



# GENERAL KIT INFORMATION



## FR-4

Epoxy-glass FR-4 is standard for most kits.

## POLYIMIDE (OPTIONAL)

For high temperatures during assembly or burn-in. Polyimide Tg is 270°C.

## COPPER THICKNESS

Usually 1.0 oz. of copper.

## HOT AIR SOLDER LEVELING

Hot air solder leveling (HASL) during board fabrication gives boards a controlled plating flatness which assures coplanarity for fine pitch components.

## LIQUID PHOTO IMAGEABLE SOLDER MASK

Liquid photoimageable (LPI) soldermask does not interfere with solder paste screen printing.

## X,Y THETA: (ACCESSORY)

Component placement data for pick and place machines.

## GERBER DATA: (ACCESSORY)

For solder paste stencil.

## LEAD-FREE (OPTIONAL)

Available with white tin or electroless nickel.

## GLOBAL FIDUCIALS

A minimum of two global fiducials are located diagonally opposed as far apart as possible.

## LOCAL FIDUCIALS

Used to locate the position of an individual component.

## GENERAL

Kits are supplied with enough components for one side of the board only. Most boards are double sided.

## OSP (OPTIONAL)

Organic Solder Preservative is available Special Order.

## STANDARD BOARD SPEC

**Board Size:** 5.5" x 4" (140mm x 100mm)

**Layers:** Double-sided

**Board Material:** FR4

**Metalization:** 1-ounce copper

**Solder Mask:** LPI (Liquid Photoimageable)

**Silk Screen:** White Ink

**Tinning:** HASL (Hot Air Solder Leveling)

**Tooling Holes:** .125" (3.18mm) 4-places

### Stencil Information

In some cases, TopLine's boards use 2-front sides, eliminating the need for separate "front" and "back" stencils.