

The 5 decisions that keep YOUR product alive for 30 years

THE SITUATION

In 1990, one of our distributors needed a temperature control it could sell in the US to his manufacturing customers (one of them could be you), so they could keep using it for decades. **The hard part was never the prototype. It was every unit and every run after it.**

THE FIVE DECISIONS — ONE PER STAGE OF THE WORK

1 Plan for the whole life, not the launch **PLAN & DEFINE**

You feel it as: the spec covered launch day, not year 25.

KELD: US certification and 30-year supply were in the plan from 1990 — not added later.

2 Give the board two test layers **PRODUCT DESIGN**

You feel it as: unit 1 works; unit 5,000 behaves differently and you cannot see why.

KELD: two test layers from day one — one common, one to check it under real load.

3 The advantage is in process, not a cheap line **PROCESS DESIGN**

You feel it as: the design was fine; the line was not, and the first batch showed it.

KELD: the strength is in process and layout — easy to build, easy to test, same result every unit.

4 Test under real loads before the first batch **VALIDATION**

You feel it as: the test lab found the problem too late, after the line was running.

KELD: validation ran under real operating loads, so risks were visible before production — not after.

5 Manage the product for 30 years, not one launch **PRODUCTION & LIFE**

You feel it as: a part is no longer made, or a standard changes — and you cannot ship.

KELD: when a part or a standard changed, it was managed before it could stop supply.

THE RESULT

30 yrs

IN PRODUCTION, SINCE 1990

<0.1%

RETURNS IN THREE DECADES

2025

RE-CERTIFIED · STILL SHIPPING

None of this was luck.

The 5 decisions are one method: **Advanced Product Quality Planning (APQP)**.

KELD uses it from the first idea and **keeps the product alive for its whole life** — for electronics that must work for years, not just at launch.

keld@keld.es

Polígono Empresarium, C/Lentisco, 15, 50720

La Cartuja Baja - Zaragoza, Spain

+34 976 42 90 99

www.keld.es