

REMATEK OPTIONS

1. **Test fixture:**
 - a. **ESD fixture:** top plate made of anti-static G10
 - b. **Quantum:** test fixture using socket-less X-Probes
 - c. **Wireless:** test fixture using a PCB instead of wires
 - d. **Alpha:** test fixture using low cost material, designed for short production
 - e. **Dual stage:** functional and in-circuit fixture in one
 - f. **Dual well:** test fixture with two vacuum well
 - g. **Mechanical:** test fixture for low probe count that uses a mechanical cover to compress probes
 - h. **Pneumatic:** test fixture that uses pneumatic cylinders to compress probes
 - i. **Gas cylinders:** fixture pan with gas struts w/wo locking device
 - j. **Original Agilent wire handles:** for Agilent 3070 fixtures
 - k. **Alum-a-grip handles:** for use with Alum-a-lift handling systems series I or II
2. **Engineering:**
 - a. **Board less:** process of building a complete test fixture without any physical board, customer supplying appropriate files
 - b. **Board stress analysis:** calculates resulting pressure applied to the UUT, the software uses spring probe force vs. hold down fingers to create a colored map
 - c. **Board stress measurements:** measures board flex using strain gauges installed on UUT, strain results are converted in deflection
 - d. **Debug program:** software that indicates test point location
3. **Hold down:**
 - a. **Molded gasket:** piece of ESD silicon based rubber molded to the shape of the UUT
 - b. **Vacuum box:** vacuum activated hard cover used to hold the UUT (iTech)
 - c. **Cover detector:** device using a magnetic switch to detect sealing lid is closed
 - d. **Overclamp:** mechanical clamp used to hold the UUT
4. **Top plate:**
 - a. **Top plate 200:** standard 0.200" thick G10 top plate
 - b. **Top plate 300:** rigid 0.300" thick top plate
 - c. **Guided top plate:** guided holes made in the top plate to help aligning probes
 - d. **Insert top plate:** removable guided portion of the top plate for easy probe access
 - e. **Ultratop:** gives more precision to the fixture by removing the spacers between the UUT and the top plate, routing of all bottom side components is necessary, guided top plate included
 - f. **Isolated vacuum:** system that permits vacuum when the sealing lid is opened, useful for accessing probes without removing top plate
 - g. **Vacuum release valve:** manual device to help air entry when vacuum is released
 - h. **Silkscreen:** writing applied to the top plate, or other surface, showing name and location of test points
 - i. **4 guide pins:** gives more precision and stability to the top plate
 - j. **U type handles on top plate:** to remove top plate
5. **Wiring:**

- a. **Ground plane**: copper clad sheet installed on the wiring side of the fixture to reduce noise interferences
 - b. **Twisted wires**: wire with a ground shield twisted around to reduce noise interferences
6. **Accessories:**
- a. **Testjet, VTEP, Opens Xpress, Multi-scan, etc**: device used to test for IC and connector open leads
 - b. **Side access**: device used to access horizontal components such as connectors
 - c. **Push button actuator**: manual, pneumatic or electric actuators to toggle UUT switches
 - d. **Light probes**: device used to detect presence and color of LEDs
 - e. **Light pipes**: fiber optic cables to transfer LED light to detectors
 - f. **Switch probe**: device used to detect presence of components
 - g. **Cycle counter**: count every fixture actuation
 - h. **Vacuum gauge**: indicates vacuum pressure
 - i. **Marker probe**: inscribes a small circle on the UUT at a chosen place
 - j. **Dust cover**: protects probes, can also be use to test vacuum
 - k. **Dust cover spot drilled**: dust cover with small marks indicating probe locations
 - l. **Shorting plate**: short all probes together for a short-test
 - m. **Precision plate**: shorting plate with a mask specially drilled following test pad dimension, used to verify test probe alignment
 - n. **Asymmetrical system for PCB location**: prevent installation of the UUT upside down
 - o. **Cage pins**: large pins, or blocks, installed on top plate to help locating UUT
 - p. **Engraved label**: UUT number identification
 - q. **Dust buster**: dust protection for fixture storage
7. **Documents:**
- a. **Probe plot**: shows the location, type and quantity of probes
 - b. **Node map**: shows the name and location of test points
 - c. **Board flex report**: shows the UUT flex under vacuum based on probe travel
 - d. **CD software**: CD-Rom including DrillCAD Light, fixture files, bill of material, terms of warranty, board stress result, debug program, etc.