



# SUN ELECTRONICS presenta:

# PCB MANUFACTURER

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La nostra azienda, Sun Electronics S.r.l., è specializzata nella fornitura di circuiti stampati. Una consolidata esperienza maturata sul territorio cinese, dove siamo presenti dal 1995 con un nostro staff tecnico e commerciale, ci ha permesso di selezionare, secondo l'ottica della serietà e affidabilità, i migliori produttori del settore.

Quello che vi presentiamo è il frutto di questa ricerca: un'azienda leader nella produzione di pcb, con la quale abbiamo da tempo intrapreso un proficuo rapporto di collaborazione. Con un personale di 2300 dipendenti, macchinari per la lavorazione del pcb fra i più avanzati al mondo e un solido sistema di controllo della qualità, il nostro costruttore rappresenta la scelta ideale per il Cliente italiano che voglia sfruttare il sempre più vantaggioso e competitivo sistema produttivo cinese.

I nostri pcb trovano applicazione in svariati settori, dall'automotive alla sicurezza e strumentazione, al settore delle caldaie e dei pannelli luminosi.

Vi lasciamo alle esplicative pagine seguenti e auspichiamo che questo primo incontro possa essere l'inizio di una fattiva collaborazione fra le nostre aziende.

In ITALIA:

SUN ELECTRONICS Srl

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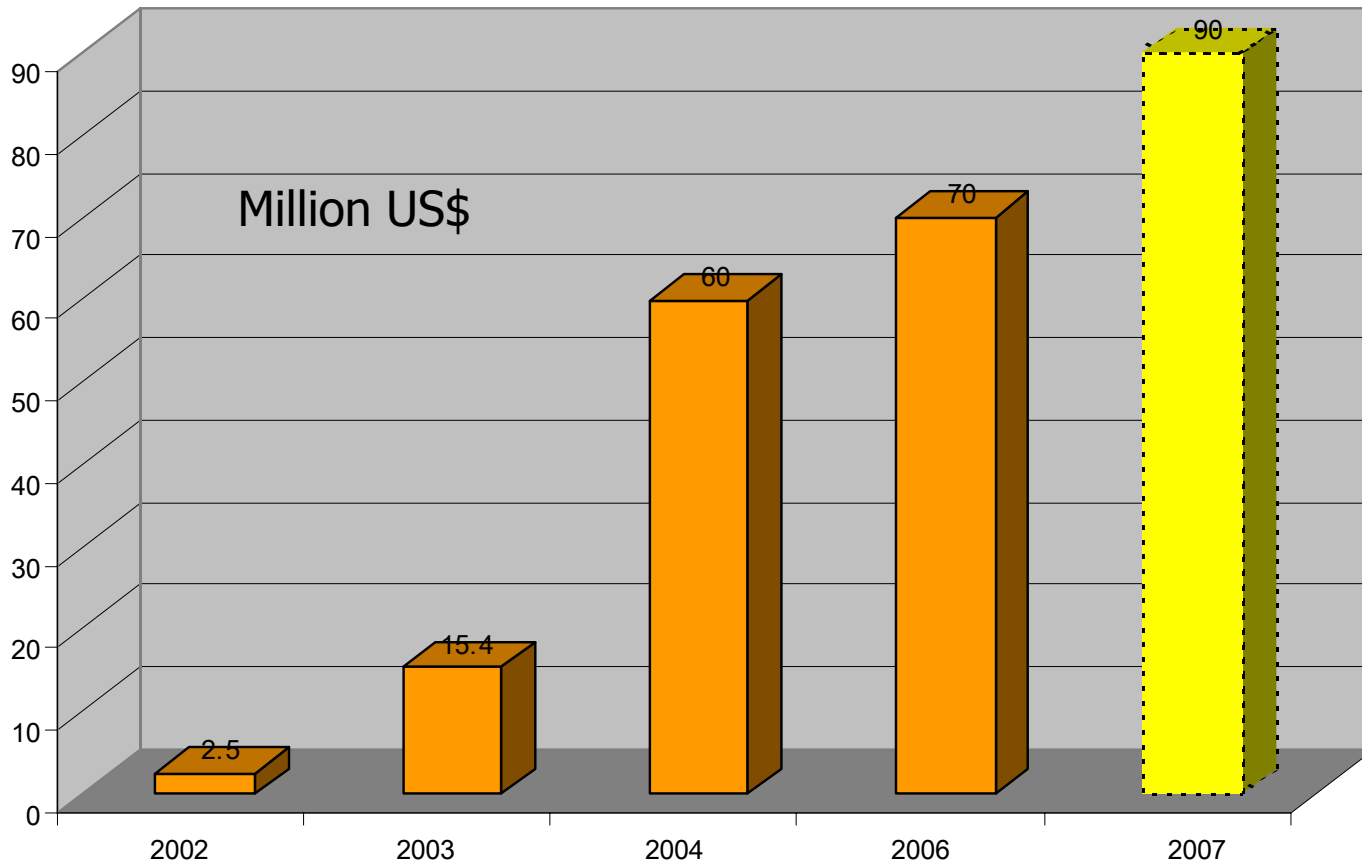


# Company Background

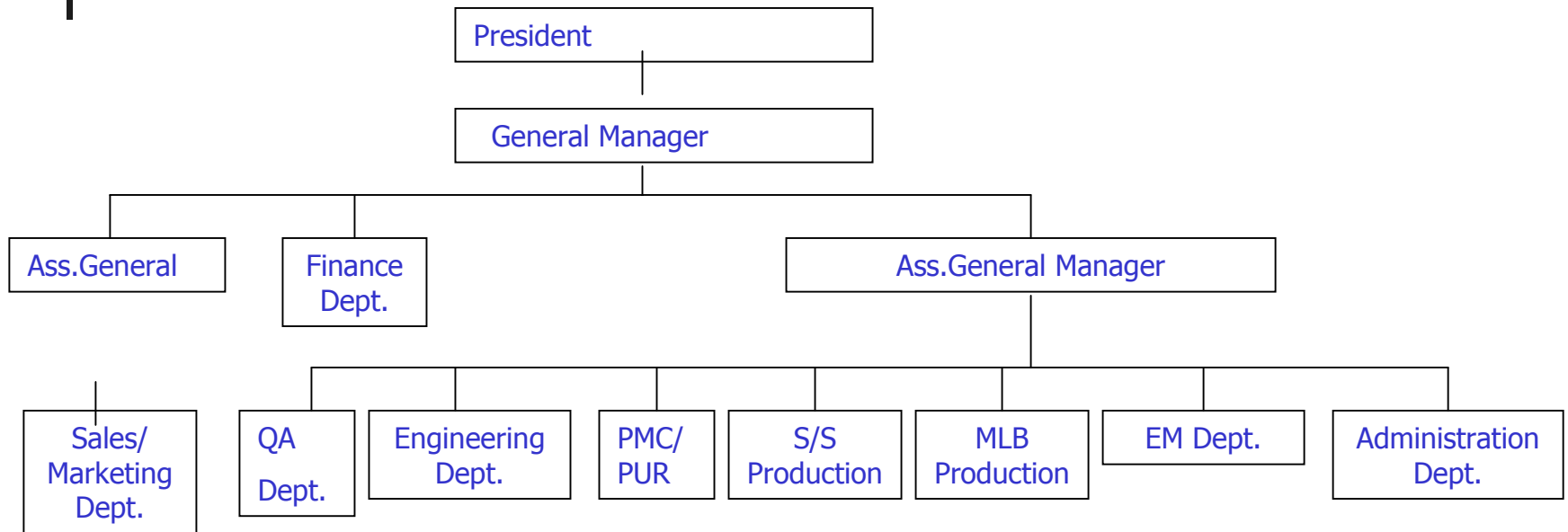
- Founded: October, 2001
- Total Investment : USD40 million
- Floor Area : Factory area: 70,000m<sup>2</sup>  
Office: 3,600 m<sup>2</sup>  
Phase I : 20,000 m<sup>2</sup>
- Production Capacity : Phase I : SS PCB 180,000 m<sup>2</sup>/month  
Phase I : MLB 600,000 ft<sup>2</sup> /month
- Production Capacity : Phase II : MLB 600,000 ft<sup>2</sup> /month  
( Expected Q1, 2006 being operation)



# *Sales Revenue*



# Organization Structure





# Quality System

- Quality System:
  - ISO9001 ( 2000 Version)
  - ISO14000
  - QS9000 & TS16949
- Training & Education System:
  - ISO18000
  - QCC
- Fabrication Standard:
  - UL & IPC-600F Class II or Class III



# Employee Distribution

<u>Function</u>	<u>Distribution</u>
<b>Administration &amp; Support</b>	<b>150</b>
<b>Production</b>	<b>1775</b>
<b>Engineering</b>	<b>145</b>
<b>Quality</b>	<b>310</b>
<b>Total</b>	<b>2380</b>

# Manufacturing Capabilities

Descriptions	<u>Capability</u>
Product	Single side, Double side and Multi-layer(4 to 16 layers)
Base Material	HB, FR-1, FR-2, CEM-1, CEM-3; CEM-3 (Green), FR-4; FR-4 High Tg
Min. Core Thickness	0.064 mm (0.0025")
Min. Board Thickness	0.4mm (0.020")
Types of Surface Finish	HASL, Entek, Flux, Gold Flash, Immersion Gold /Tin/Silver
Min. Hole Size (Drill)	0.20 mm (0.008")
Via Hole	PTH, Plugged Hole, Blind & Buried, Silver Plugged Hole
Aspect Ratio	8 : 1
Min. Line Width & Spacing	0.1 mm / 0.1 mm (4 mil / 4 mil)
Min. Pitch Size	0.15 mm (0.006")
Solder Mask	UV Curable, Photo Imageable, Peelable Type
Profile	Routing, Punching, Chamfering, V-cut
Warpage	0.75% (Max)
Impedance Control	+/- 10% or +/- 8%

# Single Sided PCB – Production Lines ( I )

(Two In House Automatic Print & Etch Lines with output 180K Meter Sq./ M)



Pre-treatment & pattern Silk-print



Etching & Ink Stripping



Micro Etching & Solder-resist Printing



Component Marks Printing



# Single Sided PCB – Production Lines ( II )

(Two In House Automatic Print & Etch Lines with output 180K Meter Sq./ M)



Punching Guild-holes Drilling  
( leaser positioning)



Punching Holes & Outline



Electrical test O/S



Entek & Flux coating

# Double Sided & Multi-layers PCB – Production Lines ( I )

(One set of double sided & Multilayers production lines in house with output 600,000Sq. Ft./M)



Board cut



Board edge Trimming



Image Transfer (inner) Layers



AOI



Brown Oxide/ Black  
Oxide



Press

# Double Sided & Multi-layers PCB – Production Lines ( II )

(One set of double sided & Multilayers production lines in house with output 600,000Sq. Ft./M)



Target Hole Drill



C.N.C. Drilling



Deburring



P.T.H. & Desmear



Panel Plating



Outer Image Transfer

# Double Sided & Multi-layers PCB – Production Lines ( III )

(One set of double sided & Multilayers production lines in house with output 600,000Sq. Ft./M)



Pattern Plating



Etching



SolderMask (WetFilms)



Routing

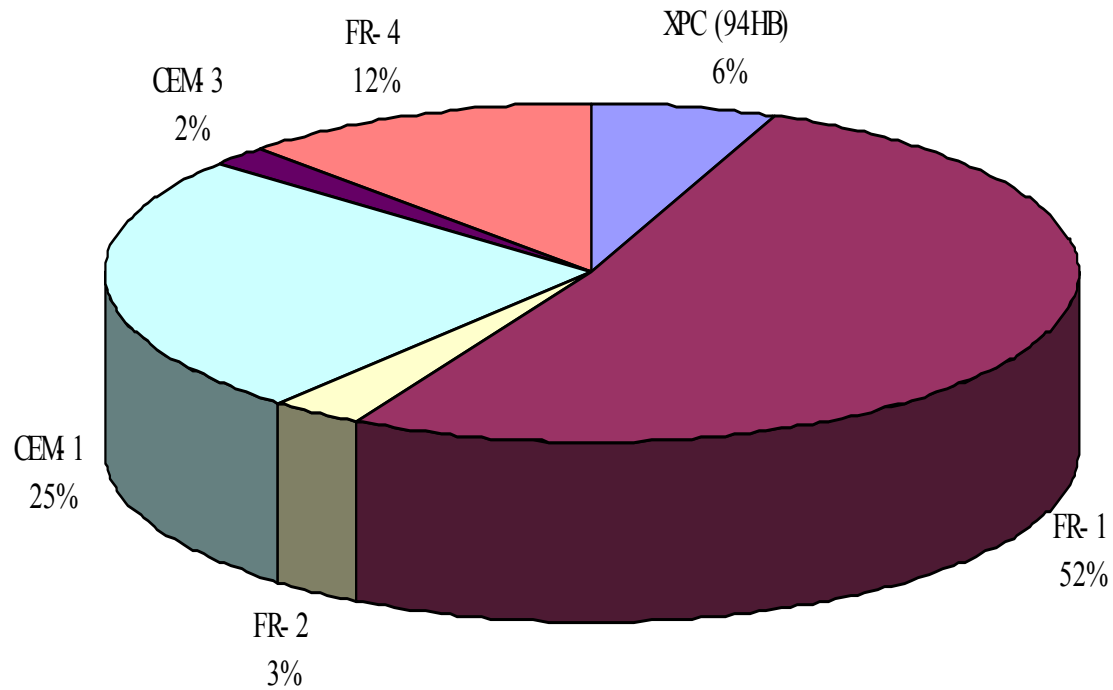


E-testing

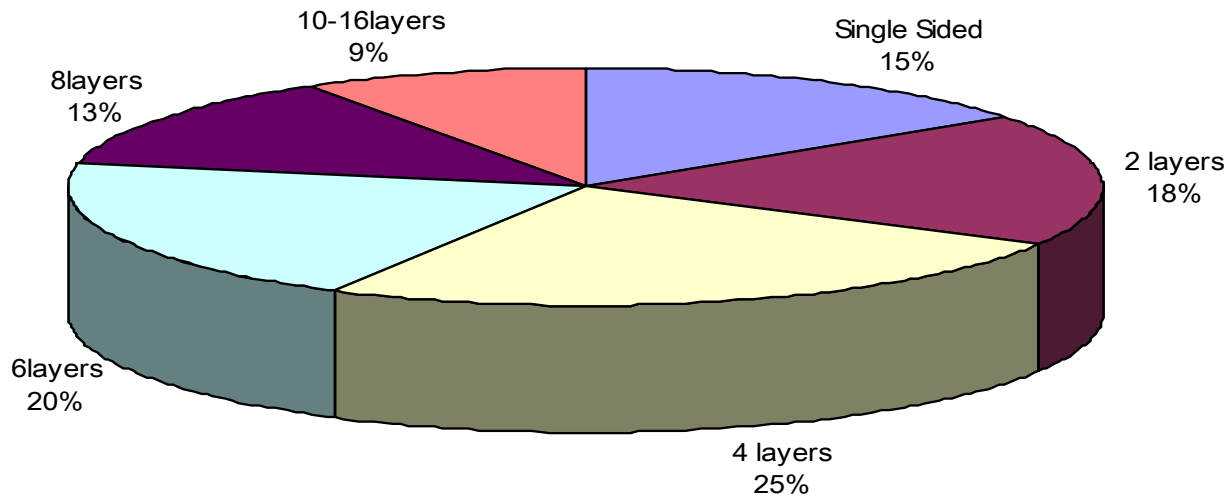


Ionograph

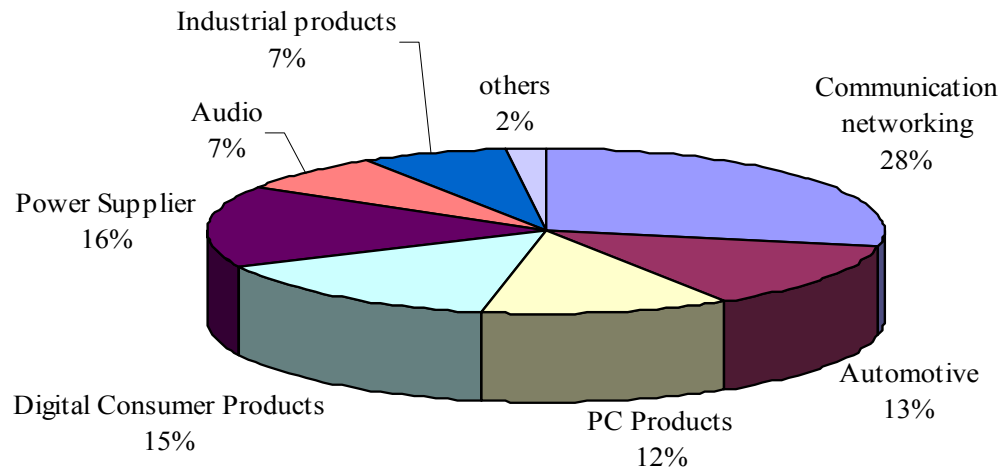
## Product - By type of laminates (Single sided)



## *Distribution of products (Sales revenue)*



## *Distribution of products of the industrial sectors*



# Customers List

## Major Customers:







# Products Delivery Lead-time

- Samples Lead-time
  - Single layer PCB: 3 days ~ 7days
  - Two Layers PCB: 4 days ~ 10days
  - 4~16 Layers PCB: 5 day ~ 20days
- Mass Production Lead-time
  - Single Layer PCB: 5 days ~10days
  - Two Layers PCB: 5 days ~14days
  - 4layers PCB: 7 days ~20days
  - 6layers PCB: 8 days ~22days
  - 8layers PCB: 9 days ~24days
  - 10~16layers PCB: 10days ~24days
  - \*\* New order need 2 extra days.
- Average Delivery lead-time: Single layer: 5days; Two layers: 8days; Multi-layers: 14days
- On Time Delivery Record:
  - Target: 100%
  - Actual: 97%