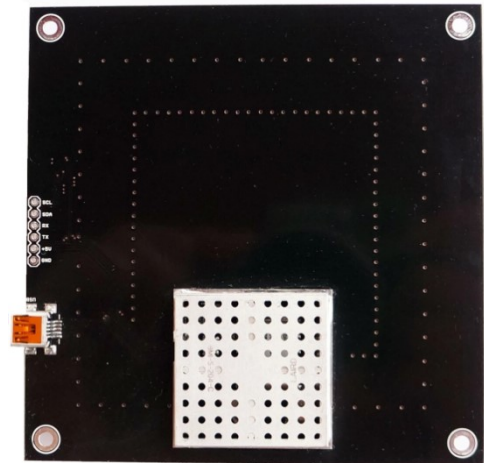


Features:

- On-board low noise 3.3 V voltage regulator and RF filter for noise blocking
- **USB, UART** (Tx, Rx) interfaces and **I2C** (SDA, SCL)(for LIS3MDL)
- **LIS3MDL** I2C magnetometer
- BDS B1/B2/B3 GPS L1/L2/L5 Glonass G1/G2 Galileo E1/E2/E5a/E5b/E6 antenna
- High Gain LNA system with very low noise figure
- Double Band Pass filter for noise rejection
- EMI and RFI protection
- **Mini USB** connector
- u-center Evaluation Software
- Extensive visualization and evaluation features
- Time pulse LED, Power LED, GEO LED
- Backup supercapacitor
- Dimensions: **100x100 mm**; hole distance **90x90 mm**
- Weight: **114 gr.**

Reference: ELT0137



GNSS FEATURES

Receiver type	92-channel u-blox M9 engine GPS L1 C/A, QZSS L1 C/A/S, GLONASS L10F, Beidou B1I, Galileo E1B/C, SBAS L1 C/A: WAAS, EGNOS, MSAS, GAGAN
GNSS platform	Concurrent GNSS
GNSS bands	L1C/A, L10F, E1-B/C, B1I
Oscillators	TCXO

PERFORMANCE

Position accuracy	1.5 m CEP (with SBAS) 2.0 m CEP (without SBAS)		
Acquisition	Cold start	Hot/Aided start	Nav. update rate
GPS+GLO+GAL+BDS	24 s	2 s	25 Hz
GPS+GLO+GAL	25 s	2 s	25 Hz
GPS+GLO	26 s	2 s	25 Hz
GPS+BDS	28 s	2 s	25 Hz
GPS+GAL	29 s	2 s	25 Hz
GPS	29 s	2 s	25 Hz
GLONASS	27 s	2 s	25 Hz
Beidou	32 s	2 s	25 Hz
Galileo	42 s	5 s	25 Hz
Velocity accuracy	0.05 m/s		
Dynamic heading accuracy	0.3 deg		
Sensitivity (GPS+GLO):			
Tracking and Navigation	-167 dBm		
Reacquisition	-160 dBm		
Cold start	-148 dBm		
Hot start	-159 dBm		

OTHER FEATURES

Anti-jamming	Active CW detection and reporting Active GNSS in-band filtering
Anti-spoofing	Spoofing detection and reporting
Security	Secure firmware update Message integrity
Memory	Flash
Data batching	Autonomous tracking up to 5 min, data logger
Operating temperature	0 °C to +50 °C
Supply voltage	4.5 V to 5.5 V
Supply current	<110 mA