



SMT 製程能力表 SMT Process Capability

編號 NO.	分類 Division	項目 Item	能力 Capability	註記 Note
1	種類 Substrate Type		硬板 (PCB)、軟板 (FPC)、軟硬結合板 (RFPCB)、鋁基板 (MCPCB)	
2	打件能力 SMT Technology	成品板厚 Min.~Max. Board Thickness	0.1 ~ 7.0 mm	
		印刷機尺寸 Stencil Printer Size	Max. 510 x 460 mm	
		迴流焊尺寸 Reflow Soldering Size	Max. 450 mm	
		波峰焊尺寸 Wave Soldering Size (DIP)	Max. 380 mm	
3	錫膏印刷 Solder Paste	錫膏品牌 Solder Paste Manufacturers	日本千住 (SMIC)、日本減摩 (GENMA)	
		錫膏種類 Solder Paste Type	Type3 (25~45um)、Type4 (20~38um)、無鉛 (Lead-Free)、無鉛低鹵 (Lead-Free & Halogen-Free (HF))、低溫製程 (Low Temperature Soldering)	
	鋼板 Stencil	鋼板尺寸 Stencil Size	Normal. 650 x 500 mm Max. 660 x 510 mm	
		鋼板厚度 Stencil Thickness	0.06 ~ 0.20 mm	
4	生產力 Production capacity	每日生產點數 Mounting Points/Day	1,500,000 Chip	
		元件最大尺寸 Component Dimension	Max. 150 x 50 x 12 mm	
		RLC置件最小間距 Minimum Spacing	Min. 0.3 mm (Edge-to-edge)	
		腳距 IC Fine Pitch	Min. 0.2 mm (Edge-to-edge)	
		球距 BGA Ball Pitch	Min. 0.3 mm (Center-to-Center)	
		RC 最小尺寸 Chip Size	Min. 01005 Chip (0.4mm x 0.2mm)	
		連接器間距 Conn Pitch	Min. 0.2 mm	
		精準度 Mounting Accuracy	Min. 0.05 mm	
		DIP方式 Dual in-line package method	通孔迴流焊接(Through-Hole Reflow)、波峰焊接(Wave Soldering)、選擇焊接(Selective Soldering) 溫控圓型錫爐(Solder Pots)、手工焊接(Hand soldering)	
5	技術能力 Technology capacity	RLC元件偏移量 Placement Offset	小於或等於元件或焊盤寬度的50% (取兩之中較小者) Component side overhang is $\leq$ 50% of the component width or land (pad) width. (The lesser of the two)	
		BTC吃錫&爬錫量 Wettable Flank	焊盤底部應填充錫潤濕明顯・側邊至少25%以上・CLASS-3須達到50% Solder should be visibly wetted on the bottom of the pad, with at least 25% on the sides, and reaching 50% for CLASS-3.	
		BTC氣泡率 Void Ratio	散熱焊墊的氣泡面積不得超過總面積50% Voiding $\leq$ 50% of thermal pad total area.	
		BGA氣泡率 Void Ratio	不得大於該球徑30%或總面積25% Total voiding must not exceed 25% of the single solder ball area, nor 30% of the ball diameter.	
		Dip 吃錫量 Solder Volume	電路板厚度的 70% 以上 Reaching or exceeding 70% of the board thickness.	
6	品質保證 Quality assurance		錫膏檢測 (SPI)、首件檢查 (FAI)、自動光學檢測 (AOI)、Xray 檢測機、100% 目測檢驗(FQC)	
7	成型 PCBA Cutting/Shearing		V-CUT 切割機 (Soring)、Router切割機 (Routing)、雷射切割 (Laser)	
8	包裝方式 Packaging Method		氣泡袋 (Bubble bag)、靜電袋 (ESD bag)、翠盤 (Tray)、蜂巢箱 (Beehive box)	
9	其他服務 Other services		電性測試 (Electrical testing)、功能測試 (Functional testing)、燒錄作業 (Firmware Flashing Work)、組裝 (Assembly)、貼標籤 (Label / Sticker)、雷射 (Laser Engraving)	