

MAY 31, 1988

TEST REPORT # 013

CONTACT RESISTANCE, GOLD THICKNESS, INSERTION AND WITHDRAWAL  
FORCE AS A FUNCTION OF BOARD INSERTION

SULLINS SALES DEPARTMENT

APPROVED BY : NOP BOONSUE  
ENGINEERING AND QUALITY ASSURANCE MANAGER  
SULLINS ELECTRONICS CORPORATION



*Sullins Electronics Corp.*

801 E. Mission Rd.  
San Marcos, Ca. 92069

## **SCOPE**

To perform contact resistance, gold thickness, insertion and withdrawal force testing on the edge card connectors as manufactured by Sullins Electronics Corporation and submitted by the test sponsor, Sullins Electronics Sales Department.

## **TEST SAMPLES AND PREPARATION**

1. The following samples were submitted by the manufacturer, Sullins Electronics, for evaluation by Sullins Test Laboratories.

<u>Quantity</u>	<u>Part Number</u>
6	RSM22DREH

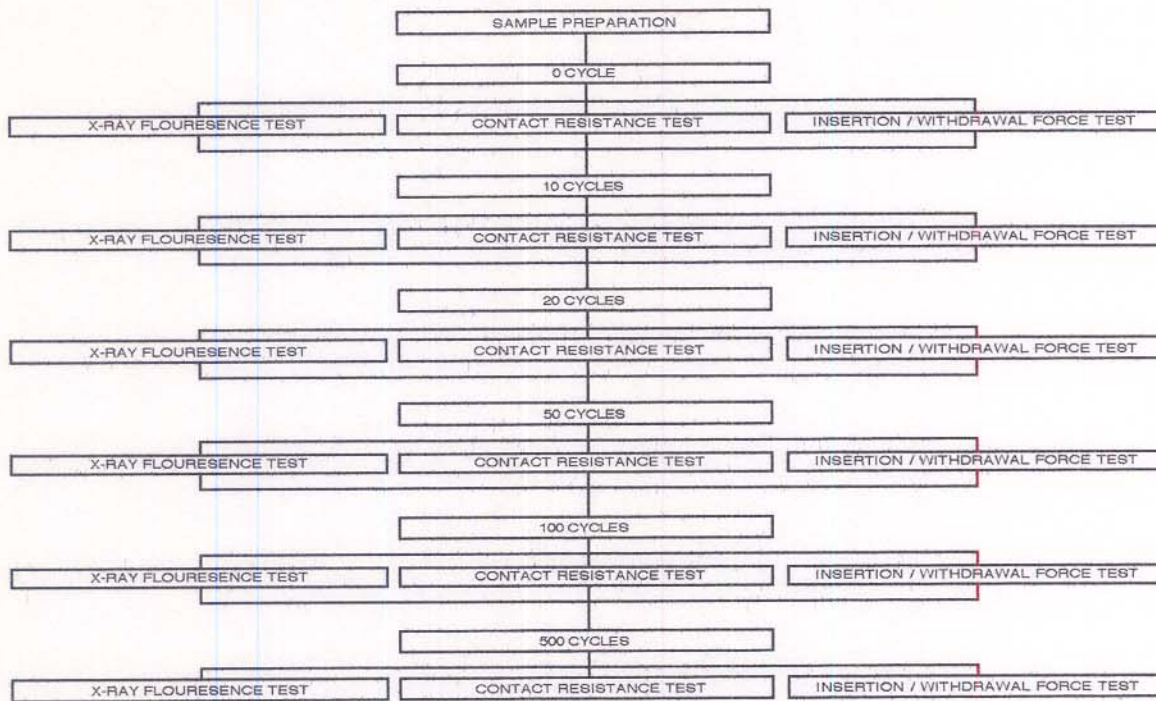
2. Unless otherwise indicated, all materials were certified by the manufacturer to be in accordance with the applicable product specification.
3. Applicable edge cards were obtained by Sullins Test Labs and prepared accordingly.
4. These edgeboards were manufactured in the form of standard .062" thick boards with an outer plating of gold on the contact pads.
5. The test samples and edge cards had wires soldered to the appropriate terminations or contact pads.
6. The test samples were cycled with a .062" steel test blade to the number of cycles desired and then tested.
7. The first test consisted of having current run through the contact point and measuring the voltage drop at the specified intervals.
8. The second test consisted of having the gold thickness tested at the specified intervals.
9. The last test consisted of having the normal force tested at the specified intervals.



*Sullins Electronics Corp.*

801 E. Mission Rd.  
San Marcos, Ca. 92069

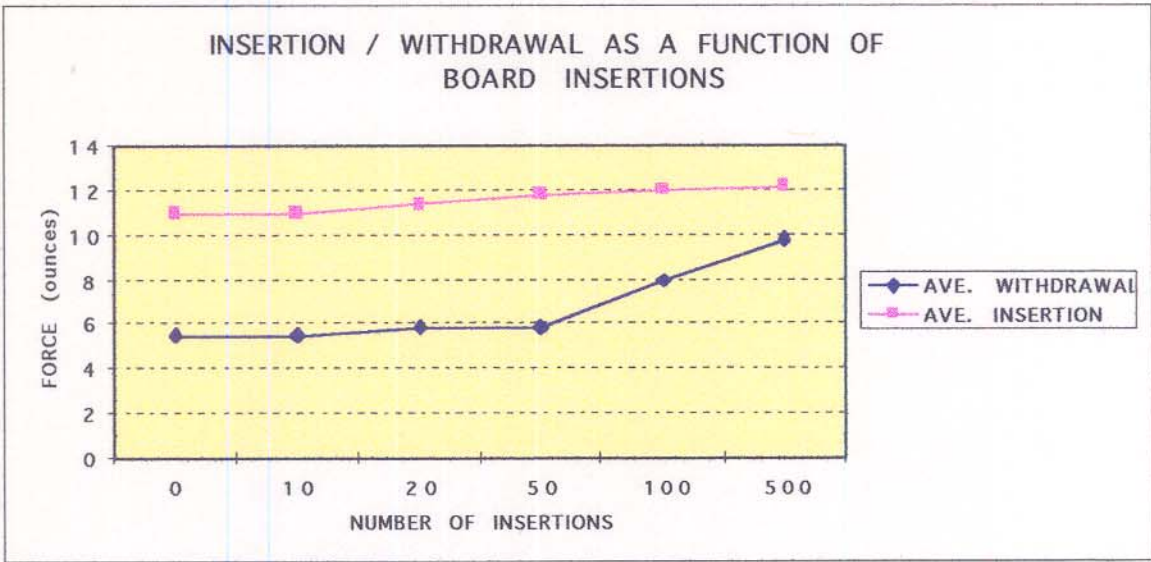
ETR # 013 TEST LAYOUT



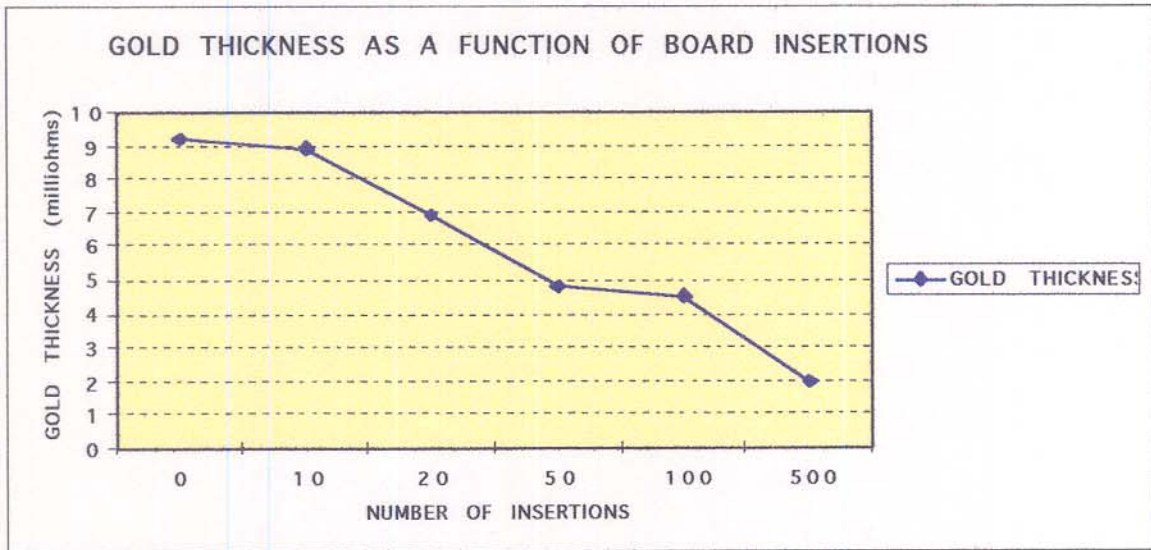
*Sullins Electronics Corp.*

801 E. Mission Rd.  
San Marcos, Ca. 92069

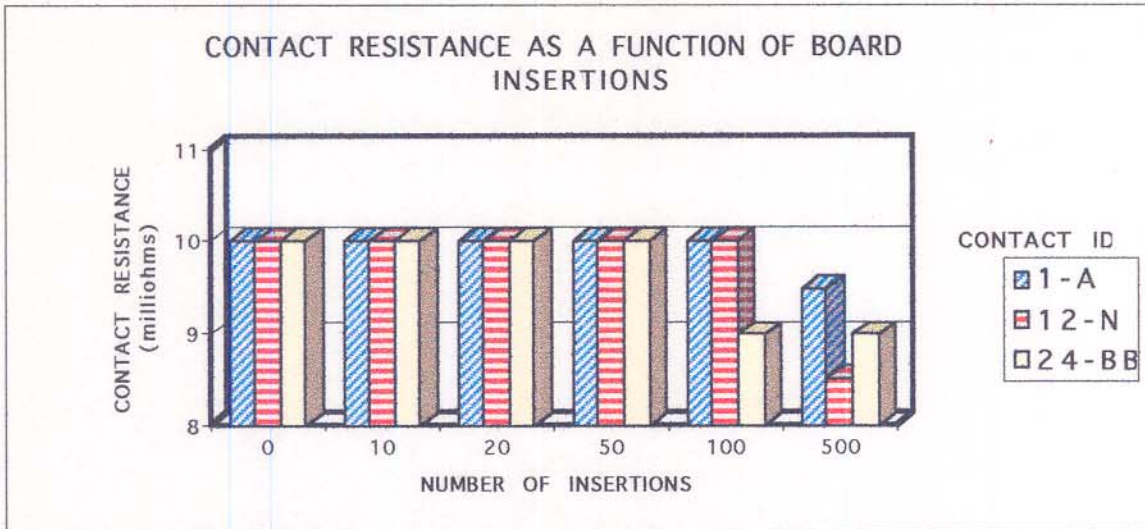
INSERTION / WITHDRAWAL AS A FUNCTION OF BOARD INSERTIONS



GOLD THICKNESS AS A FUNCTION OF BOARD INSERTIONS



*Sullins Electronics Corp.*  
 801 E. Mission Rd.  
 San Marcos, Ca. 92069



\*\* CONTACT RESISTANCE MEASURED BETWEEN PC BOARD AND CONNECTOR TERMINATIONS.

**EQUIPMENT LIST**

<u>NAME</u>	<u>BRAND AND MODEL</u>
1. DC POWER SUPPLY	HEWLETT PACKARD MPB MODEL 6282 A
2. DIGITAL MULTIMETER	KEITHLY 177 MICROVOLT DMM
3. PCB AUTO INSERTION MACHINE	SULLINS ELECTRONICS CORP.
4. PUSH-PULL FORCE GAUGE	JOHN CHATILLON & SONS MODEL DPP
5. X-RAY FLUORESCENCE MACHINE	TWIN CITIES INT. TWINTEST XRF



*Sullins Electronics Corp.*

801 E. Mission Rd.  
San Marcos, Ca. 92069