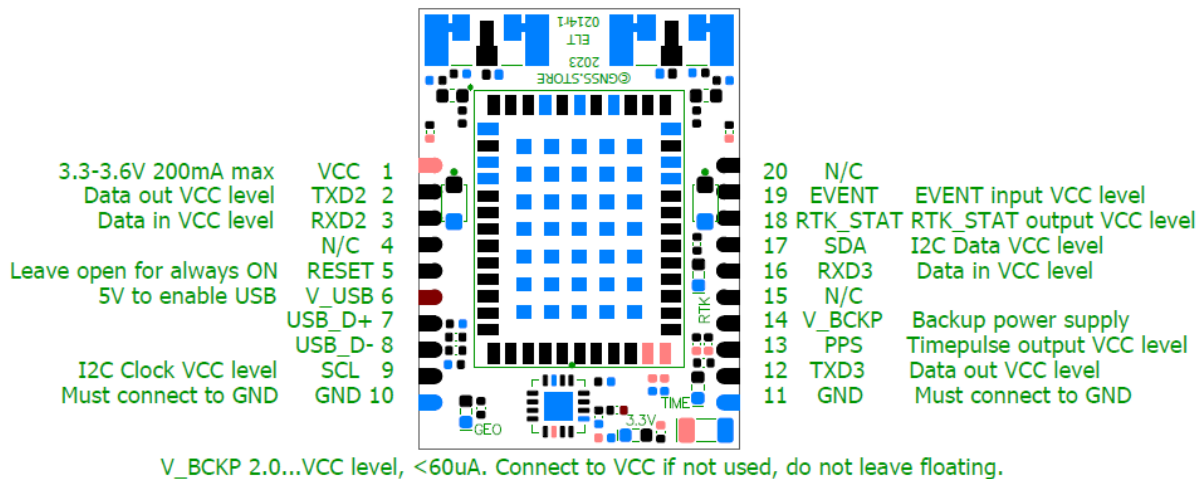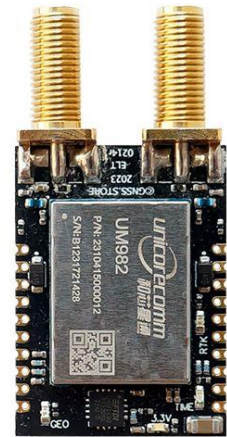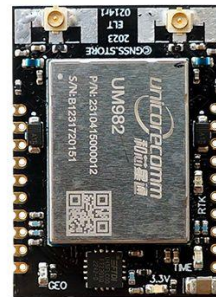## Features:

Reference: ELT0214

- Two antenna inputs with IPEX or SMA connectors
- **USB**, **I2C** and two **UART** (Tx, Rx) interfaces
- Time pulse LED, GEO LED, RTK LED, Power LED
- u-precise Unicore evaluation software
- Extensive visualization and evaluation features
- Dimensions: 24.5x33.5 mm without SMA
- Weight 10 gram
- Fully assembled and ready to use

3.3-3.6V 200mA max	VCC	1	20	N/C	
Data out VCC level	TXD2	2	19	EVENT	EVENT input VCC level
Data in VCC level	RXD2	3	18	RTK_STAT	RTK_STAT output VCC level
	N/C	4	17	SDA	I2C Data VCC level
Leave open for always ON	RESET	5	16	RXD3	Data in VCC level
5V to enable USB	V_USB	6	15	N/C	
	USB_D+	7	14	V_BCKP	Backup power supply
	USB_D-	8	13	PPS	Timepulse output VCC level
I2C Clock VCC level	SCL	9	12	TXD3	Data out VCC level
Must connect to GND	GND	10	11	GND	Must connect to GND

V_BCKP 2.0...VCC level, <60uA. Connect to VCC if not used, do not leave floating.

GNSS FEATURES

Receiver type	1408-channel NebulasIV engine Beidou, Galileo, GLONASS, GPS/QZSS
GNSS platform	All-constellation Concurrent GNSS
GNSS bands	L1C/A/L2P (Y)/L2C/L5, B1I/B2I/B3I, G1/G2, E1/E5a/E5b, L1/L2/L5
GNSS technology	Dual RTK

PERFORMANCE

Horizontal pos. accuracy	
Single point (RMS)	1.5 m
DGPS (RMS)	0.4 m + 1 ppm
RTK (RMS)	0.008 m + 1 ppm
Vertical pos. accuracy	
Single point (RMS)	2.5 m
DGPS (RMS)	0.8 m + 1 ppm
RTK (RMS)	0.015 m + 1 ppm
Heading accuracy (RMS)	0.1°/1 m baseline
Velocity accuracy (RMS)	0.03 m/s
Time accuracy (RMS)	< 20 ns

Observation accuracy (RMS)	
Pseudorange (all systems)	10cm
Carrier Phase (all systems)	1 mm

RTK Initialization time	< 5 s (typ)
RTK initialization reliability	> 99.9%
Time to First Fix	Cold start < 30s
Data update rate	Dual antenna 20 Hz

OTHER FEATURES

Heading	Angle from the True North to the baseline between Master and Slave antennas Angle from True North to the baseline of the base to rover in RTK mode.
Anti-spoofing	Advanced anti-spoofing algorithms
Anti-jamming	Active CW detection and removal Jamming status for each frequency
Operating temperature	0 °C to +50 °C
Supply voltage	3.3 V to 3.6 V
Supply current	<200 mA typ (without external antenna)
External antenna requirements	Supply voltage <3.0 V Consumption current <100 mA