features:

- Antenna input with SMA or IPEX connector
- On board low noise 3.3 V voltage regulator
- USB, SPI* and 2 UART (Tx, Rx) interface
- USB C connector
- Time pulse LED, Power LED, RTK LED, Geofence LED
- BY_Connect Evaluation Software
- Extensive visualization and evaluation features
- Backup supercapacitor
- Dimensions: 24x38 mm
- Weight: 10 gr
- Fully assembled and ready to use

Reference: ELT0651

GNSS FEATURES	
Based on the new generation GNSS SoC - Alice, designed on the basis of ISO26262 ASIL B functional safety	
17x22x2.75 mm LGA package	
Full-temperature calibrated high-precision IMU and deeply coupled combined navigation engine	
Supports on-chip RTK positioning calculation on all systems and multiple frequencies	
Supports GPS L1C/A/L1C/L2P(Y)/L2C/L5, BDS B1I/B2I/B3I/B1C/B2a/B2b, GLONASS G1/G2/G3, Galileo E1/E5a/E5b/E6, QZSS L1C/A/L1C/L2C/L5, NavIC L5 and SBAS L1C/A	
All-system multi-frequency RTK engine and advanced RTK technology	
Independent tracking of different frequencies and 60dB narrowband anti-jamming technology	

DIR   WT
TX1   RX1
TIMEPULSE   NC
TX_READY   EXT_INT
SPI_CS0   SPI_CLK
SPI_MISO   SPI_MOSI
GND   +5V

PERFORMANCE	
Channels:	1507 channels, based on Alice
Frequency:	GPS L1C/A/L1C*/L2/L5 BDS B1I/B2I/B3I/B1C*/B2a/B2b* GLONASS G1/G2 Galileo E1/E5a/E5b/E6* QZSS L1/L2/L5/L6(CLAS*) NavIC L5 SBAS* L1C/A
Single point positioning (RMS):	Horizontal: 1.5 m Vertical: 2.5 m Data Update Rate 50 Hz Positioning
RTK (RMS):	Horizontal: 1 cm + 1 ppm Initialization Reliability > 99.9% Vertical: 1.5 cm + 1 ppm Data Update Rate 2 Hz Positioning, 100Hz INS
Sensitivity:	Acquisition: -146 dBm Re-acquisition: -156dBm Tracking: -156 dBm L-band: -133 dBm L-band BER: 10E-5
Accuracy:	Carrier phase: <1mm (RMS) Pseudorange: <0.1m (RMS) Tracking: -156 dBm Time Accuracy(RMS): <20 ns Speed measurement: 0.03 m/s (RMS) Dead reckoning accuracy, typical: 0.8%

OTHER FEATURES	
Anti-jamming protection:	Jamming to signal ratio: 65dBc Multitone jamming: 6 or more pulses Narrowband jamming: 10% of the signal bandwidth Fast sweep jamming protection
Physical Characteristics:	Packaging: 54 pin LGA Dimension: 17.0 × 22.0 × 2.75 mm Weight: 1.88 ± 0.03 g
Environmental Specifications:	Working temperature: -40 °C ~ +105 °C Storage temperature: -55 °C ~ +150 °C Humidity: 95% No condensation Vibration: MIL-STD-810F Shock: MIL-STD-810F
Communication Interfaces:	3 × UART (LVTTL) 2 × CANFD (shared with UART0, UART1) 1 × SPI (shared with UART2 and RMII) 1 × RMII 100Mbit (shared with UART2 and SPI)