

# MAGNALYTIX<sup>®</sup>

## MGX Connector 10 SIR Test Board

### Practical Uses

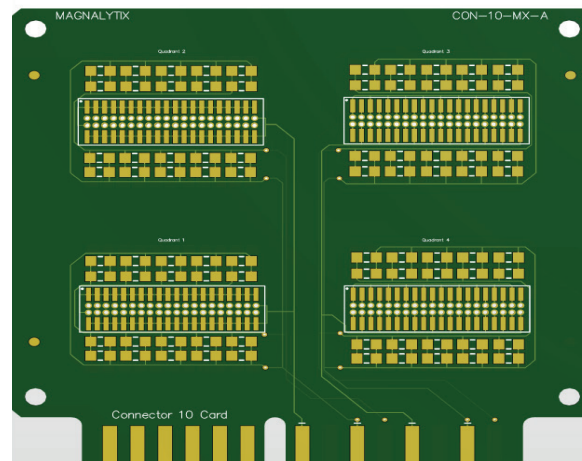
Magnalytix MGX Connector 10 SIR Test Board allows an assembler to evaluate multiple soldering steps on surface mount caps on the top and bottom side with a high density SMT/TH connector. The MGX Connector 10 allows for testing of No-Clean processing across multiple soldering steps including Surface Mount, Thru-Hole and Rework.

#### Primary Uses

- No-Clean design
  - Surface Mount
  - Thru-Hole
  - Rework
- Flux Migration
  - Selective soldering to neighboring SMT components
  - Wave soldering on a highly dense connector
  - Rework residues
- Benign nature of flux residues
  - Surface Mount
  - Liquid Fluxes

#### Secondary Uses

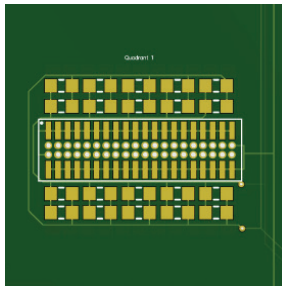
- Solder Paste Characterization
- Selective soldering flux characterization
- Rework



### Test Card Comparison

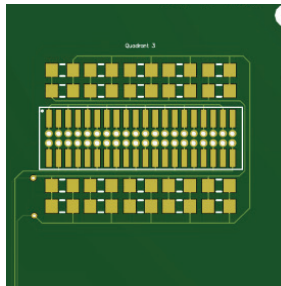
	MGX Connector 10 SIR Test Board	IPC B-52 SIR Test Board
<b>Quadrant 1</b>	80 Lead SMT / TH Connector 1.0 mm Pitch	Not Included
<b>Quadrant 2</b>	1206 caps	Included
<b>Quadrant 3</b>	80 Lead SMT / TH Connector 1.0 mm Pitch	Not Included
<b>Quadrant 4</b>	1206 caps	Included

**SIR Test Parameters**



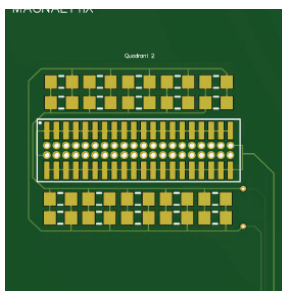
**QUADRANT 1**

- EDGE PIN 1 = CONN EVEN ROW PADS
- EDGE PIN 2 = CONN ODD ROW PADS
- EDGE PIN 3 = ALL RES PAD 1
- EDGE PIN 4 = ALL RES PAD 2



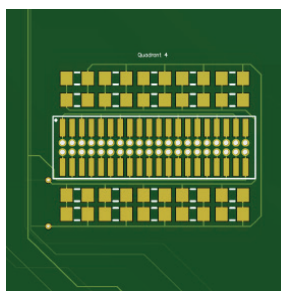
**QUADRANT 3**

- EDGE PIN 5 = CONN EVEN PADS
- EDGE PIN 6 = CONN EVEN PADS
- EDGE PIN 7 = ALL RES PAD 1



**QUADRANT 2**

- EDGE PIN 1 = CONN EVEN ROW PADS
- EDGE PIN 2 = CONN ODD ROW PADS
- EDGE PIN 3 = ALL RES PAD 1
- EDGE PIN 4 = ALL RES PAD 2



**QUADRANT 4**

- EDGE PIN 5 = CONN ODD PADS
- EDGE PIN 6 = CONN EVEN PADS
- EDGE PIN 7 = ALL RES PAD 1
- EDGE PIN 8 = ALL RES PAD 2

**Component Descriptions**

The Magnalytix MGX Connector 10 SIR test board finds use in Materials Characterization and Process Control.

- **MGX SMT TH-40 Pin Custom Connector** is representative of a surface mount and thru-hole connector. This is a challenging component due to the large SMT pad size 0.5mm by 2 mm. In addition, the wave or selective flux can wet through the barrel and intermix with the SMT flux.
- **1206 PF Capacitor Cap** is representative of capacitor caps that exhibit a low standoff gap. This component is designed to characterize both cleaned and No-cleaned process residues under similar component package styles.

**MGX Connector 10 Test Set**

Each Magnalytix Test Set includes the substrates and components to build complete assemblies needed for 1 standard testing cycle and provide the objective evidence needed to meet IPC J-STD-001G.AM 1.

10 Each – MGX Connector 10 pCB | Reel of 2160 – MGX 1206 Resistors | 40 Each – MGX 80/1.27