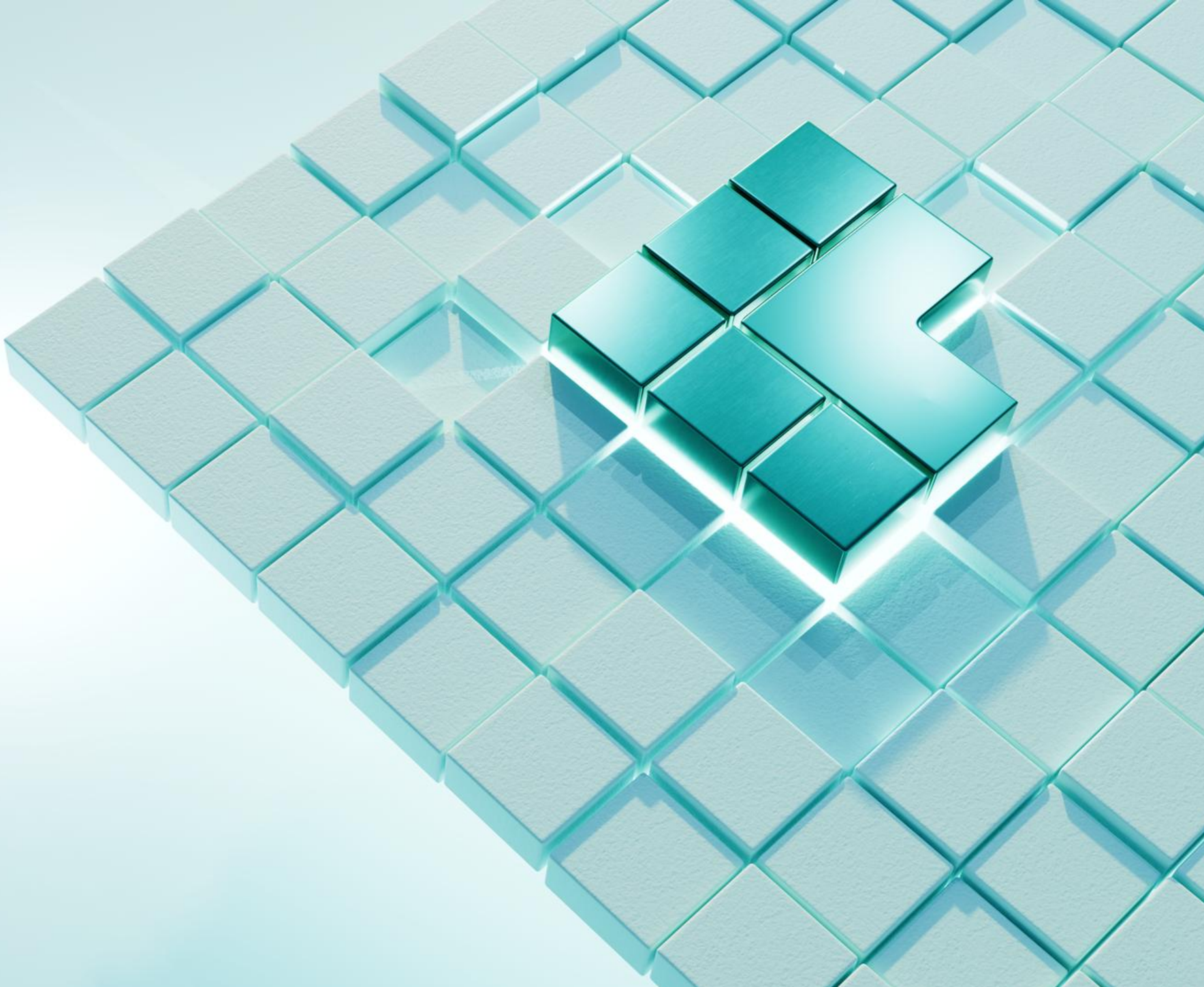
All-in-One Electronics Manufacturing Cluster



We are vertically integrated manufacturers

Mechanics

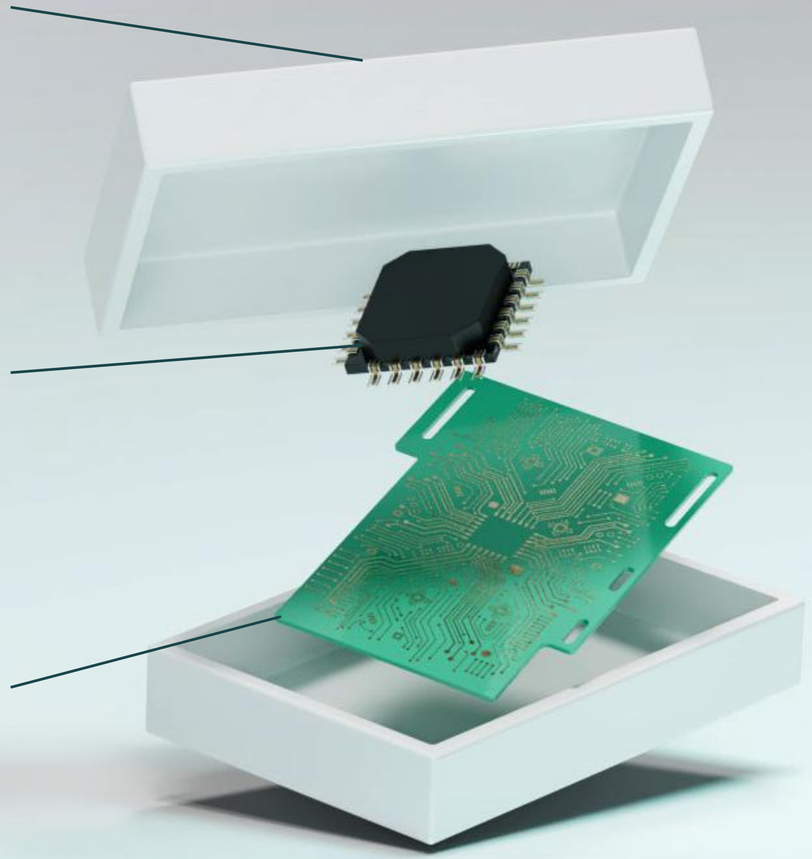
Plastic injection moulding and tooling with full-cycle services under one roof, automation that boosts efficiency, and material expertise meets smart tooling.

Electronics

Wide range of EMS services, from prototyping to high-volume serial production and final product box-building.

PCB

Innovative printing and personalization, vertical continuous plating (VCP), and advanced manufacturing technology.



TLT

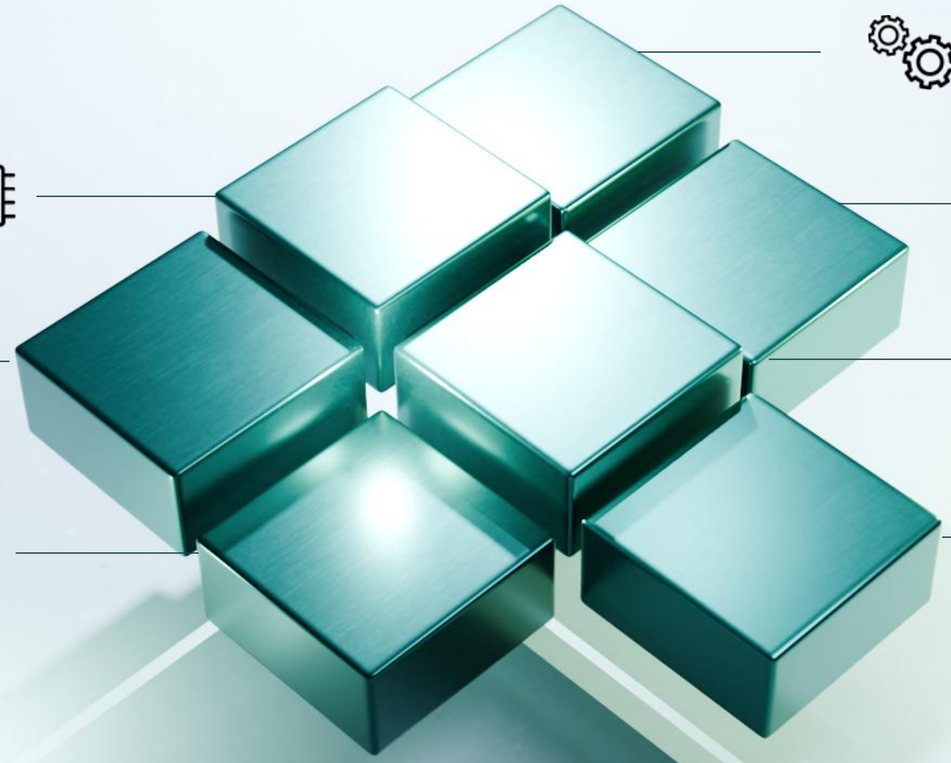
Our mission

Make it easier for our partner to bring products to life, faster and with confidence.

Our vision

To be the go-to partner for full-service manufacturing. All you need, in one place. Close, fast, reliable.

Industries that we operate in

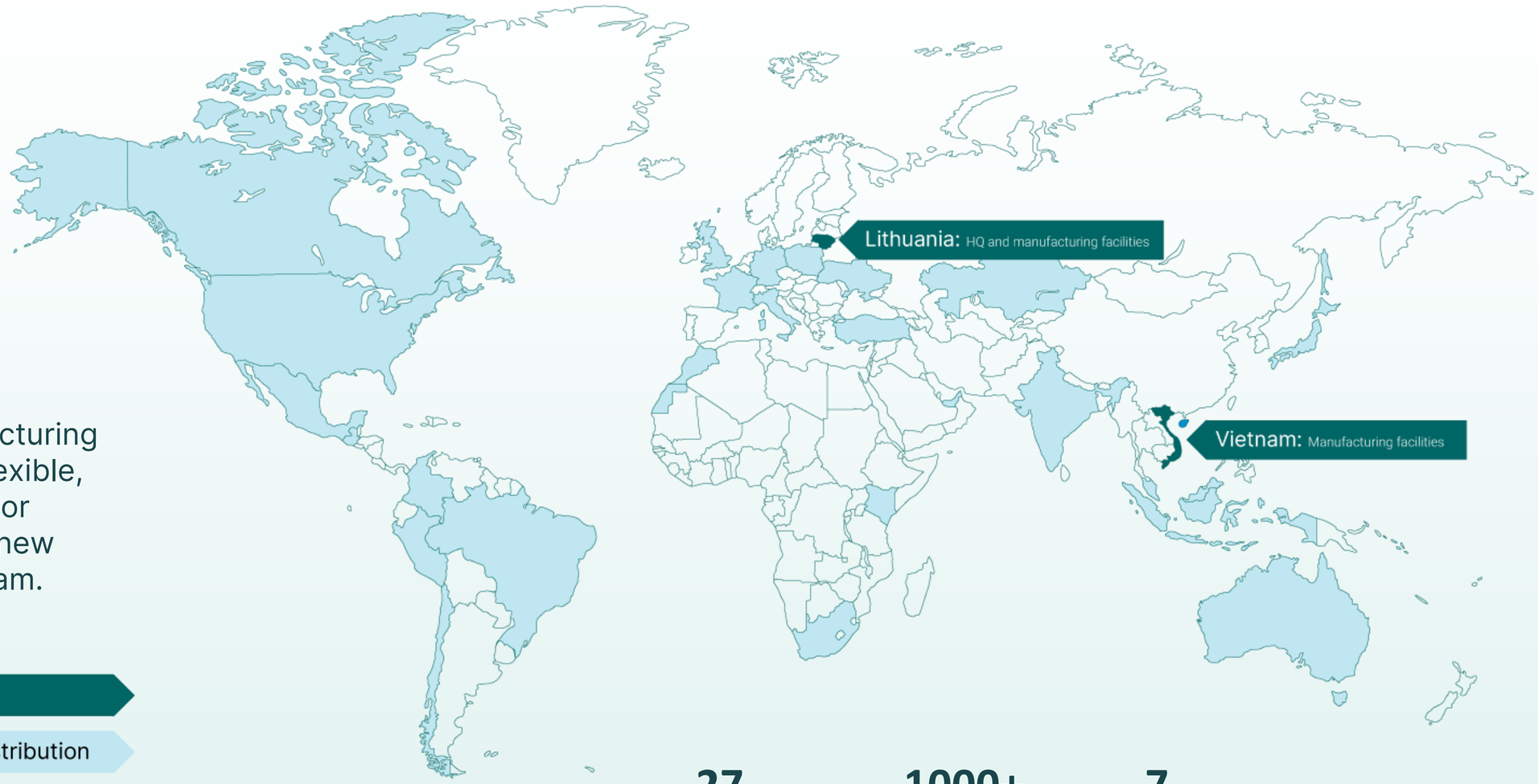


- Industrial & Automation
- Sensor Electronics
- Medical
- Consumer Electronics
- Energy & Charging Solutions
- Security & Communication
- Defense Aerospace

TLT

Global reach

TLT is a trusted manufacturing partner, offering fast, flexible, and secure production for clients worldwide, with new facility planned in Vietnam.



Manufacturing facilities

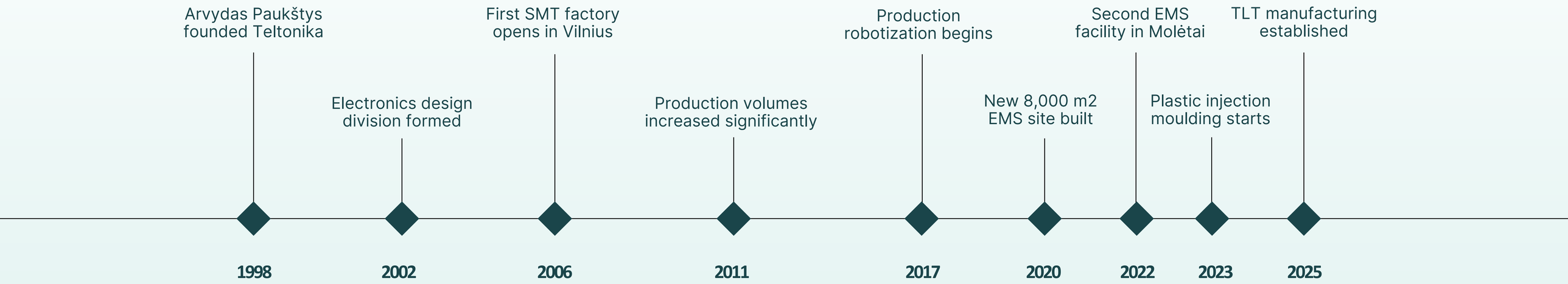
Business development and distribution

27
years of manufacturing knowledge

1000+
employees

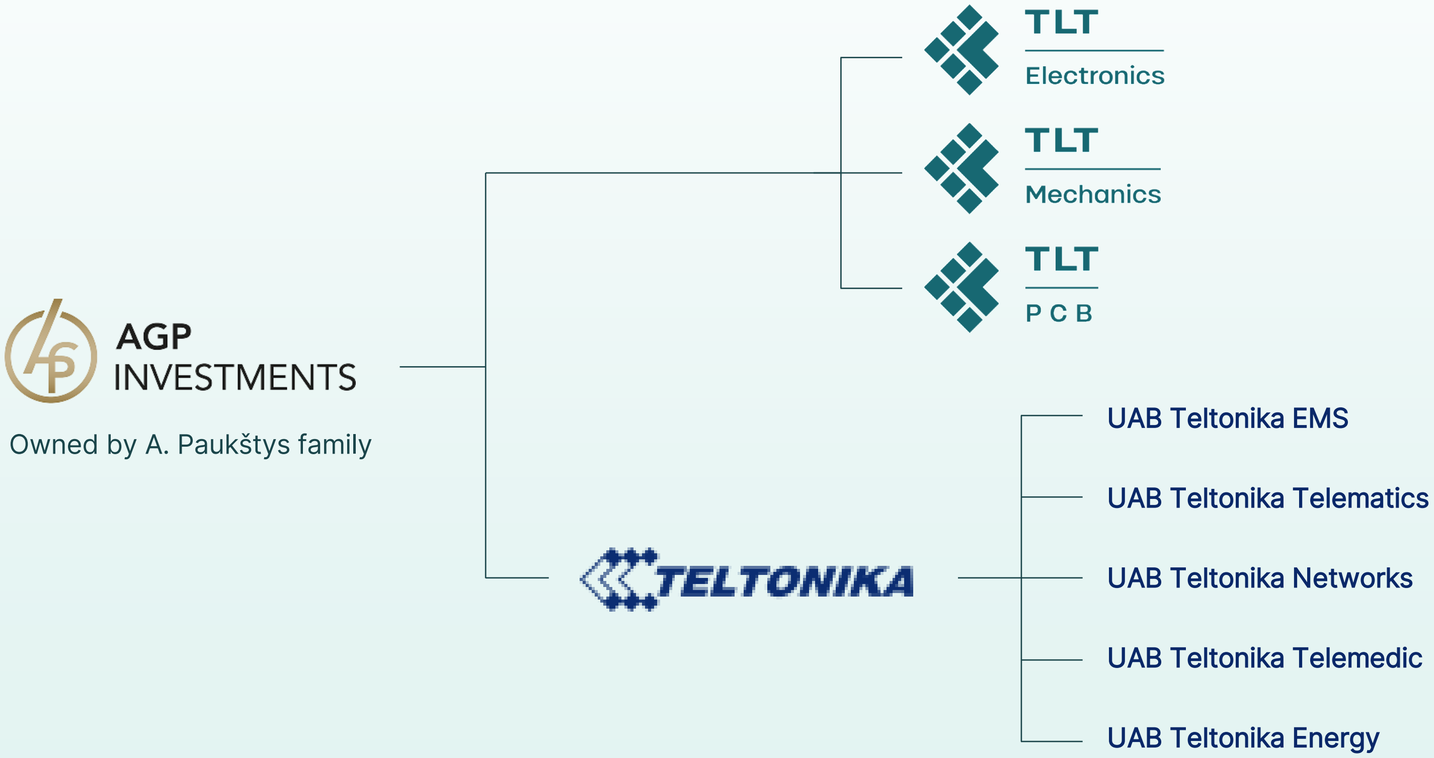
7
manufacturing facilities

History wall



TLT Manufacturing establishment

Our focus is on being a trusted manufacturing partner



TLT

Our current manufacturing capabilities

7 700 000
IoT devices production in 2024

8
SMT LINES

1000+
EMPLOYEES

High-Tech-Hill Technology park Vilnius April 2025

1. EMS plant (existing facility)
2. Electronics assembly plant
3. Electronic manufacturing facility
4. Printed circuit board (PCB) factory
5. Plastic and mechanical components manufacturing facility
6. Vilnius Airport

2X

Larger electronics assembly and manufacturing area compared to our current one

40M

Products per year additional production capacity ensure shorter manufacturing time

Plastic injection moulding, tooling & mechanical parts facility

Opening in Q3 2025

- Size: 27 100 m²
- 80 plastic injection machines
- Material expertise
- 300 specialists

TLT

Materials and software

Materials (plastics):

- Conventional (PP, HDPE, PS, TPE, TPU, SEBS, NBR)
- Technical (ABS, PC, PMMA, PPO, PPS, PSU, PEEK)

Advanced software solutions:

- Siemens NX 12 (3D modelling, simulation)
- Mastercam (CNC programming)
- Arburg ALS (production management, quality control)

TLT

Equipment

Moulding

- Arburg servo-electric machines featuring 5 & 6-axis robots
- Product weight capabilities ranging from 0.3 g to 1.1 kg
- Tonnage: 40-150 tones

Metalworking

- GF CNC milling (4-axis),
- Japanese grinding & turning machines (accuracy up to 1 nm)

TLT

Automation

- Implementation of innovative automation solutions
- AGV systems deployed for efficient product transport, storage, and production lines

TLT Mechanics Certification plan

By end of 2025 we’re planning to implement

- ISO90001
- ISO14001
- ISO45001

In 2026 our plan is to implement

- ISO13485

TLT

Now in progress

- Precision measurement laboratories
- Clean room
- Sub-assembly services
- High-precision plastic injection moulds manufacturing
- Fully automated production processes
- Headcount growth up to 300

New PCB factory in Europe

Opening in Q3 2025

- Manufacturing area: 33 000 m²
- Capacity: to produce up to 1,000 square meters of bare PCBs per day. (3500 WP)
- Innovation laboratory
- 250 specialists

TLT

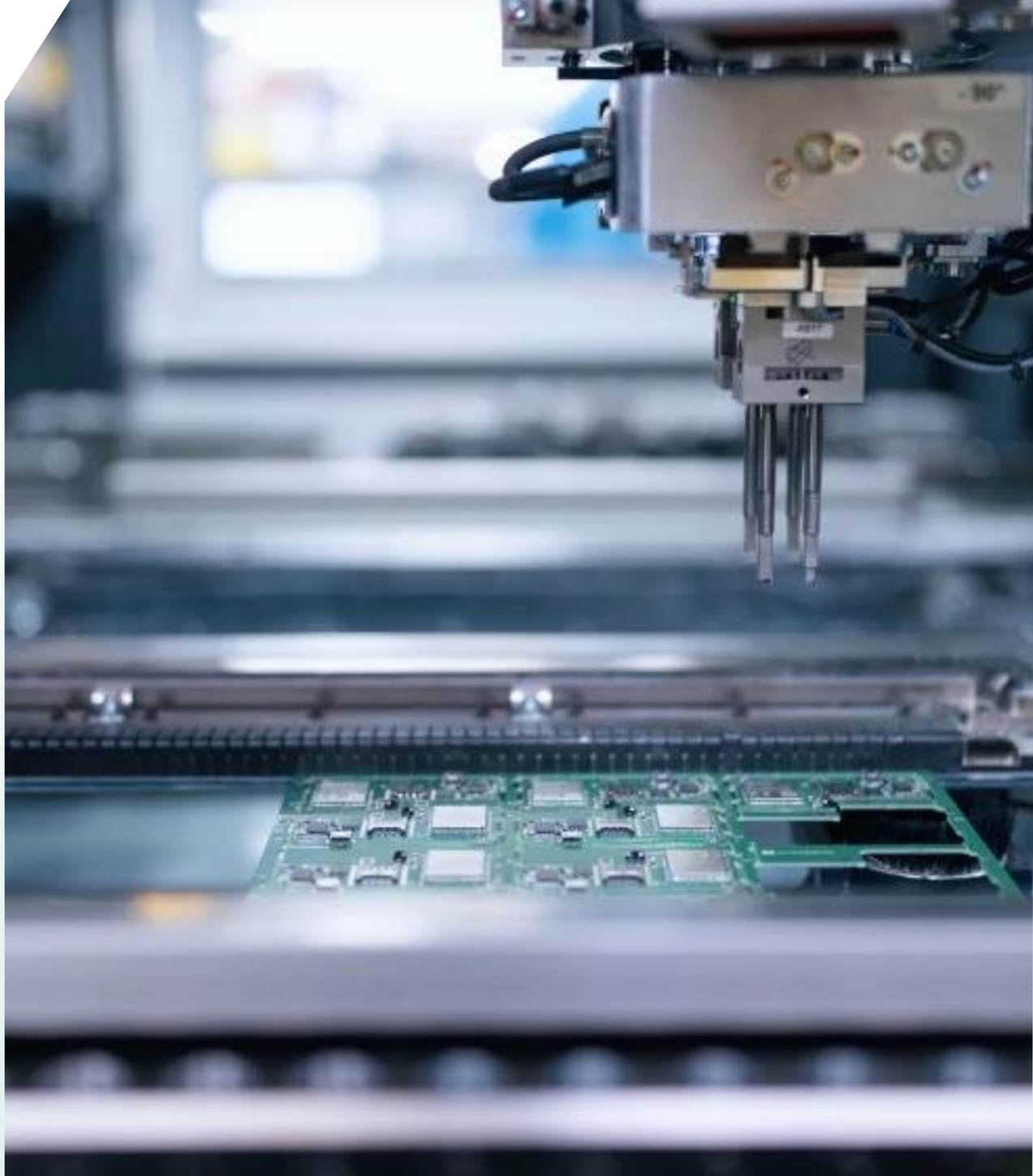
Technology

Specialising in a wide range of printed circuit boards:

- Multi-layer and double-sided designs
- Advanced HDI/SBU boards
- Future plans: flexible, rigid flexible PCBs

Capable of producing prototypes and complex boards

Initial layer count up to 8 layers, with capability for over 32 layers
Copper thickness options from 17µm to 210µm



TLT

Technical abilities

Track & Gap	min Track to Track (TT)/Track to Pad (TP)/Pad to Pad (PP), um	30
	min Track Width (MTW), um	30
Annular Ring	min Outer Layer Annular Ring, um	50
	min Inner Layer Annular Ring, um	25
Hole Diameter	min Mechanical drilling, um	150
	min Laser drilling, um	80
Plating	min Plated through hole, um	20
	min Plated blind and burried, um	12
	min Buried cores, um	13
Build up	max. PCB thickness, mm	*3.2+
	max number of PCB layers	*20+
*Contact the Technical Department if your values exceed the specified limits		

Additional information

Maximum PCB dimensions : 475x550
Soldermask : Electra EMJ110
Via plugging : Taiyo UVHP-100
Resin filling : THP-100 DX1 DR-F
Legend printing : Digital PCB Legent Printing Inkjet System „JetRite“
Finishing : ENIG, OSP

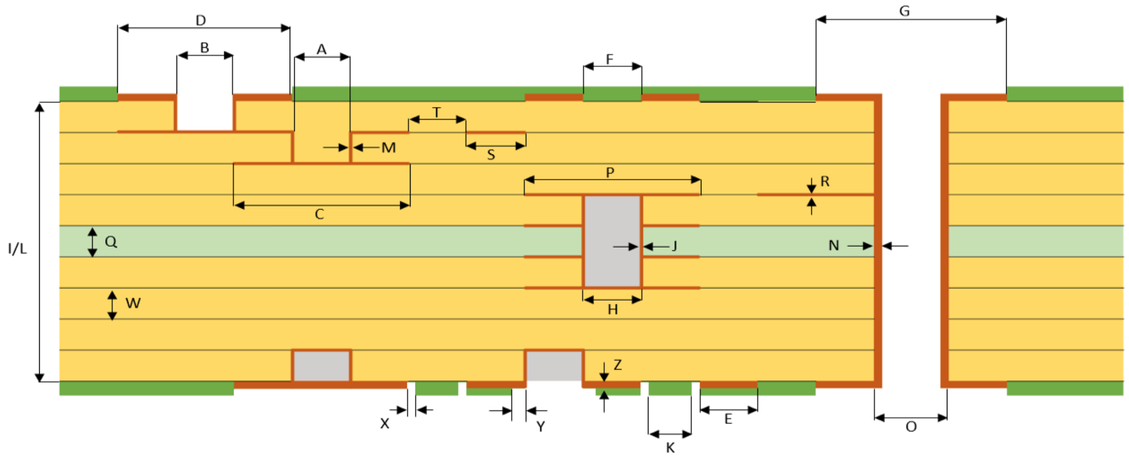
Base materials

Standard FR4 halogen free laminates: TG158 VT-441V
Prepregs : VT-441V

Technical abilities

A/B	Min. Laser via	80 um
C/D	Min. Annular ring on laser via	50 um
E/F	Min. Line/space outer layer	30 um
G/P	Min. Annular ring on Burried hole and PTH	100 um
H/O min	Min. Mech. Plated Through Hole	150 um
H max	Max. Plated Through Hole	Unlimited
O max	Max. Plated Burried Hole	AR 8:1
I min	Min. thickness on 2 Layer board	136 um
I max	Max. thickness on Multi layer board	*3.2mm+
L	Max. No. of Layers	*20+
M	Min. Cu thickness in laser/blind vias	12 um
J/N	Min Cu thickness in Burried and Through vias	20 um
Q	Min. thickness rigid base material	100 um
S/T	Min. line/space inner layer	30 um
R	Final copper thickness inner layer	70 um
Z	Final copper thickness outer layer	210 um
W	Min. prepreg thickness	78um
Y	Min. solder mask opening on vias	51 um
K	Min. solder mask dam	100 um
X	Min. solder mask clearance	51 um

Design parameters



TLT

Engineered for Excellence

- Equipped with highly automated machinery for efficient production
- Commitment to delivering quality with every product
- Internal laboratory for quality checking

TLT

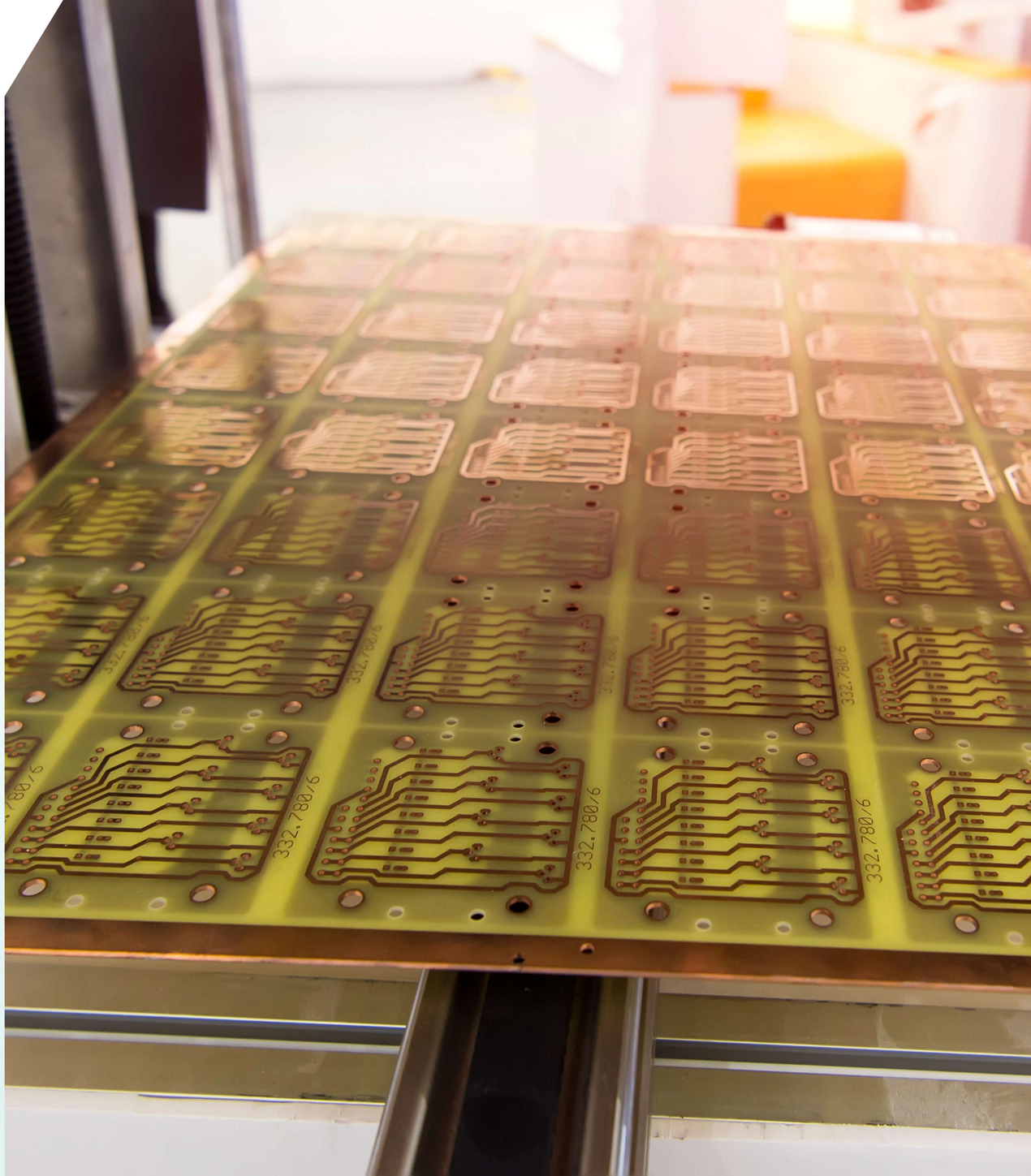
Innovative printing for personalised touch

- State-of-the-art solder mask InkJet printing technology
- Flexibility to produce 1 board or 1,000 without changing cost
- Eco-friendly process with reduced chemical usage
- Precise printing options available, including DMC codes and serial numbers

TLT

Vertical continuous plating

- High plating uniformity
- Capable of producing prototypes and complex board High aspect ratio
- Closed chambers for good work environment
- High throughput



TLT

Our Innovation Lab

- Chemical baths
- Cross-section and mechanical tests
- Thermal cycling and storage simulation
- Contaminometer

TLT

Future proof equipment

We didn’t compromise when it came to machinery

- MDI (direct imaging) is state of the art extremely fast, accurate, and energy efficient
- CNC drilling and pressing are also the latest versions precise, scalable, and highly repeatable

Electronics assembly plant

Opening in Q3 2025

- Size: 33 000 sq.m.
- High automatization
- From prototypes to large volume production
- Intellectual property security

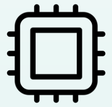
Value creation model

Commodity consolidation

Consolidated TLT spend for preferred suppliers

Alternative solutions

Offer alternate options and trade-offs, competitive quotes to achieve cost targets



Desgin for supply chain (DFSC)

Preferred Suppliers on new designs, involvement in Dfx to reduce risk, leadtime & cost

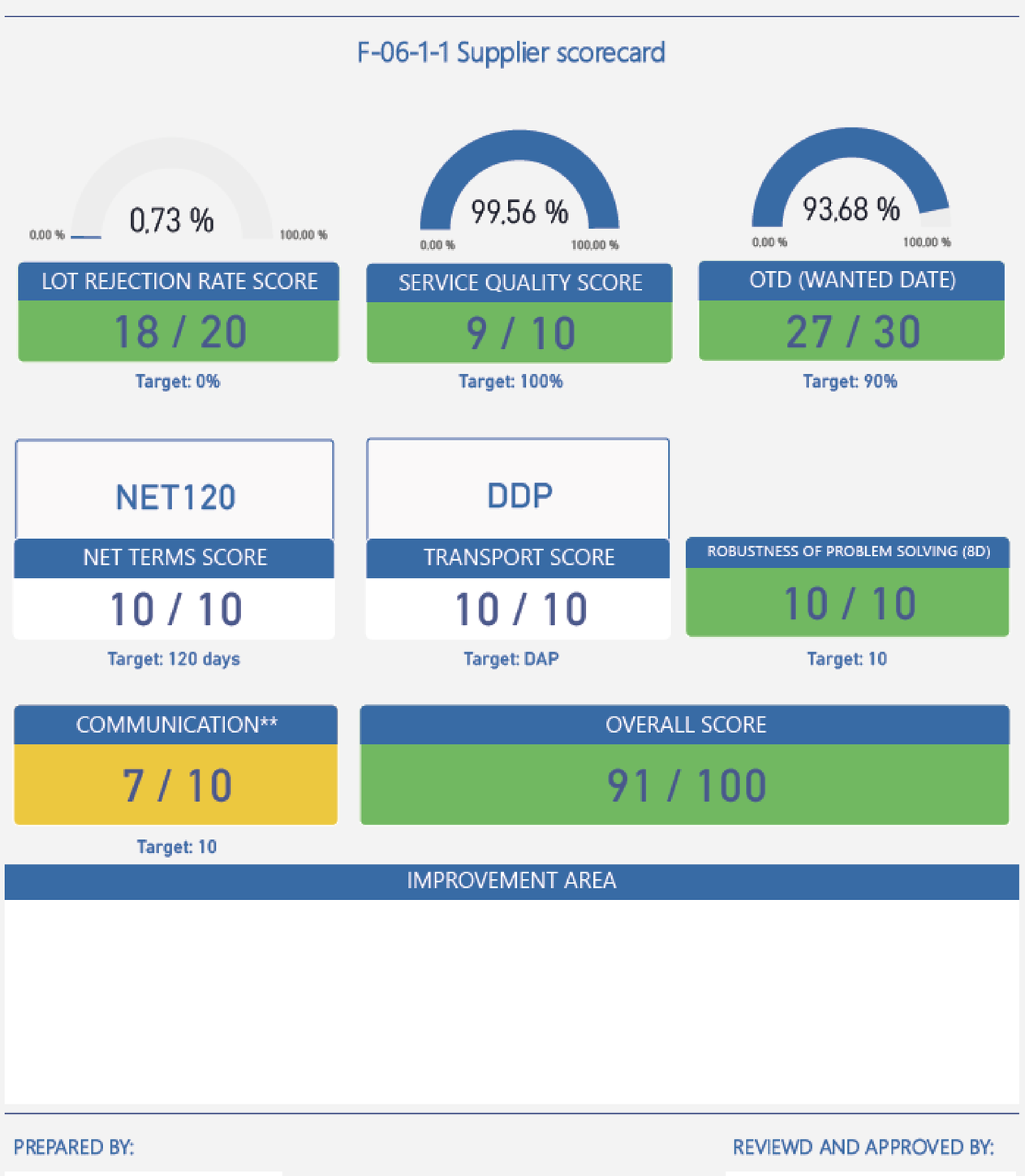
Risk assessment and mitigation

Risk assesment and mitigation solutions, dual sourcing opportunity identification

Supplier management

Supplier performance evaluations

- Lot rejection rate
- Service quality
- On time delivery
- Payment terms
- Logistics terms
- Robustness of problem solving (8d)
- Communication



TLT

Scaling growth with automation

Our partner companies grow by embracing automation, requiring fewer human resources while increasing efficiency and scalability.

- Testing robots
- Box build robots
- Packaging robots

Current testing capacity

Functional testing of

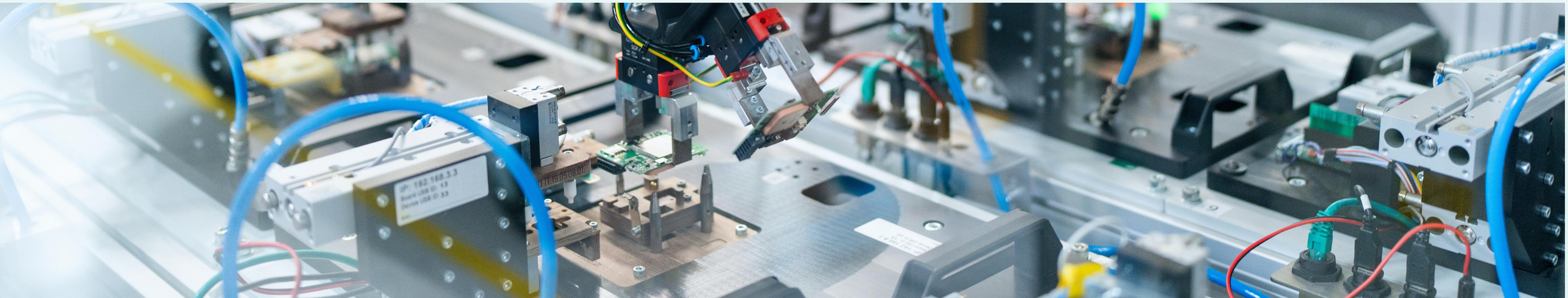
- Analogue and digital I/O;
- RS232 and CAN communication;
- Mobile network, Bluetooth (R&S CMW500);
- WIFI (Litepoint IQXEL);

Additional operations:

- Automated PCB handling;
- Flashing of devices (J-link);
- End of line testing;
- Testing inside RF chambers;

Achieved test parameters:

- Average test time – 90-180s;
- Automated handling time – 12s;
- Average FPY – 95%;
- Estimated investments >3 000 000 EUR



Planned future testing capacity

- Manual and in-line ICT testing stations;
- Modular automated functional testing fixture;
- In-line pallet testing solutions;
- Battery testing solution to ensure battery health.

Our ODM capabilities include

- Design for manufacturing (DFM)
- Design for testing (DFT)
- Custom testing equipment development
- End-to-End Product Development

EMS – non production staff

Sourcing
43

R&D
26

Quality
31

Steady year-on-year growth

*Teltonika IoT Group numbers; approx. 50% TLT in 2025

General information – Status August 2025

2 electronics assembly facilities:

- Vilnius 8 000 m^2
  Molėtai 11 000 m^2
- 11 SMT lines (FUJI)
- 8 THT lines (ERSA selective)
- Highest quality machinery park
- 3 shifts; 5 days/week (7 days possible)

Total employees: 1000+

PCB manufacturing facility

- Facility space is established and prepared
- Machines are installed and some are already running
- Latest technologies are in place, including soldermask printing, laboratories, and high-speed testing lines

Plastic and mechanical parts facility

- 3 000 m^2
- 16 Plastic injection machines
- Full capacity 40 specialists
- Moving into new facility in end of August

General information – Planned 2-3 years

3 electronics assembly facilities

- Vilnius 30 700 m^2
  Molėtai 11 000 m^2
- 22 SMT lines (FUJI)
- 16 THT lines (ERSA selective)
- Highest quality machinery park
- Total employees: 1 200+

PCB manufacturing facility

- 33 000 m^2
- Producing 3500 WP per day
- Multi-layer and
  double-sided designs
- Advanced HDI/SBU boards
- Capable of producing prototypes
  and complex board

Total employees: 250

Plastic and mechanical parts facility

- 22 100 m^2
- Capacity to work with up to 80 plastic injection machines
- Material experience (Convetional plastic, rubbers, technical plastics)
- Implementation of innovative automation solutions
- AGV systems deployed for efficient product transport, storage, and production lines

Total employees: 300

Supply chain management

Sourcing & supply offices:

- Vilnius, Molėtai | LITHUANIA
- Hong Kong | CHINA

  1.3B pcs Annually

  2024 > 120M EUR

Quality assurance

ISO 9001:2015

ISO 9001:2015
Quality service sertification

ISO 14001:2015

ISO 14001:2015
Environmental system certification

ISO 45001:2018

ISO 45001:2018
Safety system certification

ISO 27001:2022

ISO 27001:2022
Information security management system

ISO 13485:2016

ISO 13485:2016
Quality system certification

Member of:

IPC Member

eipc

AIAG member

TLT

Roadmap to IATF 16949:2016 certification

AQAP 2110 (NATO) Certification

2025: Implementation of AQAP 2110 requirements is planned

In progress

2025: Conduct GAP assessment

In progress

2027: Target certification

Planned after achieving Automotive standard

Cybersecurity: TISAX LEVEL 2 Implementation

ISO 27001

In place

TISAX initiative is underway, aiming for completion in

2026

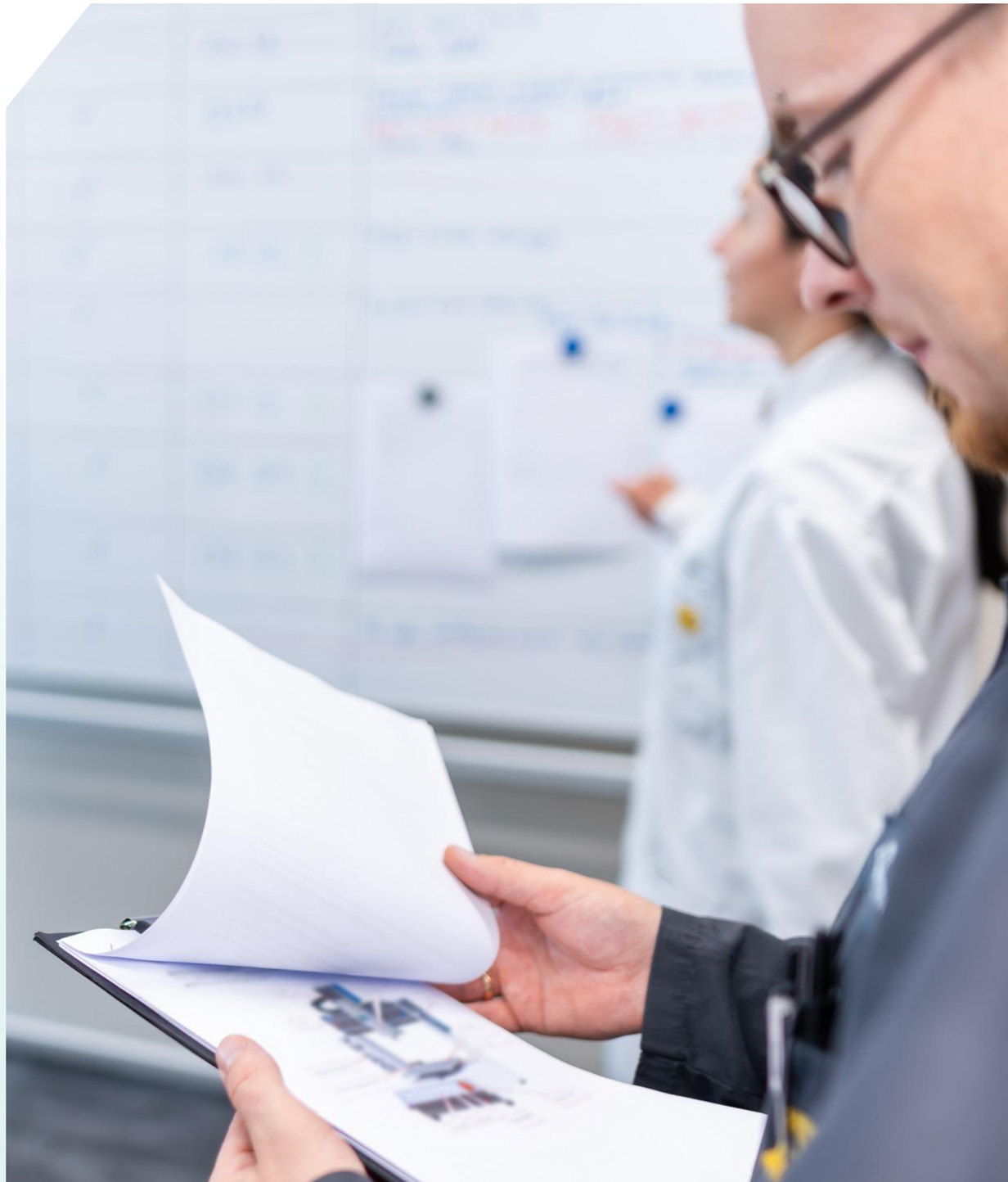
Timeline details to follow

Customer Focus Team

Business Development Manager

Key Account Manager

- Quality Manager
- Sourcing Specialist
- Planning & Logistics
- NPI Engineer
- Purchasing Specialist



TLT

Customer onboarding journey

1

Communication and evaluation

- Understand customer needs and assess feasibility.
- Customer Inquiry & NDA
- Design & BOM Submission:
- Technical Feasibility & Quotation
- Regulatory & Compliance Check

2

Product samples

- Develop and refine a prototype for production readiness.
- NPI
- Purchasing
- Planning
- Quality
- Manufacturing

3

Serial production

- Validate production and ensure quality before mass manufacturing.
- Terms & Conditions
- Pilot Run
- Quality Control
- Compliance
- Customer Approval

4

Mass production

- Scale production and ensure post-sales support.
- Full-Scale Manufacturing Begins
- Packaging & Logistics
- Final Delivery & Customer Acceptance
- Post-Sales Support & Improvement

Commitment to society

Environmental protection
Our product packaging is made from recycled materials.

Philanthropy
We donate €1 million annually for social causes and aid.

Sustainability
Our production focuses on reducing environmental impact.

TLT

Why us?

40M	Products per year additional production capacity ensure shorter manufacturing time
101,800 m²	Manufacturing area. Larger electronics assembly and manufacturing area compared to our current one
Innovation	PCB plant will the most advanced of its kind in Europe
Security	We will be able to further protect our and our customers intellectual property
Independence	As we produce more and more components ourselves, we become more independent from 3rd party suppliers


Visit us for a first hand look to see how vertical integration works