

ICTürkiye2026 · International Brokerage Event · 29 September 2026

FPGA Design and Embedded AI Hardware Capability

Available to consortia whose proposal needs custom electronics built

Kuantek Elektronik A.Ş. · Bilişim Vadisi, Gebze, Türkiye

Digital and Enabling
Technologies

Advanced Manufacturing and
Materials

Energy Systems and Renewables

Transport and Mobility

What we build

FPGA and SoC design

Efinix Trion, Topaz and Titanium;
Altera; AMD-Xilinx including RFSoc.
Board design, integration and small-series production.

RTL implementation

Image signal processing chains and
quantised CNN inference accelerators
written as hardware, not ported to it.

Data acquisition

High-channel-count front-ends with
real-time streaming and hardware-level
channel synchronisation.

Electro-optics

LWIR and visible-band camera cores,
lens–detector matching and detection
range modelling.

Measurement discipline

Latency characterised through an
FPGA-internal trigger methodology —
figures we demonstrate rather than
assert.

Connectivity and deployment

IoT gateways, energy analysers, remote
I/O and data loggers; Modbus, CAN and
EtherCAT integration.

How we work inside a project

1

Work package partner

- Owns a hardware or edge-processing work package
- Deliverables, milestones and integration responsibility
- Contributes to technical reporting and reviews

2

Demonstrator supplier

- Builds pilot units to the consortium's specification
- Supports installation and field validation
- Iterates hardware between pilot campaigns

3

FSTP supplier

- Technology supplier within FSTP schemes
- Suited to projects distributing third-party support
- Lighter contractual footprint than full partnership

We join consortia — we do not seek coordinator roles.

Track record

32+

R&D project applications submitted

14

projects completed

8

commercialised products

- Authorised Efinix FPGA distributor for Türkiye — direct silicon vendor access for the consortium.
- Industrial products already in the field: IoT gateways, energy analysers, remote I/O modules and data loggers.
- Electro-optical system engineering, from sensor and optics specification through to latency characterisation.
- Founded and led by academic engineers, with a working relationship with Kocaeli University's ECE department.

Where we fit

Digital and Enabling Technologies

Custom silicon-adjacent hardware, on-device inference, real-time processing

Advanced Manufacturing and Materials

Machine vision and inspection hardware retrofittable to existing lines

Energy Systems and Renewables

Monitoring, metering and thermal inspection of generation and distribution assets

Transport and Mobility

Multi-band perception for vessels, terminals and infrastructure

Assoc. Prof. Dr. Anıl Çelebi — Managing Partner, Kuantek Elektronik A.Ş. · Kocaeli University

Request a bilateral meeting on the ICTürkiye2026 platform — matchmaking stays open into Q1 2027.