

in**e**ltro

Welcome

ineltro



Distribution With Passion

Renewable Energy Management and Power designs

Measurement and Sensor technology

Industrial Applications

Process Control and Automation

Connectivity Wired and Wireless

Introduction

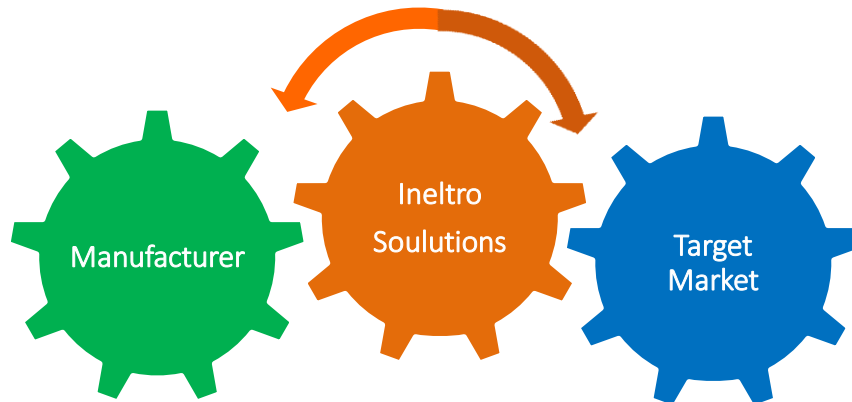
Ineltro AG is a privately held independent
Technical Distributor and **Solution Provider**

To be Leader in Design-in Activities for both
Embedded Computing Applications and
Electronic Components we work together with
leading suppliers.

Founded: 1943 as Moor AG, 2005 renamed

Capital: 2 Mio CHF

Warehouse: 600m2



Battery & Power



Battery

Every application is unique and has its own dedicated requirements. Often the correct combination is the optimal choice.

- Alcaline Alcaline-Mangan
- Li-SoCl² Lithium-Thionylchlorid
- Li-MnO² Lithium-Manganoxid
- LiFePO⁴ Lithium-Iron-Phosphate
- LiPo Lithium-Polymer
- Li-Ion Lithium-Ion
- NiMH Nickel-Metallhydrid



Battery & Power

Ultra-Caps

- High Current Capability
- ESR to $-40^{\circ}\text{C}^{\circ}\pm$ constant
- 1 Mio. Cycles, no maintenance
- 10 years at 25°C Hot-Spot
- Cells, standard- and custom Moduls
- Offline vehicles, robots (limited loading time, also as hybrid with batteries or hydraulics)
- Dieselstart, Start-Stop, Recuperation
- Offshore Application

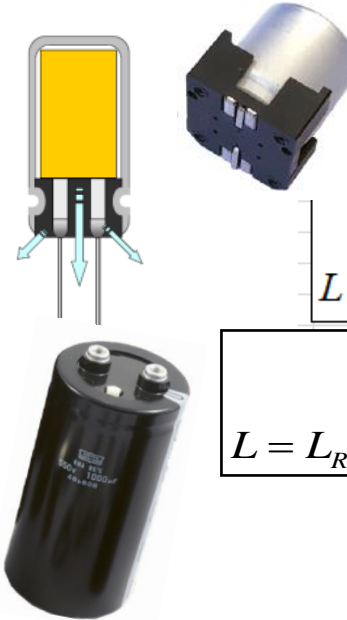


Battery & Power



Electrolyte Polymer Hybrid Capacitors

- For High Reliability Applications
- Cost Optimized Designs for
- Drives
- Inverters / Converters
- White Goods



$$L_X = L_{Spec.} \cdot 2^{\frac{T_o - T_X}{10}}$$

$$L = L_R \cdot 2.89 \cdot 2^{\frac{T_o - T_X}{10}} \cdot 2^{\frac{\Delta T_M - \Delta T_M \left(\frac{I_{appl}}{I_{spec}} \right)^2}{5}}$$

$$L = L_R \cdot 1.5^{\frac{135^\circ C - T_X}{10}} \cdot 2^{\frac{\Delta T_M - \Delta T_M \left(\frac{I_{appl}}{I_{spec}} \right)^2}{7.5}}$$

Power Supplies

- AC/DC, DC/DC
- Programmable LED Drivers
- Industrial, Medical, Railway



Electromechanic

- Push pull connectors
- Flat cables
- IDC PCB Connectors
- Cable assemblies
- Terminal Blocks
- FFC connectors
- Switches
- Sensors
- I/O connectors
- Heat sinks
- Relays with forcibly guided contacts
- modular rectangular connectors



Wireless



Wireless and IoT

- Modules & Terminals
- NFC, Cellular, GNSS, Bluetooth, BLE, WiFi, Long & Shortrange,
- LORA, SIGFOX, Wireless M-bus
- Connectivity / SIM Cards
- SIM and Data Management / Cloud Services
- Accessories
- Premium Design Support (Drivers, Design Review, etc.)
- Evalboards, Firmware-support...



Embedded Computing



Computer on Modules

- COMe, SMARC, SOM, Q Seven, others

Single Board Computer

- pITX 2.5", 3.5", EPIC, PC/104

Industrial Motherboards

- mITX, μ ATX, ATX, FLEX

Compact PCI

- Parallel, Serial, Backplane, Cases

Gateway/Edge Computing

- Industrial Computer for IoT Applications

Box PC's

- Entry Level, High End, scalable, fanless

Rugged Tablet Computer

- Size 5.7", 7", 11.6"

Transportation PC's and HMI's

- EN50155 certified

Rackmount/Embedded Server

- 1U, 2U, 4U, Special Version

Cloud Server

- High End, up to 40Gb/s, 128 Cores



Embedded Peripherals



Input Devices

- Keyboard, Mouse, Trackball, Card Reader
- Industrial, Medical, Marine, IP65-IP68



Memories

- Flash Storage, DRAM
- Industrial, -40...+85 °C



Peripheral Cards

- Storage Expansion, Display Card, Communication Modules
- Frame Grabber, Graphic Card



Power Supplies

- Open Frame, DIN-Rail, ATX, UPS, DC/DC
- Industrial, Medical



IoT Solutions

- Router, Modem, Switch, PoE, Gateway, Connectivity Service (Cloud), SIM Card, Monitoring



Display

Noritake-iron®

WINSTAR

Eink

A4EON®
an ASUS assoc. co.

kontron

Industrial Monitors / HMI

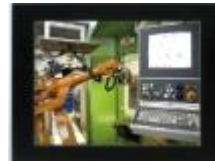
- Open frame
- Standard or metal housing
- Scaleable

Rugged Tablet Computer

- Size 5.7", 7", 11.6"
- Docking station, Accessories

Display Solutions/Accessories

- TFT/Touch Solutions, customized
- High brightness, sunlight readable
- VFD, with or w/o touch
- E-Paper
- LCD, VATN, OLED
- EMC Filter, noise reduction
- Cables, Driving Boards
- Resistive or capacitive touch



Semiconductor & Sensor



Semiconductors

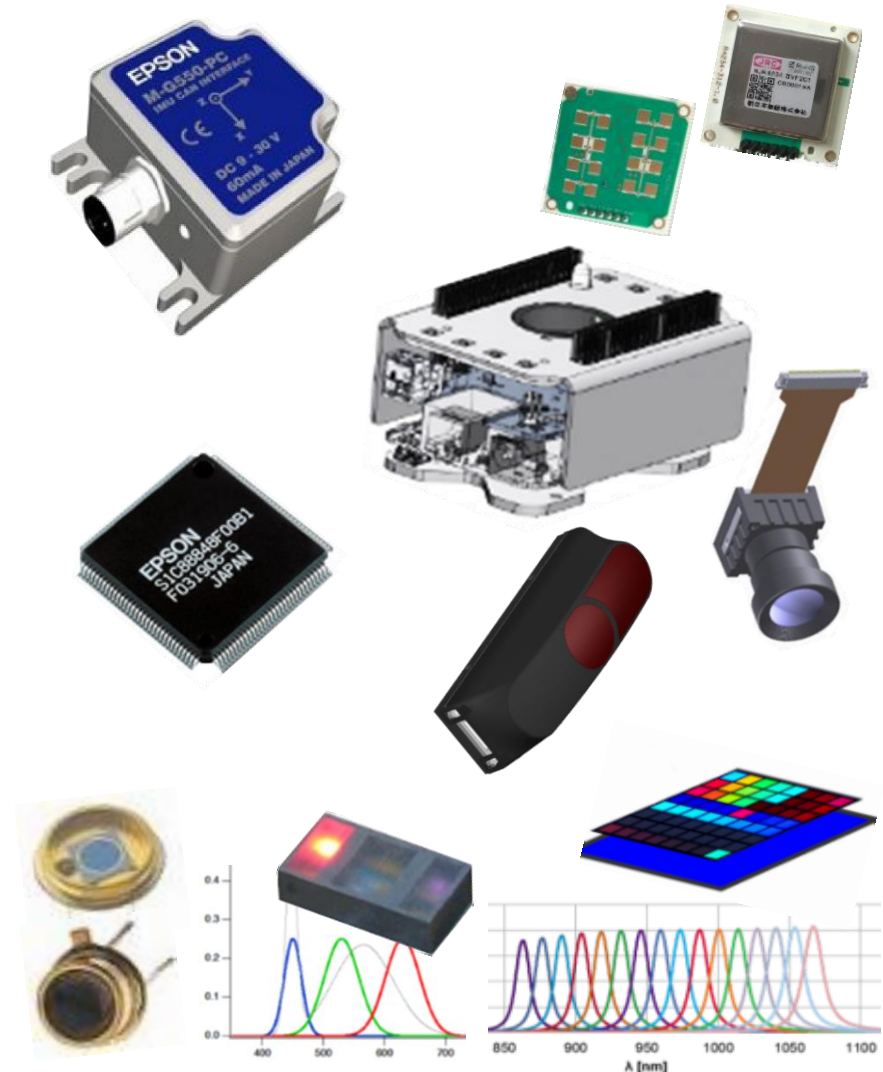
- CMOS Asics
- MCU's up to M0+
- ASSP's for LCD, EPD, USB, LED
- OP's, AFE, Powermanagement IC's
- Audio & Video, A/D
- RF Communication IC's & Moduls incl. LNA power amplifiers, switches
- Motor IC's
- Foundry Services

Sensors

- Gyros, IMU, Acceleration- & Inclinationometers
- Radar
- Heatflux, Laserbeam Allocator

Optoelectronics

- Si, InGaAs Diodes and Modules
- TOF Chips
- Range Finders, TOF Frame
- Distance Measuring Engines up to 1/4 VGA
- Multi Channel Detectors also as Custom COBPs



Timing Device



kHz

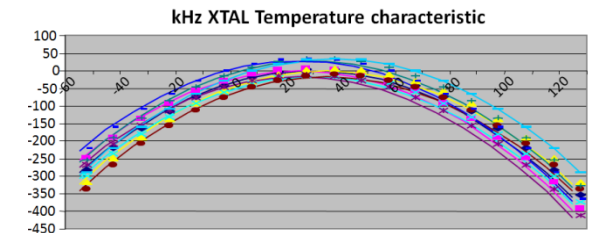
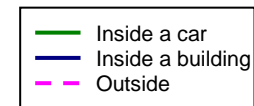
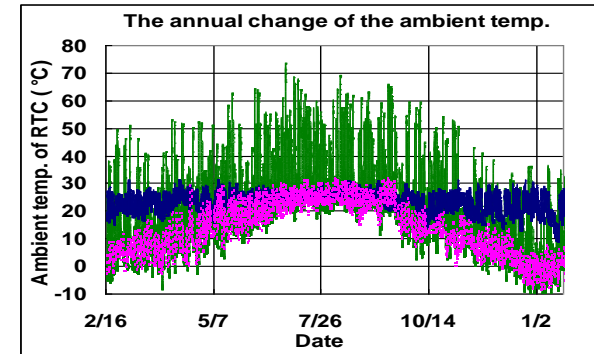
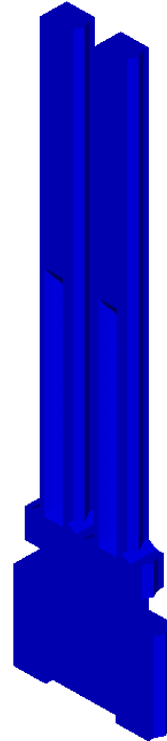
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|---------------|------------------------------|
| – Crystals | Lowest Cost |
| – Oscillators | Lowest Power (on) |
| – TCXO | Accurate, Small Low Power |

RTC

- | | |
|-----------------|--------------------------|
| – SPI, I2C | Best Accuracy |
| – AEC200 Series | Ultra Low Power (on/off) |
| | Clock, Calendar |
| | Alarm, Timer |
| | Battery switching |
| | Special Functions |

MHz

- Crystals
- Oscillators
- TCXO, VC-TCXO, OCXO
- SAW
- Programmable Series



Added value

Ineltro's offering and strength:

- Design-In / Project Support
- Customer specific Solutions
- Customer Trainings, Technology Events
- Logistic Services with local stock in Switzerland
 - Forecast
 - Consignment
 - KANBAN
- Value Added Services
 - Assembly
 - modifications
- Realizing your Ideas ...

