

ISO 9001:  
2000  
Certified

**United Electronics, Corp., Inc.**

5321 N. Pearl Street, Rosemont, IL 60018

Toll Free 1-800-352-1959

Corporate Office 847-671-6034

FAX 847-671-1783



United Electronics, Corp., Inc. Established in 1984 is a world-class manufacturer of Single-Sided, Double-Sided and Multi-Layer printed circuit boards that are used throughout the Electronics Industry. We have been at our current location in Rosemont, Illinois since 1996 and in 2002 we built our own offshore facility to allow us to provide our customers with competitive global pricing. The key to the success of our company has been our belief that the customer comes first and that we must be able to provide pricing and delivery that will allow our customers to compete in the world market place.

The entire staff at United is highly trained and dedicated to meeting your printed circuit board requirements. Every order, large or small is monitored throughout the production process to assure compliance to customer specifications.

## GENERAL INFORMATION

- Multilayer capability to 12 layers
- Controlled impedance
- 0.004"/0.004" Line and Space capability
- Prototype delivery in 24 hours
- Production delivery in three weeks available
- Prototype to Production Support
- Minority Owned
- UL Approved Printed Circuit Board Manufacturer

## PRODUCTION LOCATIONS:

### UNITED ELECTRONICS CORP., INC.

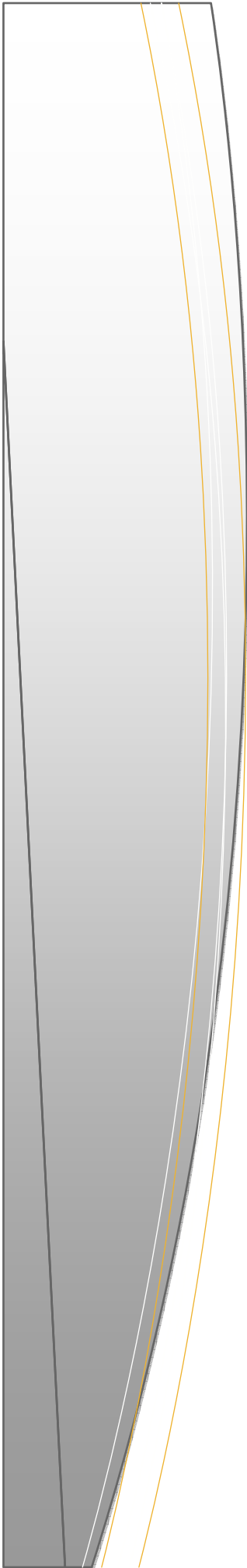
5321 N. Pearl Street  
Rosemont, Illinois 60018

ISO9001:2000 Certified  
70,000 square foot facility

### FINELINE CIRCUIT COMPANY

EPIE Plot E/8  
GIDC Manjusar, Savali 391 770  
Dist. Baroda, Gujarat, India

ISO9001:2000 Certified  
60,000 square foot facility



**United Electronics Corp., Inc.** produces Single-Sided, Double-Sided and Multi-Layer printed circuit boards. We service customers in the aerospace, automotive, appliance, musical instrument and telecommunications industry. We offer our customers the optimal combination of quality, delivery, competitive pricing and customer service that allows them to have an advantage over their competition.

Quotation within 24 hours  
24-Hour Turn-around on Prototypes  
Three-Week Delivery on New Production  
S/S & D/S PTH Multi-Layer Production volume  
Electrical Testing  
Controlled Impedance  
LPI Solder Mask on SMT boards  
Design Rule Checking and In-House Photo plotting

Prototype through production Pub's





## LAMINATES / CONSTRUCTION:

### \* Lamination types:

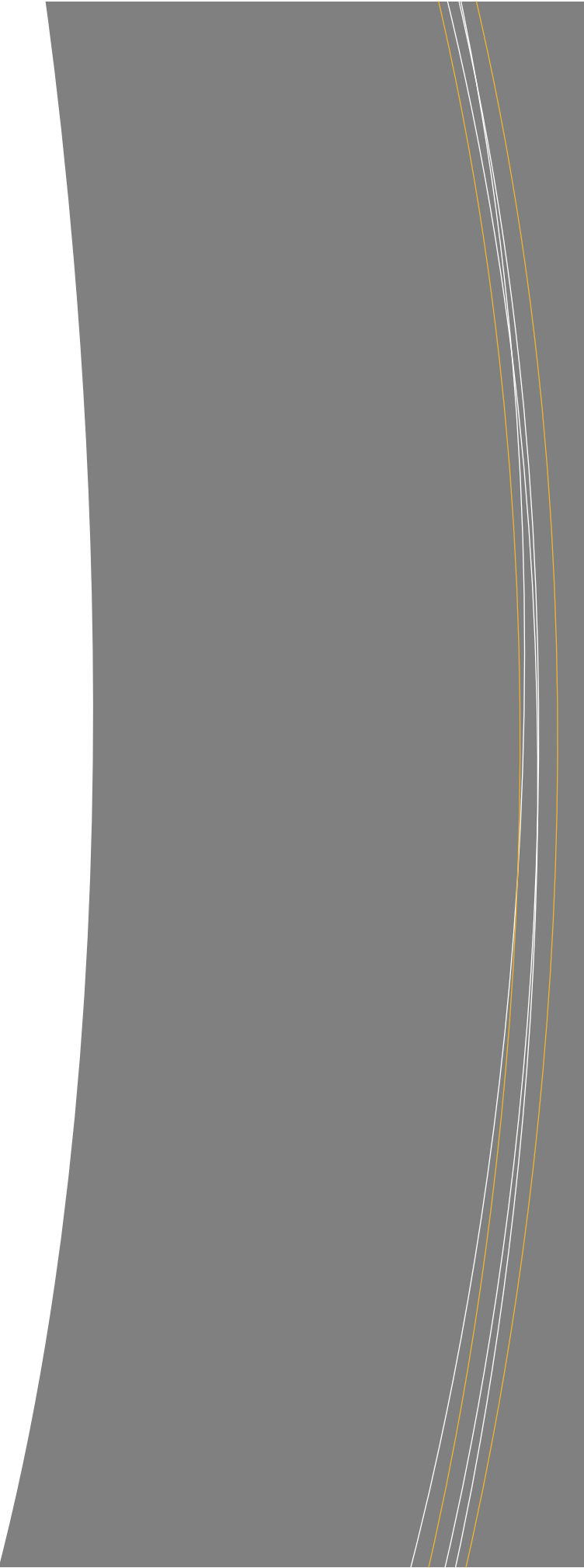
- FR-1, CEM-1, FR-4 (Std. & HighCTI)
- High Tg Epoxy(170+Tg)
- Polyimides
- GETEK
- Arlon (PTFE)
- Rogers
- Isola
- Taconic
- Nelco
- Lead Free Laminates (RoHS, WEEE)
- Thermagon (Aluminium)

### \* Copper cladding

- Inner layer max.Cu weight:6 oz.
- Outer layer max.Cu weight: 10 oz.
- Min. Cu weight :1/4 oz.

\* Max available process panel size: 20" X 30"

\* Multi- layer constructions:

- Min. core thickness: .004"
  - Max. layer count:12
  - Min.Multi-layer thickness: .025"
  - Max.Multi-layer thickness: 0.150"
  - Blind/buried vias - only sequential lamination
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## ETCHING:

\* Min.conductor width

Start Cu Foil weight	Internal	External
1/2 oz.	.004"	.004"
1 oz.	.004"	.004"
2 oz.	.006"	.008"
3+ oz.	.008"	.010"
4+ oz.	Engineering Review Required	

\* Min. features spacing:

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1 oz.	.004"	.004"
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3+ oz.	.008"	.010"
4+ oz.	Engineering Review Required	

\* Min. features spacing:



### **DRILL / PLATING:**

- \* Max. Aspect Ratio:8 to 1
- \* Min. hole size tolerance (plated): + 0.003"
- \* Min. hole size tolerance (unplated): + 0.002"
- \* Min. drilled hole size: 0.006 "C.040" Thiek MAX
- \* Min. annular plane clearance of drilled hole: 0.010"
- \* Min. internal pad size to drill hole size : + 0.012"
- \* Min. external pad size to drill hole size: + 0.010"

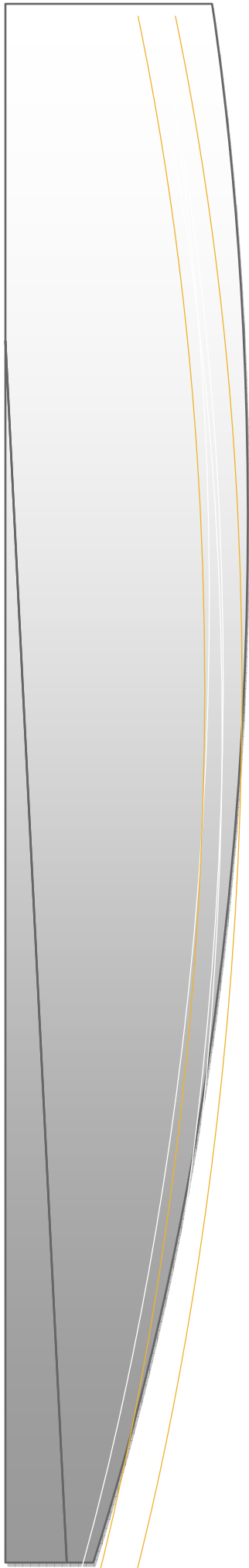


### **SOLDERMASK:**

- \* Spray-coated Photo-imageable soldermask
- \* Screened epoxy soldermask
- \* Screened UV-curable via plugging
- \* Peelable mask with stencil
- \* Min.web thickness: 0.004"
- \* Min. soldermask clearance : 0.0025"
- \* Solder dam 0.004"

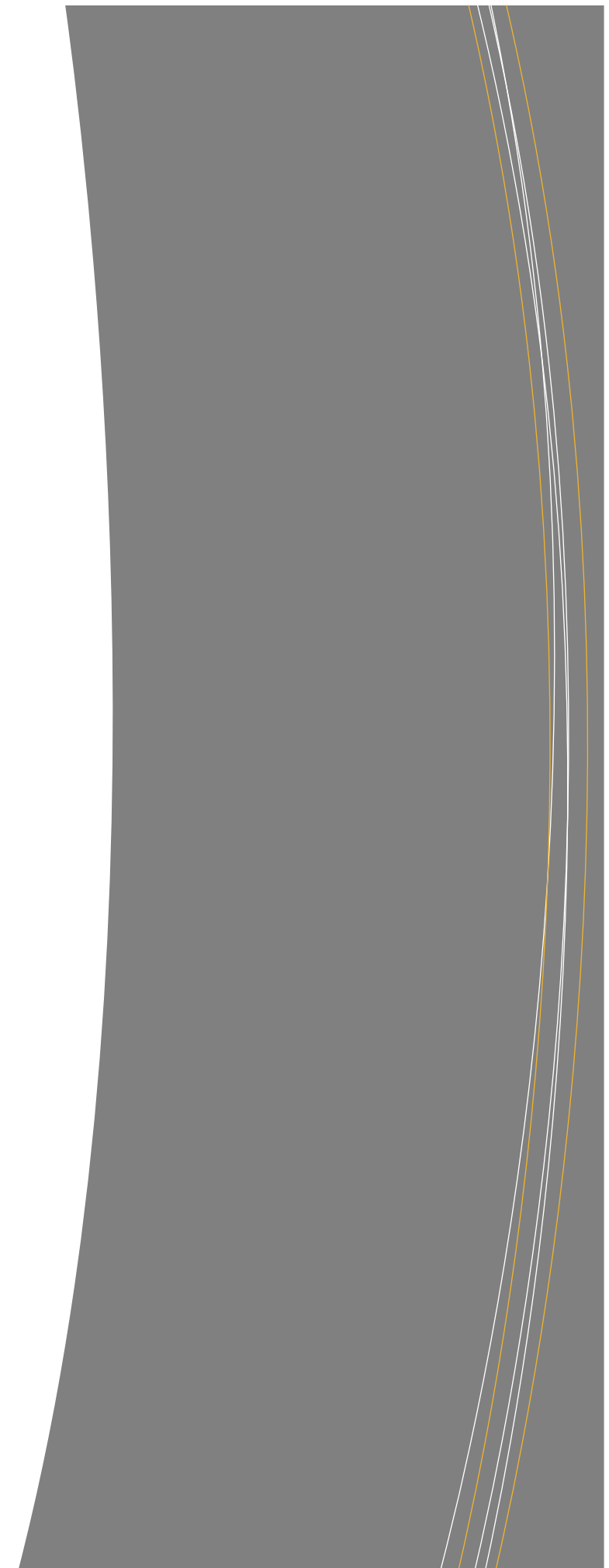
#### Hole Fill:

- \* Silver Epoxy Vias
- \* Solder Mask



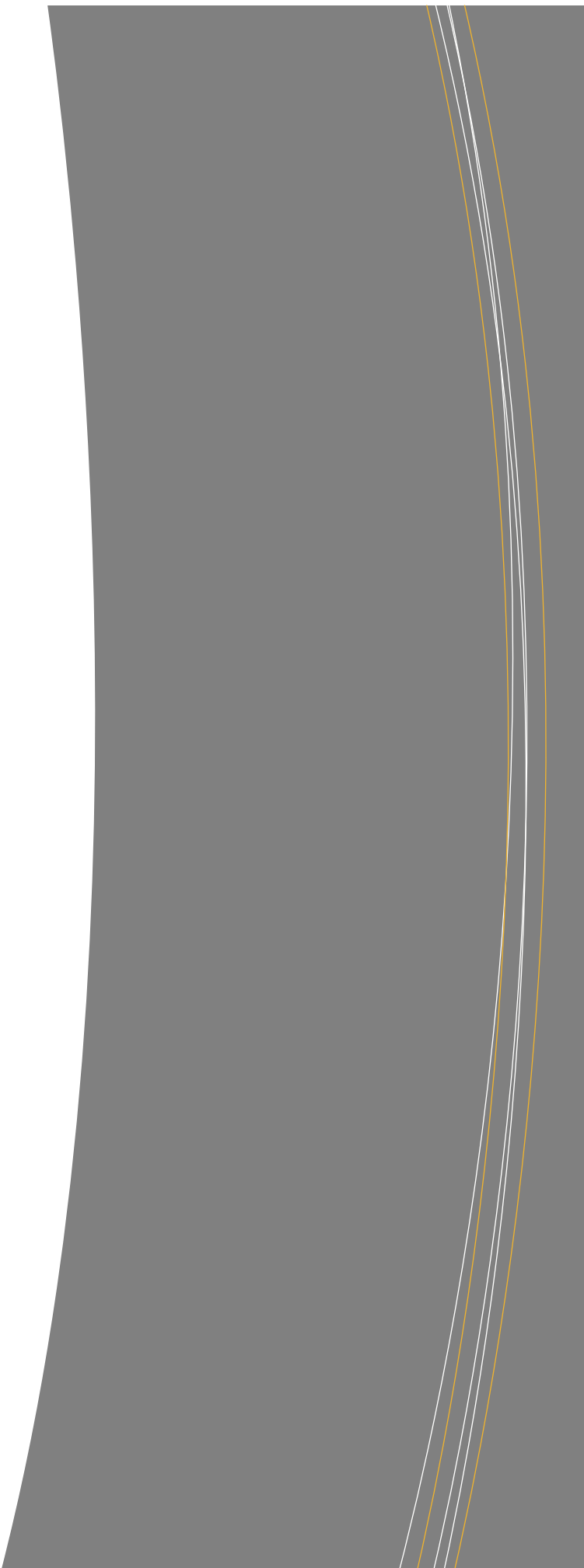
**FABRICATION:**

- \* Scoring - CNC (jump scoring available)
- \* Edge milling
- \* Hard-tool Pierce and /or Blank
- \* Edge beveling
- \* Minimum slot width: 0.020"
- \* Min. inside radius (milled): 0.015"
- \* Planarization"





## **ELECTRICAL TEST:**

- \* Dual Access Testing - Universal grid
  - \* Netlist Testing( Gerber - extracted / IPC- D-356)
  - \* Fixtureless Testing for Proto / Small Volume
  
  - \* Impedance Testing (Polar CITS-500)
    - Impedance Tolerance: + 10%
  
  - \* Min.Continuity Test: 10 Ohm
  - \* Max Isolation Test :10 M Ohm
  - \* Voltage:10 - 250 VDC
  
  - \* Fine Pitch Testing:
    - Min.SMD Pitch (fixtured) : .010"
    - Min.BGA Pitch (fixtured) :1 mm (.0394)
  
  - \* Fixture Less Testing (Ncwsystem)
    - Flying Grid Testing (Ncwsystem)
    - Flying Probe Cuitim 8 manta
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