

The ELGENS X-Corleone is a premier rugged AI-edge server engineered for mission-critical environments. Powered by 13th Gen Intel Core processors and an NVIDIA Quadro 2000A GPU to deliver high-performance AI inference and real-time data fusion. Central to its design is a quantum-safe architecture featuring NIST FIPS 203/204/205 compliant Post-Quantum Cryptography (PQC) and TLS 1.3 Hybrid encryption. Establishing an end-to-end zero-trust chain through Dual TPM 2.0 and ML-DSA signatures. Connectivity is optimized with 4x 10GbE and 4x 2.5GbE PoE+ ports for low-latency ISR applications.



Preliminary Picture



Product Highlights - Advantages and Benefits

- ▶ **PQC-Proof Quantum Security (Optional by Customer Request)** : Integrates NIST FIPS 203/204/205 compliant Post-Quantum Cryptography (PQC) to protect sensitive data against "Harvest Now, Decrypt Later" threats.
- ▶ **Military-Grade Certification** : Compliant with MIL-STD-704F, MIL-STD-1275E, and MIL-STD-461G for EMC/EMI compliance, as well as MIL-STD-810H for shock and vibration resilience.
- ▶ **Extreme Environment Reliability** : Engineered for -40°C to 70°C environments with "Cold Start" technology, enabling immediate system boot-up in freezing conditions. Ensures stable operation in harsh environments with reduced failure risk.
- ▶ **Security Design**: Provides hardware-level dual-TPM 2.0 and TrustZone for secure boot, device authentication, and full disk encryption. Customers can securely transmit AI models, control signals, and mission data without fear of interception, reducing risks of Man-in-the-Middle(MITM) attacks and building trust in networked deployments.
- ▶ **Enhanced Durability and Resistance** : The full metal chassis and full IP67 protection against physical damage, high-impact forces, and heavy vibrations in mission critical applications.
- ▶ **Secure Connectivity**: D38999 military connectors for all I/Os. Prevent accidental cable disconnection.
- ▶ **Stable Supply**: 10-year longevity support and proactive notification of EOL.

Specifications

System	
CPU	13th Gen Intel® Core i3-13300HRE, up to i7-13800HRE CPU
System Memory	2 x Dual-Channel SO-DIMM Slot for ECC DDR5, 5200 MT/s, Default 32GB, up to 96GB
AI Computing	1 x MXM 3.1 Type A Slot for GPU Card, Quadro® 2000A, GDDR6 8G
External I/O Port	2 x USB by D38999 Connector
	4 x 10 GbE LAN by D38999 Connector
	4 x 2.5 PoE+ by D38999 Connector, Total 100W Power Budget
	1 x HDMI by D38999 Connector
	2 x COM Port (RS-232/422/485) by D38999 Connector (Optional by Customer's Request)
	1 x DC Power Input by D38999 Connector
	1 x Power Button

System

Storage Slot	1x m.2 Slot (M Key, 2280) for PCIe Gen4 NVMe m.2 SSD 1x m.2 Slot (B Key, 2280) for SATA III m.2 SSD
Operation System	Support Windows 11 (64-bit), Linux (64-bit) by Optional by Customer's Request
Security	2x TPM 2.0 1x TrustZone by NXP i.MX 8M Plus

Environment

Power Input	DC 9-36V, 450W Power Input with MIL-STD-461G/1275E Compliant
Dimension	As the Drawing Shown in 3rd Page
Mounting	
Cerfitication	EMC • MIL-STD-461G Compliant (CE101/CE102/RE101/RE102) • MIL-STD-1275E Compliant • MIL-STD-704F Compliant • FCC / CE Class A Certified Vibration • MIL-STD-810H, Method 514.8, Procedure I • IEC-60068-2-64, 1.5 Grms @10~500Hz Shock • MIL-STD-810H, Method 516.8, Procedure I, 20g 11ms IP Level • IP67
Operating Temp	-40~70 °C, Cold Start
Storage Temp	-40~70°C
Humidity	10~95% @40 °C, non-condensing

Ordering Information

X-Corleone XC-133	Secured AI Server, 13th Gen Intel® Core i3-13300HRE, 32GB DDR5 5200MT/s, 1TB M.2 NVMe SSD, Quadro® 2000A MXM GPU
X-Corleone XC-135	Secured AI Server, 13th Gen Intel® Core i5-13600HRE, 32GB DDR5 5200MT/s, 1TB M.2 NVMe SSD, Quadro® 2000A MXM GPU
X-Corleone XC-137	Secured AI Server, 13th Gen Intel® Core i7-13800HRE, 32GB DDR5 5200MT/s, 1TB M.2 NVMe SSD, Quadro® 2000A MXM GPU

Dimension & I/O Connector

