FSA TECHNOLOGY INC.

COMPANY PROFILE

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About FSA-Technology:

The name FSA was coined from its three main business offer of the company:

Fabrication

Services **Assembly**

FSA-Technology was established in March 8, 2004 with the objective of establishing a company that will support the growing semiconductor/electronics industry in the Philippine region.

It is strategically located near the highly industrial area of Laguna, Cavite and Batangas to ensure an excellent customer support as well as on-time response.

FSA management is backed by more than 30 years of technical experience in the semiconductor/electronics industry that make sure that the customer expectation on technical support is delivered.

FSA partnered with a highly reliable multi-national business partners to provide quality products to the Philippine Semiconductor/Electronics market

FSA-TECHNOLOGY Inc.

FSA-Technology is committed to provide customer with products of excellent quality, on-time delivery and competitive pricing.

In meeting customer needs, FSA is assured of financial stability and growth. It can then positively responds to the needs of all employees and be a good corporate citizen of the community.

Corporate Philosophy

To create value in everything we do.

To make individual happiness the source of corporate growth.

To transcend our success to the local community through cooperative programs and projects.

To be a corporate group imbued with gratitude and trust.

QEHS Policy

FSA-Technology is committed to provide quality and reliable products for the electronic and semiconductor industries in a manner that ensures a safe and healthy workplace, prevention of injury and ill health for our employee. We will operate in compliance with all relevant legislation and we will strive for continuous improvements in everything we do in order to exceed customer satisfaction.

Quality, Environment, Health and Safety shall be everyone's responsibility.

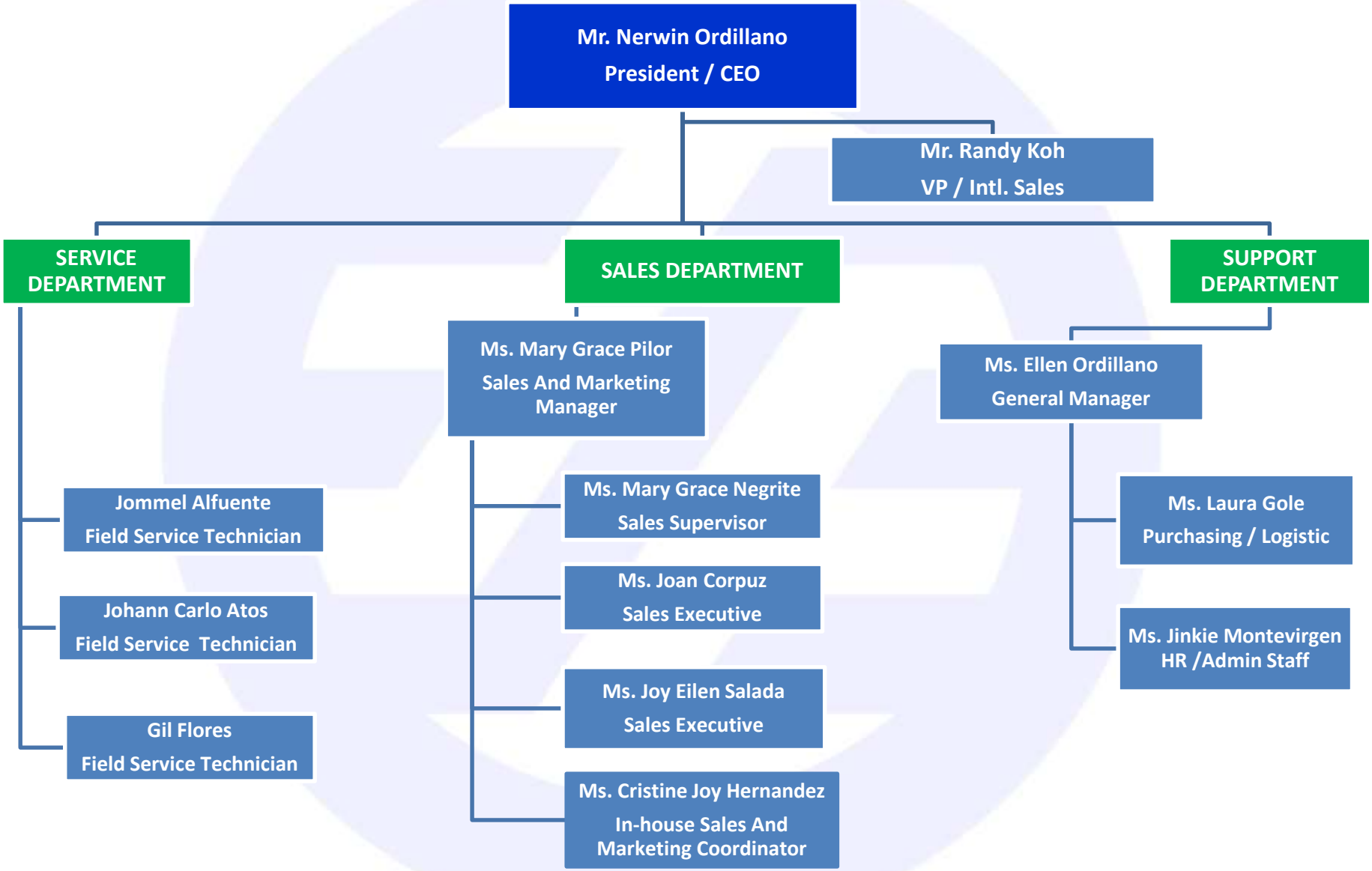
MISSION

- ***Provide excellent products and services to our customer***
- ***Innovative, Creative and Profitable Company in the next 25 years***
- ***Give sufficient earning to it's employee for the next 25 years***
- ***Mold it's employee to become more professional and world-class***

VISION

To become one of the BEST Solution Provider Company in terms of Fabrication, Services and Assembly in the next 25 years.

FSA-TECH ORGANIZATIONAL CHART



OUR PRODUCT / SERVICE OFFERING:

FSA Technology provides customer with product line up for Semiconductor and Electronics Industry.

PRINTED CIRCUIT BOARD (PCB)

AVI-TECH Pte. Ltd. PCB for Burn-In Application

Equipment Line-Up:

Burn-In Oven and Driver Board – *Exclusive Philippine Distributor*

Probe Card Analyzer – *Exclusive Philippine Distributor*

Burn-In Board Tester (TSE Boss)

PRINTED CIRCUIT BOARD (PCB)

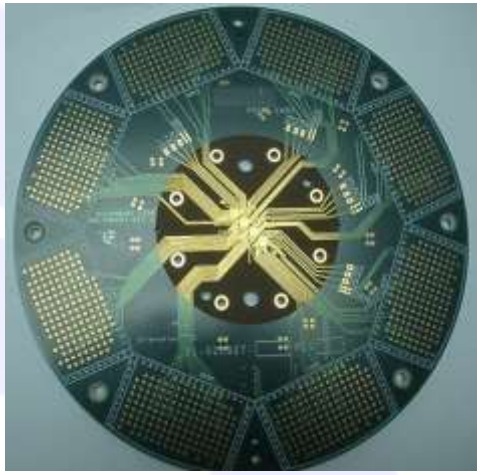
Design & Fabrication
High-End PCB for Semiconductor Load Board Application
High Reliability PCB for Burn-In Application (including MIL Specs)
PCB for Low-Mix to High-Volume Requirements

PCB Manufacturing Capabilities:

- Maximum Layers : 60
- Minimum Board Size : 1in X 1in (2.54mm X 2,54mm)
- Maximum Board Size : 30in X 30in (76.2mm X 76.2mm)
- Minimum Board Thickness : 0.005in (0.127mm)
- Maximum Board Thickness : 0.250in (6.35mm)
- Copper Weight : 0.25 oz – 6 oz
- Minimum Trace Width (Inner) : 1.5 ~ 3mils
- Minimum Trace Width (Outer) : 2 ~ 4mils
- Minimum Space (Inner/Outer) : 3mils

Materials & Laminates:

- FR-4 Multi-Functional (140degC)
- FR-4 High Temp (180degC)
- FR-407 / FR-408
- Nelco 4000 Series
- ISOLA Series IS-410 and 370-HR
- Polyimide
- Getek
- Rogers 4000 Series



3-mils Trace / Space Sample

Plating & Surface Finish:

- Immersion Tin
- Electroless Nickel: 120 to 200 u" thickness
- Electrolytic Nickel: 350 u" thickness
- ENIG (Electroless Nickel Immersion Gold) 2 to 6u" thickness

Full body Gold (Hard Gold) up to 100uinches
Selective Gold up to 100u"
Soft Bondable Gold
Hot Air Solder Level (HASL)

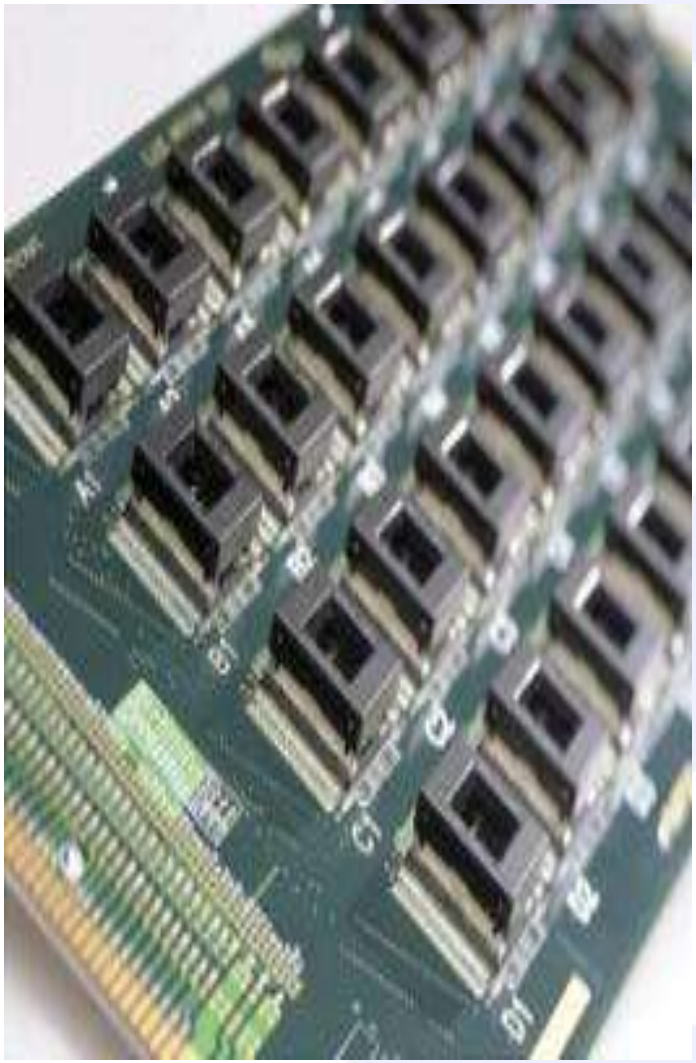
VERTICAL PROBE CAR
✓Cobra Technology

✓QUAD Site

✓WLCSP 8x8, Fine Pitch (0.3mm)

✓300u" Nickel & 50u" Hard Gold

Edged Connector Finger
Copper Plating up to 14mils
With Nickel 350u" and Hard Gold

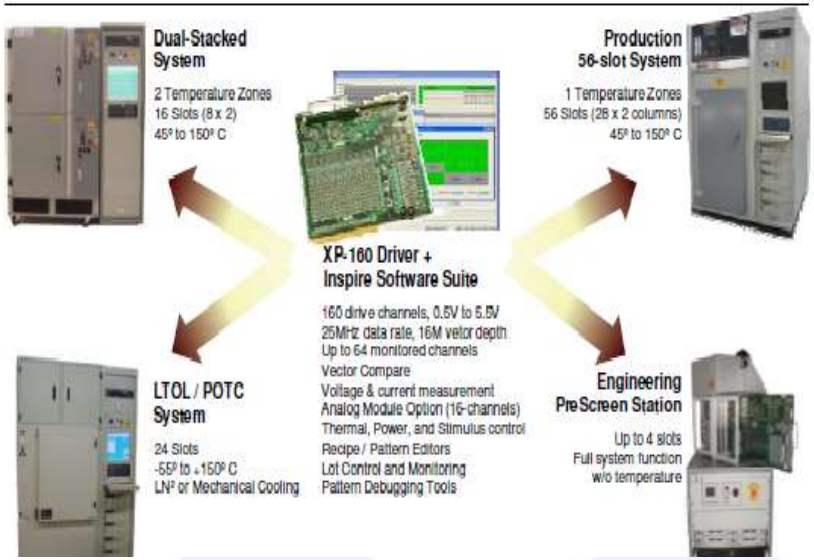


PCB Design Capabilities:

- ✓Analog, Digital, Mixed-Signal, RF Applications
- ✓High Speed / Impedance Controlled Boards
- ✓Equal Trace Lengths & Differential Pairs
- ✓High Current / Heavy Copper Board
- ✓EMI / EMC Compliance Board
- ✓Use of Microvia, pad over via, blind via, buried via
- ✓High Density Interconnect (HDI) Technology
- ✓Complies to IPC design standard

Burn-In Oven & Driver Board

Inspire XP-160 Burn-In Systems



Inspire 8160HX High Power

- Individual DUT Temperature Control
- Up to 480W per BIB
- 6 power supplies per BIB
  - full software controlled & monitored
- Localized power deliver
  - for most accurate, low-noise DC voltage
- 144 drive channels
  - 25MHz data rate, 16MB vector depth
  - up to 48 monitor channels
- Up to 24 slots per system
- Legacy BIB form factor (12.32"x23.85"x0.062")

CONFIDENTIAL

LASSEN 24-Slot Burn-in Test System

-55° to 175° C
600W Heat Dissipation
24 BIB slots
3 power zones (of 8 slots/zone)
4 PS per zone (PS1:PS4)
XP160 160-channel Drivers
Inspire Burn-in Software

SHASTA 24-Slot Burn-in Test System

45° to 150° C
1000W Heat Dissipation
24 BIB slots
6 power zones (of 4 slots/zone)
4 PS per zone (PS1:PS4)
Small Footprint (48" x 48")
XP160 160-channel Drivers
Inspire Burn-in Software

Probe Card Analyzer

TESTING CAPABILITIES:

Leakage	OD Leakage Scrub Analysis	Capacitor Leakage	Alignment
Tip Diameter	Planarity Gram Force	Contact Resistance	Wire Check
Relays	Capacitance	Elevated Heat Levels*	Resistance

*-requires purchase of Hot Chuck Option

METROLOGY TOOLS:

✓ITC has a complete range of probe card metrology products that address the needs of probe card manufacturers and end users.

✓It has tools that can be used as complete final test or repair tools

TECHNOLOGY LEADER:

✓Industry's choice for testing High Force Cobra Type Probe Cards.

✓Testing the largest probe cards (40,000+ probes, 300mm array)

Available Pro-Bilt Models

PB-3600	➢ 3,072 maximum channels ➢ Drive Relay or Test on any channels
PB-1500	➢ Tips-Up Analyzer ➢ 1,280 Test/Relay Channels ➢ Full Analyzer Test Capability
PB-1200	➢ Tips-Up Repair Station ➢ Test Planarity, Alignment and Gram Force
PB-6500 / 6800	➢ 6,016 Maximum Channels (Upgradeable to 12,000 + Channels) ➢ Drive Relay or Test on any channels

Burn-In Board Tester (TSE Boss)

BOSS Interface Test System is a tool used for verifying the electrical integrity of Test Interface. The core of the Interface Test System is the Boss Tester.

Boss Tester is a measurement instrument incorporating an Analog measurement board for Resistance, Capacitance, Leakage and Voltage measurements. Multiple Relay Matrix boards switch the Analog Signals to thousands of different Kelvin Connected Test Points.

APPLICATIONS:

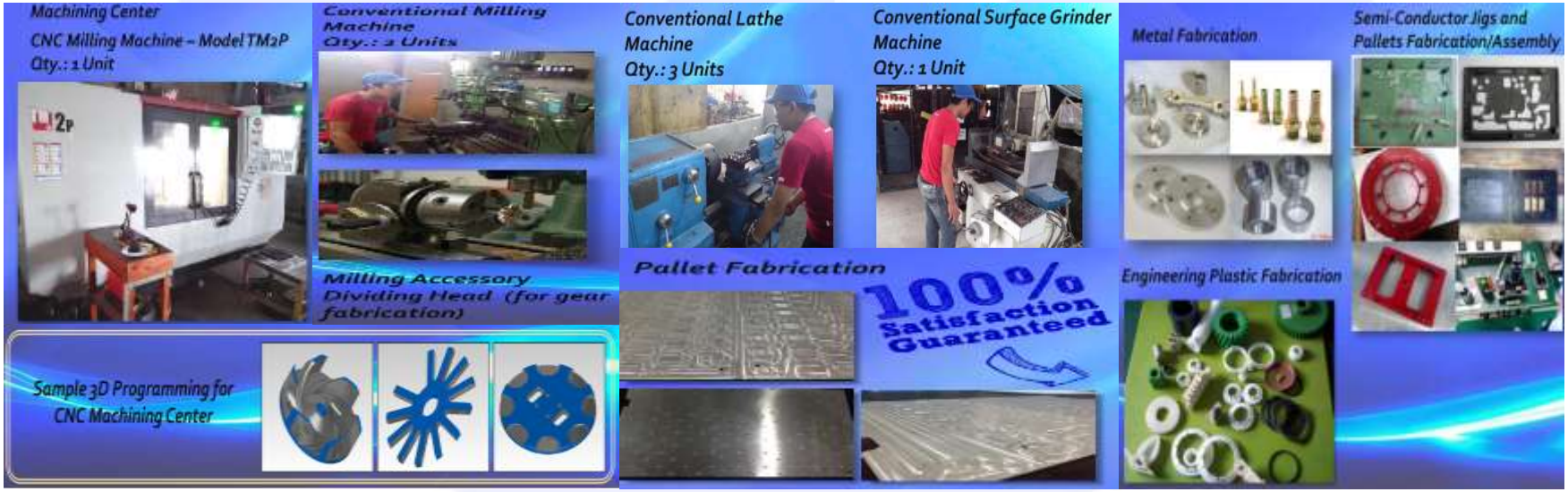
- Burn-In Boards
- Load Boards
- Sockets / Contactors
- Cables
- Probe Cards (without Robotics)
- Other Test Interface

MEASUREMENT SPECIFICATIONS

Type	Range	Accuracy	Resolution	Technique
Resistance	1mΩ to 100MΩ	0.1%	0.1%	Force Constant Current; Measure Resultant Voltage
Capacitance	10pF to 10,000uF	5%	0.1%	Force Constant Current; Measure dV/dT
Leakage	5nA to 99.9uA	1%	1%	Force Constant Voltage; Measure Resultant Current
Voltage	0V to 9.5V	1%	1%	Force Constant Current; Measure Resultant Voltage

Other Services:

- POGO PINS for In-Circuit Testing Applications (Bed of Nails – BON)
- PCB Assembly / Burn-In, HAST Board Assembly
- Outsourcing
- Precision Tooling and Metal fabrication
  - Semi-Conductor Jig
  - Pallets Fabrication
  - Engineering Plastic Fabrication
    - Machine Equipment's use are: CNC Milling Machine, Conventional Miiling/Lathe Machine, Hydraulic Machine, Drill, Threading, Band saw Machine

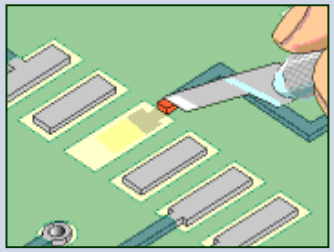
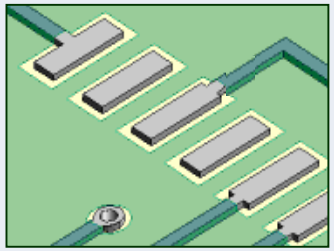
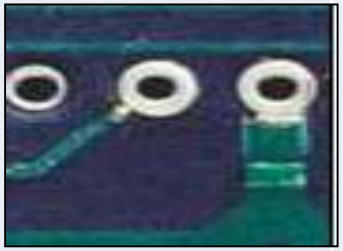


- Load Board, DUT Board, Interface Board and Burn in Board Repair

TECHNICAL CAPABILITIES

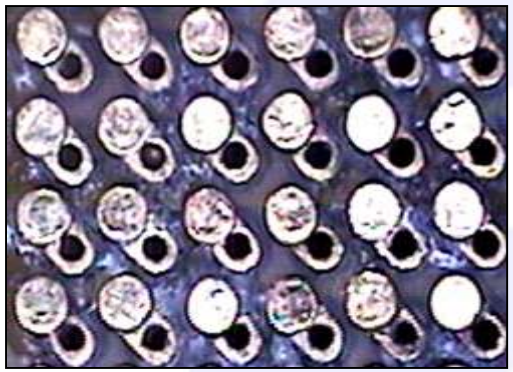
1. PAD REPAIR

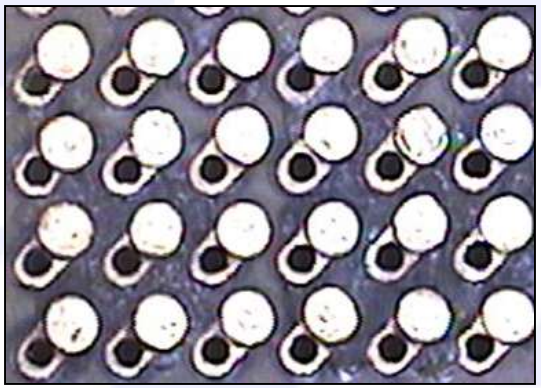
Process of replacing damaged DUT pads, component terminals, pogo traces and edge fingers to convey the original functionality of the contact points.

	Land	Edge Finger	Plated Thru Holes	Terminals
Before				
After				

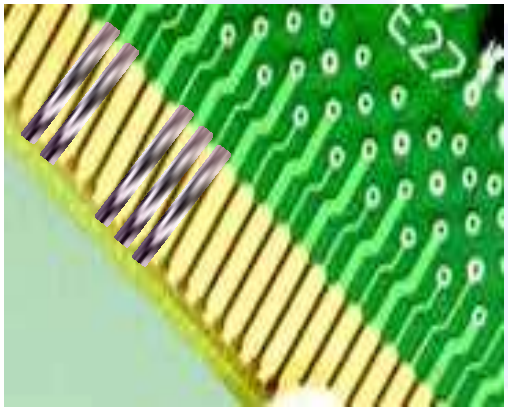
2. PAD RE-PLATING

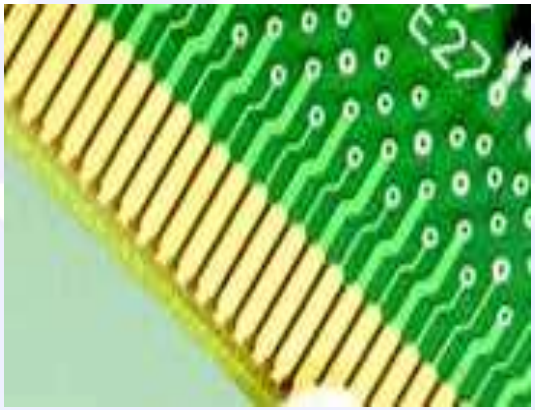
Process of re-coating abraded DUT pads, component terminals, pogo traces and edge fingers to convey the original functionality of the devices contact points.





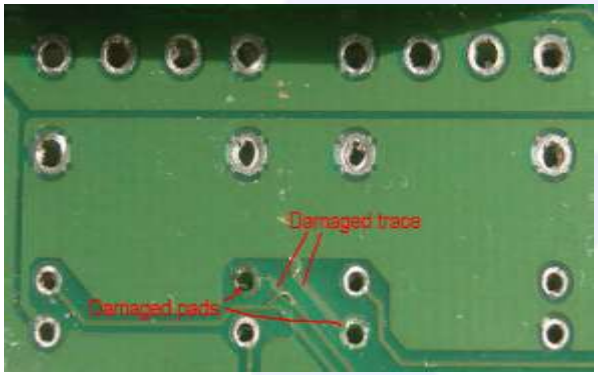
Note: Plating is also applicable on probe pins (both vertical and cantilever, pogo pins, socket pins, component terminals and jewelries





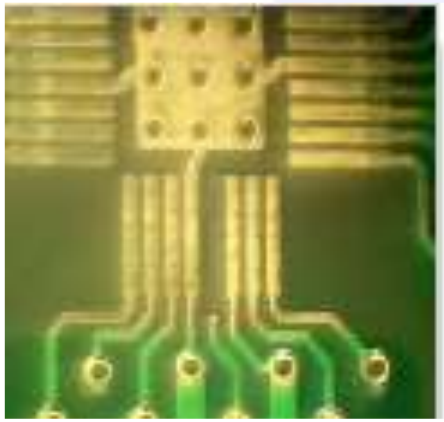
Plating of probe pins contact will extend the life span of the probe pins. It will also eliminate poor contact in between wafer pads and probe pins

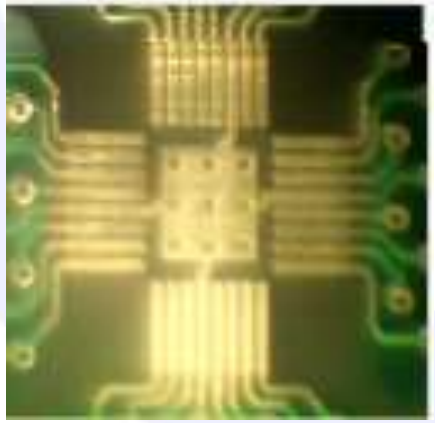
3. Via Hole rework
4. Component Repair, Removal, Replacement
5. Inner Trace Repair
6. Pell-off Pad Rework



Via Hole rework

Component Repair, Removal, Replacement

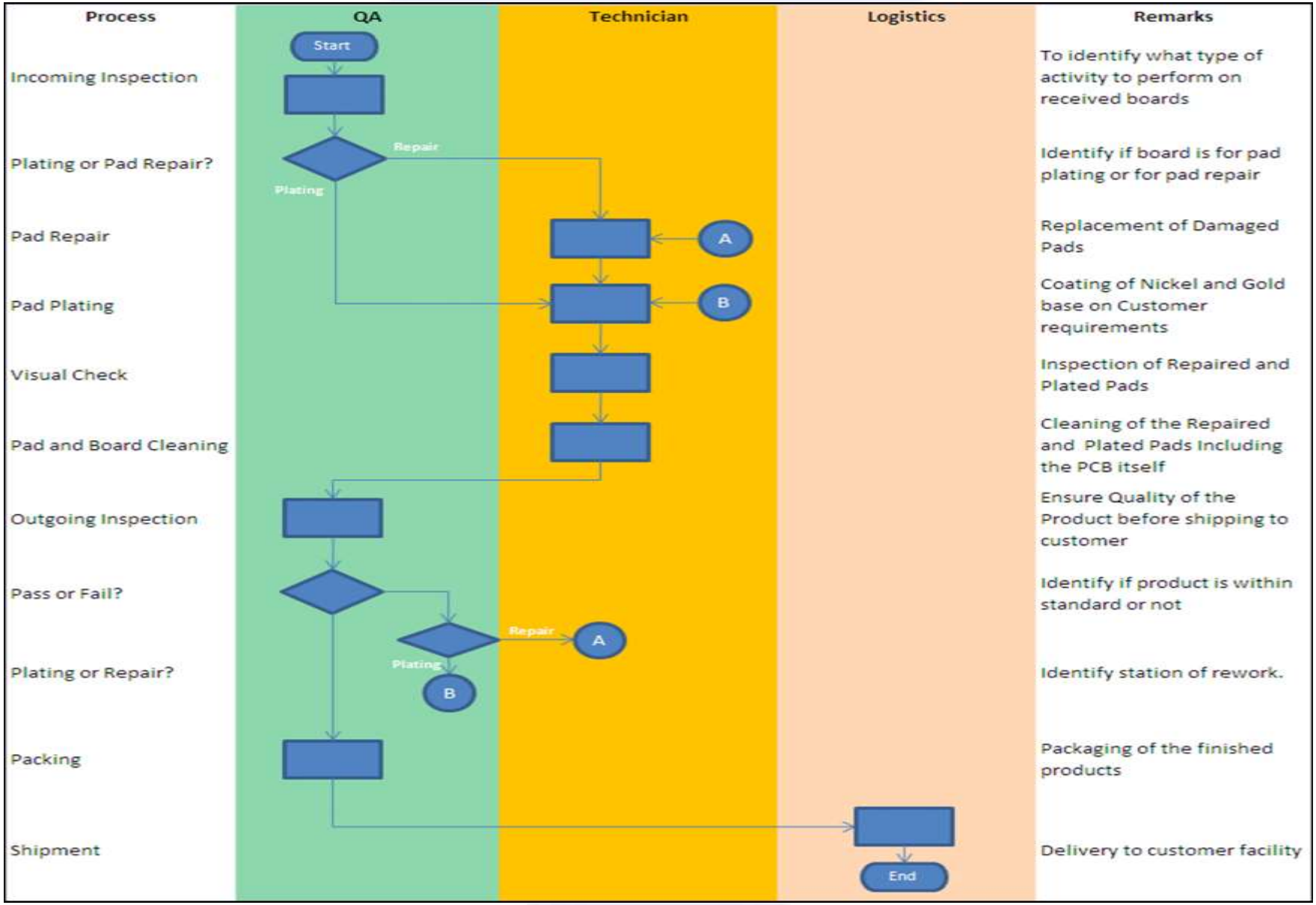




Pell-off Pad Rework

Inner Trace Repair

REWORK AND PLATINGPROCEDURE



CUSTOMERS PROFILE

Thank you!!!