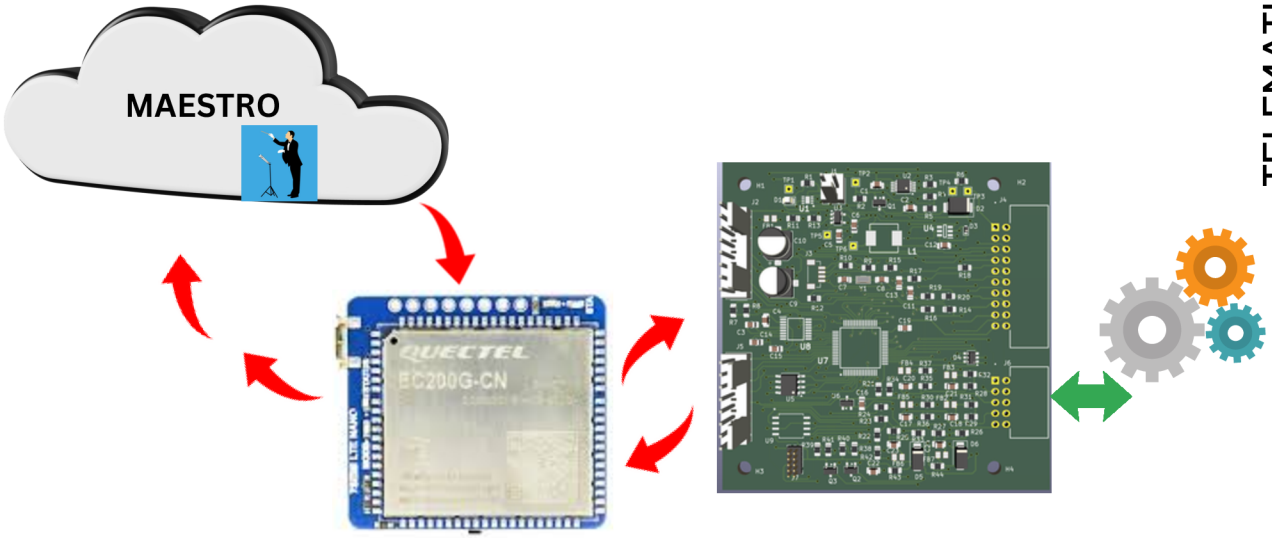
samsan
in step with the NEXT

TELEMATICS PRODUCT GROUP

TwinLnk™

Intelligent flow of Data - Machine to Cloud



TwinLnk Core

A compact, cost-optimized IoT gateway engineered for reliable data acquisition and transmission for vmobile and remote monitoring applications.

TwinLnk Auto

An AIS-140 compliant automotive-grade telematics gateway featuring multi-GNSS tracking, secure CAN logging, and rugged IP67 design for mission-critical fleet applications.

TwinLnk Edge

A powerful enterprise IoT edge platform combining industrial hardware, customizable SDK, and flexible middleware to seamlessly integrate PLCs, machines, and cloud systems.

Tracks - Understands - Communicates - Acts in real time

INFLYX™ (FROM "INFORMATION + FLUX") SYMBOLIZES CONTINUOUS, INTELLIGENT, AND SECURE DATA FLOW ACROSS CONNECTED SYSTEMS. IT IS A NEXT-GENERATION TELEMATICS AND IOT GATEWAY DESIGNED FOR VEHICLES, INDUSTRIAL, AND INFRASTRUCTURE APPLICATIONS — ENABLING DATA ACQUISITION, ANALYTICS, AND TWO-WAY COMMUNICATION BETWEEN FIELD ASSETS AND CLOUD PLATFORMS. INFLYX™ GOES BEYOND CONVENTIONAL TELEMATICS

KEY HIGHLIGHTS

- Smart Edge Intelligence for data filtering and pre-processing.
- Two-way communication via MQTT for remote configuration and control.
- Secure Over-the-Air Firmware Update (FOTA) through HTTPS.
- Multi-GNSS Support for accurate localization.
- Advanced Hardware Security with encryption and HSM support.
- Low Power Operation with intelligent sleep modes.
- Modular Connectivity — CAN, RS232, RS485

SPECIFICATION SUMMARY

- **Processor**: 80 MHz ARM® Cortex-M0+, 128 KB Flash, 32 KB SRAM
- **Cellular Modem:** 4G CAT 1, GSM fallback, TLS 1.3 support
- **GNSS:** Multi-constellation GPS, GLONASS, BDS, Galileo, NavIC
- **Storage:** 128 Mbit (16 MB) NOR Flash memory
- **SIM/eSIM:** Dual profile switching – Manual and Software controlled
- **Connectivity:** RS232, RS485, CAN
- **Security:** AES-128/256 encryption, CRC, optional HSM
- **Battery:** 3.7 V, 1000mAh backup (AIS 140 compliant)
- **Power Supply:** 8–32 V input, <1.5 A max current

UNIQUE DIFFERENTIATORS

- Birectional Data Flow ---------- Data exchange via MQTT for telemetry and control
- Edge Data Intelligence ---------- Onboard preprocessing minimizes bandwidth usage
- Secure FOTA ---------- Over-the-air firmware updates with HTTPS
- Dual SIM/eSIM ---------- Auto-switch for best network resilience
- High GNSS Sensitivity ---------- Multi-constellation receiver with patch antenna
- Rugged Design ---------- Optimized for vehicle, industrial, and sensor interface

Inflyx™ acts as a data bridge and intelligence hub between the edge and the cloud, enabling:

- *Real-time telemetry and analytics for vehicles, machines, or dam sensors.*
- *Configuration updates and command control from remote servers.*
- *Secure firmware updates and diagnostics.*
- *Visualization-ready data streams for dashboards or AI platforms*

SAMSAN - MAESTRO COMPONENTS AND PLATFORM SERVICES

KEY FEATURES of MAESTRO Platform

- Service-Oriented Architecture (SOA)
- High-Performance Compute Abstraction - Real-time and non-real-time workload partitioning
- Multi-Channel Connectivity - 4G/5G, C-V2X, Wi-Fi, BLE
- Secure MQTT, HTTPS, or gRPC communication
- Device Provisioning and Management services
- Cloud Data - Storage of structured and unstructured data
- Digital Twin & Analytics - Predictive maintenance, Driving analytics, Battery health models, OTA rollout stats
- Security Requirements - Key provisioning and certificate management, TLS 1.3 for cloud traffic, Safety partitioning between critical and non-critical apps