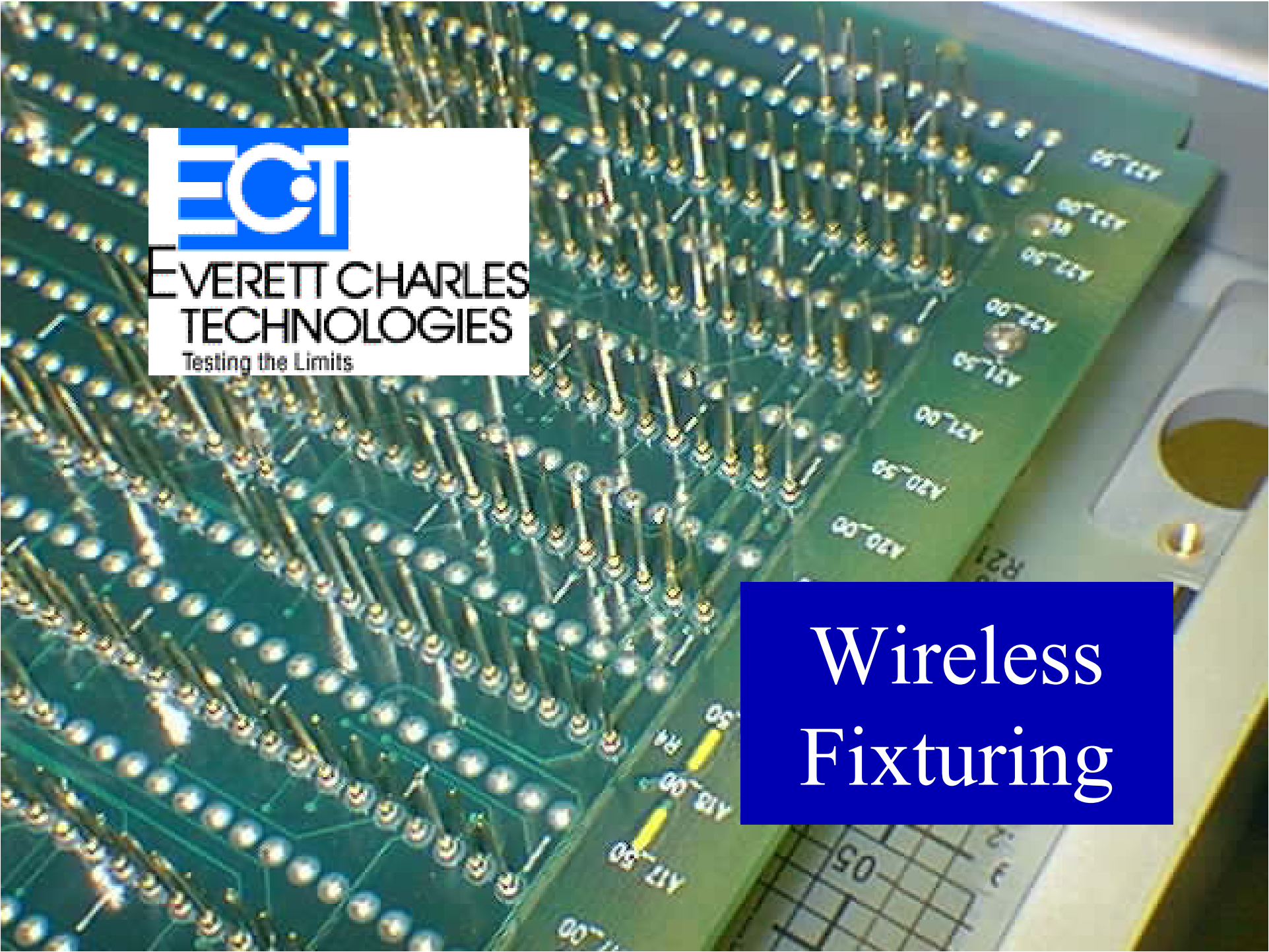




Wireless Fixturing



What is Wireless?

- A Printed Circuit Board replaces the insulated, 26-30awg solid wires normally used in fixtures
- Double Ended Probes replace standard wire-wrap receptacle/probe sets
 - One side accesses the interface printed circuit board (IPCB)
 - The other side contacts the PCBA to be tested
- These are the only significant part changes in a wireless fixture



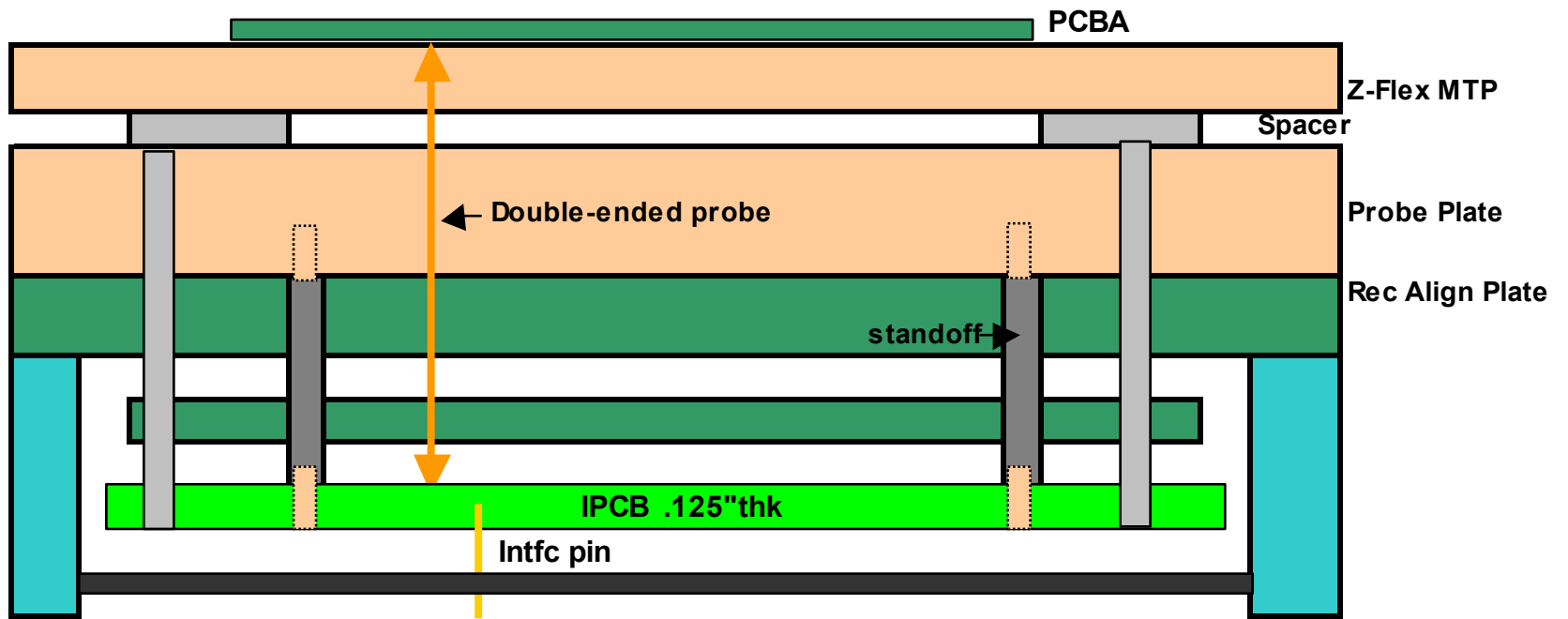
Advantages of Wireless

- No “Rat’s Nest” of Wires
- Improved Test Program Reliability
 - Same Results on any system
 - Copy Exact Fixture Duplication with no changes or tweaking needed to the test program
- Improved Signal Strength
 - GR228x fixtures have shorter trace connections than standard wires
- Faster Delivery on Duplicate Fixtures

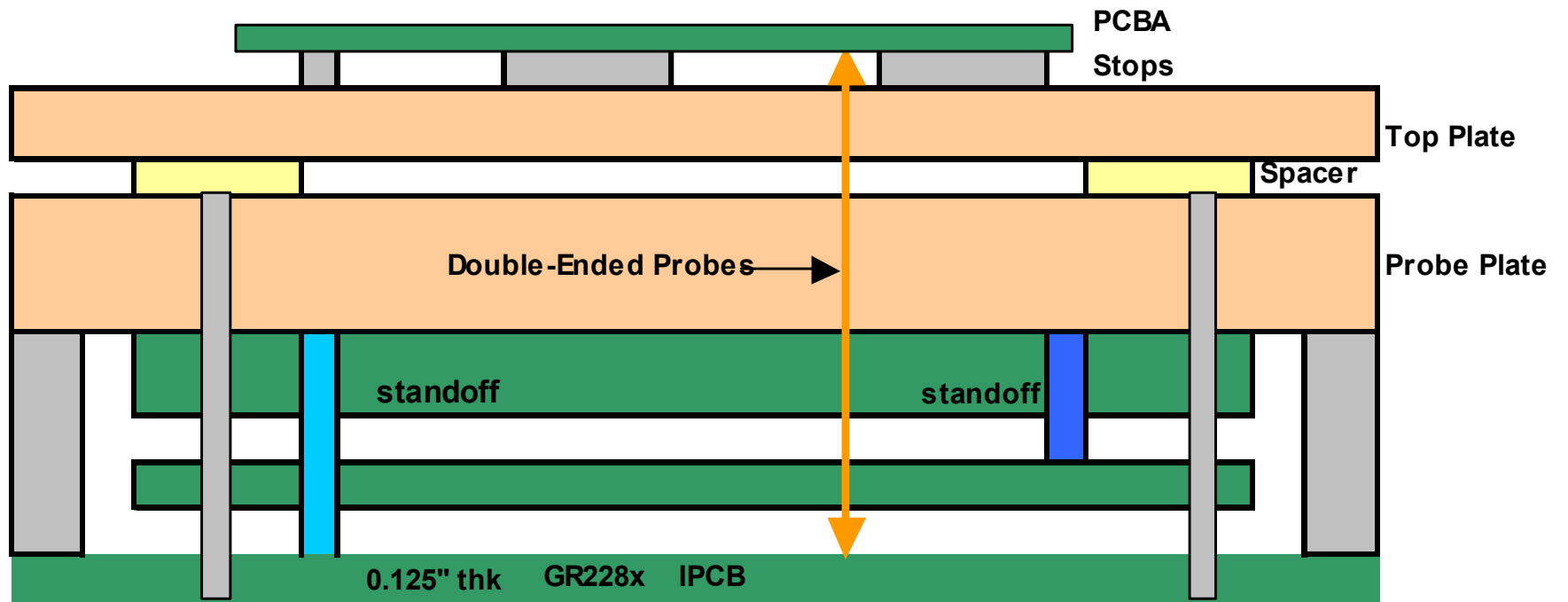
How it Works

- 307x or CAF created fixture files are used to design the IPCB
- ECT-STG and Harbor Electronics, our own world class bareboard manufacturers, fabricate and test the IPCB. The fixture is drilled and assembled in parallel to the IPCB fab
- The IPCB is assembled to the fixture
 - 307x requires 2nd operation to install and solder interface pins

Typical HP307 Wireless Fixture Stack-up



Typical GR228x Wireless Fixture Stack-up



Common ECOs

- IPCB designs includes ECO points connected to customer specified “extra” resources
- ECO Double ended receptacles are installed on the outer edges of the fixture that contact the ECO points on the IPCB
- Standard Receptacles/probes can be added and wire connected from receptacle to the ECO point on top of the probe plate
- For 307x, wire wrap jumpers can be added between “personality-pins” by removing the waffle plate

Disadvantages of Wireless?

Drawback

- Cost on first fixture is usually higher than a wired fixture
 - IPCB design and Fab Cost
 - Double ended rec/probe sets
- Delivery is based on lead time for design/fab

ECT advantage

- ECT has in-house board shop and solid relationships with outside board shops plus an in-house probe factory to be price competitive.
- ECT board shop committed to a 10 day delivery on all IPCB fabs after design