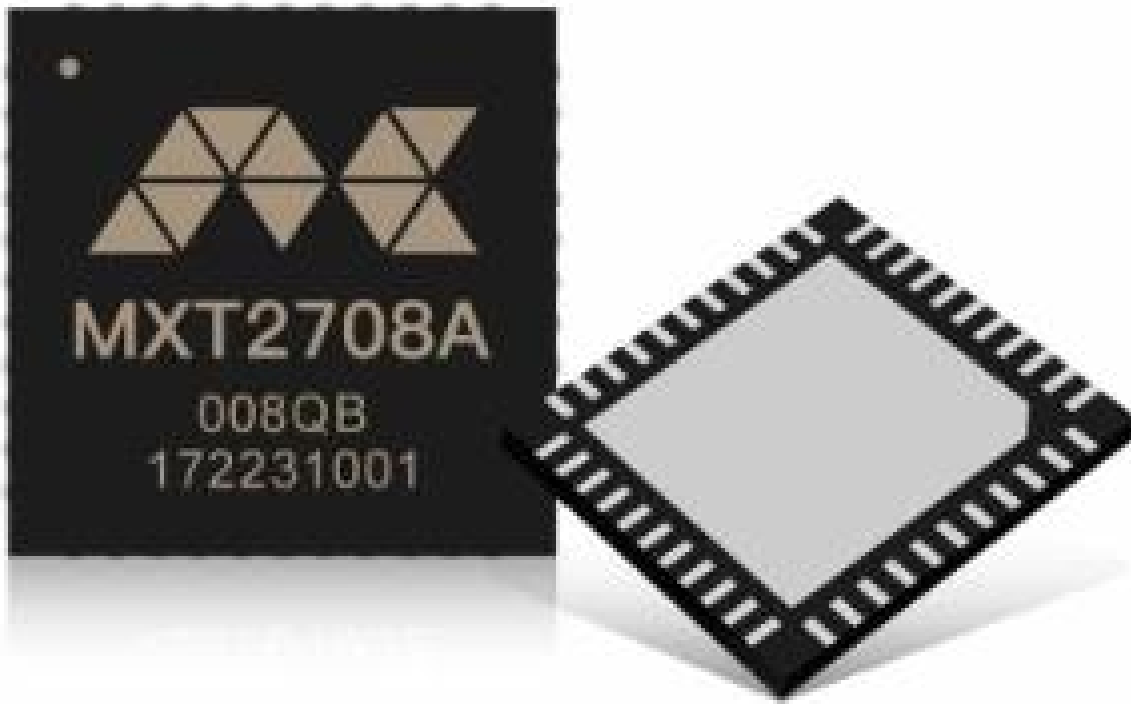


GNSS baseband and RF integrated SoC MXT2708A

The MXT2708A is a high-performance baseband and RF integrated SoC, Designed and developed by MXGNSS using a 40nm process based on completely independent intellectual property rights. Utilizing the broadband radio frequency technology independently developed by MXGNSS, the chip supports all deployed satellite constellations, including BDS, GPS, GLONASS, Galileo, QZSS, etc. It initiatively achieves the target that a single chip synchronously receives satellite signals from BDS/GPS/GLONASS Galileo systems, effectively improving the positioning performance, including sensitivity, the initial positioning time, positioning accuracy, etc. With its high integration and multi-function features, MXT2708A is suitable for automotive, industrial, consumer electronics, and other fields.



Technical Feature



**40nm Process
baseband and RF
integration**



**Support
BDS/GPS/GLONASS/Galileo**



**High sensitivity
design**



**Support AGNSS
and DGNSS**



**Smart Suppress
anti-jamming
technology**



**Supporting precision
timing(optional)**



**Supporting RTK
algorithm(optional)**

Specifications

Signal Tracking	GPS/QZSS L1CA / L2C /L5 BDS B1I/ B1CB2I/ B2a GLONASS L1 / L2 Galileo E1 / E5a
Position Accuracy	2.0m CEP RTD:0.5m CEP RTK: 2.0cm+1ppm CEP
TTFF	Cold Starts :30s Hot Starts: 1s
Sensitivity	Acquisition : -147dBm Tracking : -164dBm
Velocity Accuracy	0.05m/s
Nav. Update Rate	1 / 2 / 5 / 10HZ
1PPS Accuracy	20ns
Operational Limits	Altitude : 18000m Velocity : 515m/s Dynamics : 4g NMEA 0183
Nav. Data Format	MXT Data Format RTCM 2.3 / 2.4 / 3.X
Power Consumption	35mA@3.3V
Package	5x5mm QFN
Supply	3.3V
Temperature	Ambient -40°C~85°C Store -40°C~85°C

Application Area



Electric Timing



Deformation Monitoring



Base Station Orientation



Intelligent Robot



Shipborne Navigation



Smart Agriculture



Vehicle Road Collaboration



Navigation and Positioning