TECHNICAL EXPERTISE & PROJECT DELIVERY MATRIX

Domain	Specialist "Surge Capacity" Deliverables	Strategic Value (The "Fox" Factor)
Electronics & Hardware Systems	**Board-Level Architecture:** Power-path design, mixed-signal interfaces, embedded bring-up, and stabilisation of complex hardware platforms.	**System Coherence:** Establishes a stable electronics foundation for PMIC, ADC, and power-stage validation across full product cycles.
Post-Silicon Validation (V&V)	**Expert Bring-up & Triage:** Full characterisation of complex **PMU/PMIC** and **BOOST** devices. Expert in PVT corner validation and silicon-to-model correlation.	**Risk Mitigation:** Identifying architectural flaws during initial bring-up to prevent costly silicon re-spins and tape-out delays.
Precision Analogue & Mixed-Signal	**ASIC & Sensor Interfaces:** Specialist in low-noise front-ends, **Delta-Sigma ADCs**, and MEMS sensor evaluation (pressure/inertial).	**Efficiency:** Optimising nanopower architectures for wearable and mobile display tech (**Apple/Dialog/Renesas** heritage).
Power Electronics & SiC	**High-Voltage Gate Drivers:** Validation and verification of **SiC/GaN Gate Drivers**. Verification of power stages for EV and industrial applications.	**Specialist Insight:** Deep understanding of high-frequency switching parasitics and thermal management in power modules.
System Diagnostics (The Fuchs)	**High-Level Debug:** Rapid root-cause analysis of non-obvious board-level parasitics and EMI/EMC issues that stall production.	**"The Fox" Intuition:** 25+ years of diagnostic memory to solve "unsolvable" hardware bugs that junior teams struggle to isolate.
Automation & Tooling	**Python/MATLAB Frameworks:** Development of robust, scalable test automation suites (Pytest/PyVISA) for accelerated characterisation.	**Speed to Market:** Replacing slow manual bench testing with automated suites to hit aggressive smartphone/consumer launch windows.

Engagement Standards

All technical deliverables are mapped to specific **Acceptance Criteria (AC)** defined at the start of the engagement. Whether operating under an **SOW** or **FTC**, I provide structured updates, validation reports, and raw data correlation to ensure full transparency of the "Silicon to System" status.

EMEA Engagement & Mobility

- **Dual Nationality (UK/EU):** Full mobility for on-site engagements across the UK and EU. Currently finalizing Greek passport documentation to further streamline cross-border deployments.
- **Tax Compliance:** Fully registered for VAT and Income Tax in Germany (2024/25 filings active) and operating via a compliant PSC/SOW framework in the UK (Outside IR35).
- **Coverage:** Available for Specialist Surge Capacity in the UK, DACH region, and wider EMEA markets.

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