

# HARDWARE

## DEVELOPMENT CAPABILITIES

[www.ektos.net](http://www.ektos.net)

### Knowledge Areas

Digital electronics

Analogue electronics

Power electronics:

(AC/DC, DC/DC, DC/AC)  
up to 15kW

RF and Antennas HF

EMC (emission, immunity)

Electrical Safety

Functional Safety

Battery Power  
(10+ years battery life)

Signal Integrity: DDR4

HDMI USB-3.1 LVDS

### Connectivity

USB (2.0, 3.0, 3.1)

Ethernet (1Gb) Wi-Fi 2.4/5G

Bluetooth and BLE SigFox

LoRa GSM, 2/3/4G

NB-IoT LTE-M MiWi

ZigBee Z-Wave NFC

### PCB Design

Up to 12 layers HDI

Rigid/Flex/Flex-Rigid

Alu-based HDI fine-pitch

blind and buried vias

PCB antennas

RF impedance

High power:

PCBs with up to 210u copper

### Domains

Sensors and IoT

Power Electronics

Battery Power

General Purpose controllers

Consumer Electronics

Automotive

Industrial Electronics

### Simulation & Modeling

LTSpice Micro-Cap

PSpice Multisim

Lifetime and MTBF  
(MIL-HDBK-217F)

Battery Life estimation,  
optimization

### Approvals & Compliance

EMC Radio Safety

### CADs

OrCad KiCAD PADS

Altium Designer