

Facilities

1. Fabrication Process Equipment List & Photos.

1. Fabrication Process Equipment List (FEP_01)

Process	Equipment
Laminate Cutting	AUTO Cutting Saw Machine
	Auto De-burring Machine
	Double Door Oven
Inner Dry Film	Chem. Cleaning Machine
	Scrubber Machine
	Auto Rollering Machine
	LP. Roller Coating System
	Auto Exposure Machine
	Manual Exposure Machine
	DES Line

1.Fabrication Process Equipment List (FEP_02)

Process	Equipment
Inner Profiling	X-Ray Auto-positioning Drilling Machine
	Spot Facing Machine
	CCD Target Drill M/C
Inner Layer Inspection	Camtek AOI Machine
	Orbotech V309 AOI Machine
	Orbotech AOI Machine
	Verifying Machine
Brown Oxide	Brown Oxide Horizontal Line
Lay-up	Rivet Machine
	Bonding Machine
	NC Slitting and Sheeter for Prepreg
	Auto Lay-up System

1.Fabrication Process Equipment List (FEP_03)

Process	Equipment
Pressing	Pressing Machine
	PE Machine
Drilling	Drill Machine
	Pointing Machine
	Pastern Particle Machine
	Laser Drilling Machine
PTH & PP	De-burring Machine
	PTH Line
	Panel Plating Line
	Drying machine

1.Fabrication Process Equipment List (FEP_04)

Process	Equipment
Outer Dry Film	Pumice Scrubber machine
	Chemical cleaning machine
	Auto Laminator
	Manual Exposure System
	Fully- atuo exposure machine
	Developer machine
Pattern Plating	Pattern Plating Line
Outer Etching	Outer Etching Line
Outer Layer Inspection	E-Tester
	AOI Machine
	Verifying Machine

1.Fabrication Process Equipment List (FEP_05)

Process	Equipment
Solder Mask	IS Burnishing Machine
	Semi-auto Screen Printing Machine
	Fully Auto Screen Printing Machine
	Pre-cure Conveyor/ Vertical Oven
	Final Cure Conveyor Oven
	Exposure System Machine
	Fully-auto Exposure System Machine
	Developer Machine
Component Mark	Silk Screen Printing Machine
	Vertical Oven

1.Fabrication Process Equipment List (FEP_06)

Process	Equipment
Surface Finishing	Immersion Gold Line
	Gold Finger Line
	Horizontal HAL Machine
	Vertical Lead-Free HAL Machine
	OSP Line
	Immersion Silver Line
	Immersion Tin Line
Profiling	Routing Machine
	V-Cutting Machine
	Punching Machine
E-Test	E-Tester
Package	Vacuum Package Machine

2.Fabrication Process Equipment Photos (FEP_07)



Laser Plotter



CAD/CAM



Auto-Cutter



Roller-Coater



IL Auto-Exposure



Inter Etching



Inner AOI



Multi-bond line



Auto-PE



Multi-Layer Press



Drilling



Chemical Lab

2.Fabrication Process Equipment Photos (FEP_08)



Horizontal Plating



Laser Drill



OL Auto-Exposure



OL AOI



Auto-Silkscreen



Hot-air Leveling



Router



Auto-Vcut



Flying Probe Test



Digital Reader



Facilities

**2. Process Machine Q'ty & topic
brand highlight.**

1. Process Machine Q'ty (PMQ_01)

Process	Equipment Item	Model	Vender	Producing area	Q'ty
Laminate Cutting	AUTO Cutting Saw Machine	FL-M-230/ 210/ 180/110	SCHELLING	AUSTRIA	6
	Auto De-burring Machine	MH-600/NTG-800/ MH-680	MingHai/ASIA NEOTECH	Japan/TaiWan	3
	Double Door Oven	D36H04	Universal	SHENZHEN	12
Inner Dry Film	Chem. Cleaning Machine	CCP30NPB A10A1/ 08CCP30DPBA02/DB15NKB A05/09CCP30DPBA01/ UH-CCP30P	Universal	SHENZHEN	17
	Scrubbing Machine	/	ISHI HYOKI	JAPAN	2
	Auto Rolling Machine	HAKUTO-6101/720I/ MACJ1500B/1500B/ SUN-CSL-A25/ SOMAR-ASL-24ML	HAKUTO/ SUN/ SOMAR	JAPAN	20
	LP. Roller Coating System	RC4000HTDC/RC380HTDC/ BURKLE-BA3000/KL/ SYSTRONIC-180RC	WKK	GERMANY	7

1. Process Machine Q'ty (PMQ_02)

Process	Equipment Item	Model	Vender	Producing area	Q'ty
Inner Dry Film	Auto Exposure Machine	ORC-Proform7000/ Proform7500/2010/ OLEC AX-28	ORC/OLEC	America	28
	Manual Exposure Machine	ORC-HWM-201B/5K /3K/7K/201B-5K OLEC-AP-30C/AP30- 8KW/AP42-8K/AX-28 C SUN-UVE-7K/5K AP30CL-5000/6K	ORC/OLEC/C SUN	America	25
	DES Line	JS-7729/ DES35NMAA07A4 /HOLLMULLER	IS/UNIVERSAL/ HOLLMULLER	USA/ GERMANY	10
Inner Profiling	X-Ray Auto-positioning Drilling Machine	DX-330/MMX-888	OFUNW/ WKK	JAPAN	8
	Spot Facing Machine	SUN-PM/PC	CHING HUEI	Tai wan	4
	CCD Target Drill M/C	SUN-AMD/PC	CHING HUEI	Tai wan	4

1. Process Machine Q'ty (PMQ_03)

Process	Equipment Item	Model	Vender	Producing area	Q'ty
Inner Profiling	X-Ray Auto-positioning Drilling Machine	DX-330/MMX-888	OFUNW/ WKK	JAPAN	8
	Spot Facing Machine	SUN-PM/PC	CHING HUEI	Tai wan	4
	CCD Target Drill M/C	SUN-AMD/PC	CHING HUEI	Tai wan	4
Inner Layer Inspection	Camtek AOI Machine	ORION 604/	Camtek	ISRAEL	9
	Orbotech V309 AOI Machine	V309X-AP/V309i-AP	Orbotech	ISRAEL	34
	Orbotech AOI Machine	Spiron 8800/Inspire 9060/ Discovery 8000/Discovery 6	Orbotech	ISRAEL	14
	Verifying Machine	VNR/VRS	Orbotech	ISRAEL	67
		CVRISIRIUS	Camtek	ISRAEL	
Brown Oxide	Brown Oxide Horizontal Line	SD40NP04002/BR40NPAA10 AZ/BR30NPAA10A3/09BR40 DMA07	UNIVERSAL/Ma cdermid	TaiWan/China	7

1. Process Machine Q'ty (PMQ_04)

Process	Equipment Item	Model	Vender	Producing area	Q'ty
Lay-up	Rivet Machine	JS-7729/JH-868	World wide/ HSIN JON	Tai wan	7
	Bonding Machine	BD-02-06	Gainford	Panyu	3
	NC Slitting and Sheeter for Prepreg	VNC-55/VIGOR	World wide	Tai wan	6
	Auto Lay-up System	Yamchen L03	Gainford/ Shengang/ Lande/Aiji /Weishipu/ zhishenglong	Tai wan	6
Pressing	Pressing Machine	LHV-900-15/ LAMV/LAMVS	Gainford/ BURKLE	Tai wan / Germany	7
	PE Machine	ATD-5010/PE-3000-4C-45、 PE-3000	W.K.K/XIANG SHUN	USA/Tai wan	3

1. Process Machine Q'ty (PMQ_05)

Process	Equipment Item	Model	Vender	Producing area	Q'ty
Drilling	Drill Machine	ND series/GIGA 888L/MEGA-4600/MARK V/VI	HITACHI/ Jadason/ PLURITEC/ EXCELLON/	JAPAN/ITALY/AMERICAN	814
	Pointing Machine	MDP-10/MDP-5/CK-2/SP-DP-1/SP-DP-2/TK-100P	A&O/Kontech/ HUI GAO/ LI CHUAN	TAIWAN/GERMANY	53
	Pastern Particle Machine	GAM-80/TGT/CRM-2006T/CRM-2000T	A&O/HUI GAO/OFUNA	TAIWAN/GERMANY	6
	Laser Drilling Machine	HDI 5330	ESI	U.S.	1
PTH & PP	De-burring Machine	IS	Wesero GmbH, sprockhovel	GERMANY	8
	PTH Line	/	Gaiford/Forward/ Gold Time/ COMMEND	Panyu/HK/TAIWAN	7
	Panel Plating Line	O303116	Gaiford/ Gold Time /COMMEND	Panyu/HK/TAIWAN	6
	Drying Machine	OPP-D-1/PC40NPGA01/ 08FC60NPAA01	Ellington/ATO/ UNIVERSAL	China	8

1. Process Machine Q'ty (PMQ_06)

Process	Equipment Item	Model	Vender	Producing area	Q'ty
Outer Dry Film	Pumice Scrubber	ODFSCR-1	Ellington	China	13
	Chemical cleaning machine	SCA44NO400 (R1)	UNIVERSAL	China	1
	Auto Laminator	CSL-A25/ SCHMID/ACL-9100/MACH 7201series	OIA/HAKUTO	Taiwan/Japan	16
	Manual Exposure System	AP30-5K/8K/OB 7120/UVE-M500/ HMW201B-5KR/ EXM 1350/ HMW-2016-5K	Jadason/ WKK/C SUN/ORC	USA/GERMANY/Taiwan/JAPAN	27
	Fully-atuo exposure	EXM-1350/HAP series/ ONOSOKKlseries	HATUTO/ WKK	JAPAN	18
	Developer machine	DLD40 NPAA05/ 08DLD40NCAA01/ DLD 40 NGBA 04A1/ DLD40NPAA05/ DLD40NGBA04A1	CUNFORD/ UNIVERSE	HK	8

1. Process Machine Q'ty (PMQ_07)

Process	Equipment Item	Model	Vender	Producing area	Q'ty
Pattern Plating	Pattern Plating Line	OPI-1/OPI-2/80015E	Ellington/FORWARD/GAINFORD/COMMEND/Gold Time	H.K./TAIWAN/China	9
Outer Etching	Outer Etching Line	SES-1/SES-6/SES30NPAA07/SES45NPAA01A3	Ellington/HOLLMULLER/SCHEMID/UNIVERSAL	GERMANY/America	8
Outer Layer Inspection	E-Tester	MV300/BGA-T30003/Max-302	Mason Electronics/CENTALIC	H.K.	60
	AOI Machine	VISION 309X-AP/PC-1490	ORBOTECH	ISRAEL	28
	Verifying Machine	VRS4I/VRS3I	ORBOTECH	ISRAEL	24

1. Process Machine Q'ty (PMQ_08)

Process	Equipment Item	Model	Vender	Producing area	Q'ty	
Solder Mask	IS Burnishing Machine	ISAT-EW80P	/	GERMANY	14	
	Semi-auto Screen Printing Machine	AT-EW80P	OIA	TAI WAN.	90	
	Fully Auto Screen Printing Machine	CHIP610-1	CHING HUEI	TAIWAN	1	
	Pre-cure Conveyor/ Vertical Oven	WFPTO-1/O-S18EL21KP /D36EL03010/O- D36ED22K/O-S36EO22K	Ellington/CSUN/U NIVERSAL /OIA	ChinaHK/TAIWAN	20	
	Final Cure Conveyor Oven	O-T84H8/ D36EL02001 (R2) /D36EL03010	UNIVERSAL	H.K.	44	
	Exposure System Machine		ORC HMW 680GW	W.K.K	ORC	3
			AP30 CL-8000	JADASON	AMERICAN	8
			TC-6575PSR	DA ZHEN	TAIWAN	4
			UVE-7K/UVE-M720	OIA	TAIWAN	23
	Fully-auto Exposure System M/C	AC 620	ADTEC	AMERICAN	2	
Developer	IS/DLM30NGAA08A5/08DL M35NKAA04	WKK/ UNIVERSAL	ITALY/China	12		

1. Process Machine Q'ty (PMQ_09)

Process	Equipment Item	Model	Vender	Producing area	Q'ty
Component Mark	Silk Screen Printing M/C	AT-EW80P/P-WF6061/TC-6575PSR	ATMA CHAMP /OIA/SVECIA/DIA/DA ZHEN	TAI WAN/JAPAN/CHINA	57
	Vertical Oven	O-S18EL21KP /O-D27EL23KP	UNIVERSAL	HK	30
Profiling	Routing Machine	POSALUX US-6000/ MEGA 4600/MARK/TRUDIRL-104 SYSTEM-6/NR-6L180E/Six-Park/SR-5B22/DALIANG TC-RU4B II /SR-5B22/FR-557	World wide/ PLURITEC/ EXCELLON/ ADVANCED/ Schmolli/ HITACHI/Trudil/So gotec/WKK	Switzerland/ ITALY/USA/ GERMANY/ JAPAN/ TAIWAN	117
	V-Cutting Machine	NCV-600	WKK	SHODA	22
	Punching Machine	TP-80/TP110/TP-160	Guangling Co.ltd/ AMADA/ World Precise	Huzhou/JAPAN	19

1. Process Machine Q'ty (PMQ_10)

Process	Equipment Item	Model	Vender	Producing area	Q'ty
E-Test	E-Tester	MV300/MU3001S/K U08AA1/ MAX-9800/ BAG- T30000/ Micro 200/MAX- 302/KV08AA1	MANSON/KAIM A/MAXTRON/CE NTALIC/MANIA/ BAOCHUANG	HK/SHENZHEN	139
Surface Finishing	Immersion Gold Line	OIG-1/5229E9	COMMEND	TAIWAN	2
	Gold Finger Line	/	SAN HE	SHENZHEN	4
	Horizontal HAL Machine	HSL-350/HSL- 175/WSL-375	WKK	USA	2
	Vertical Lead-Free HAL Machine	JS-A45003	ZHENG SHEN	TAIWAN	2
	OSP Line	OEK-1 /EK25NTAA01/ EK25NLAA05A2/IE 15NPO4002(R1)/08E K35NEAA01	MMD(ELLINGTO N)/UNIVERSE	HK	6
	Immersion Silver Line	IE20NT04004	UNIVERSE	HK	2
	Immersion Tin Line	/	Shenzhen Luye	China	1
Package	Vacuum Package Machine	PP-5580R/VPE- 12065/SP-5580D	Zhong xing/ XingMing/ JIAN LIANG	Taiwan/U.S.A. /China	14

2. Topic brand highlight (PMQ_11)

AUTO Cutting Saw Machine



AUTO De-burring Machine



2. Topic brand highlight (PMQ_12)

Chemical Cleaning Machine



Auto Exposure Machine



2. Topic brand highlight (PMQ_13)

DES Line



**Inner Layer
AOI Machine**



2. Topic brand highlight (PMQ_14)

Brown Oxide Horizontal Line



Pressing Machine



2. Topic brand highlight (PMQ_15)

Drilling Machine



PTH Line



2. Topic brand highlight (PMQ_16)

Panel Plating Line



Pattern Plating Line



2. Topic brand highlight (PMQ_17)

Outer Etching Line



Outer Layer AOI Machine



2. Topic brand highlight (PMQ_18)

**Outer Dry Film
Fully-auto Exposure
Machine**



**Outer Solder
Mask Pre-treatment
Machine**



2. Topic brand highlight (PMQ_19)

**Solder mask Fully Auto
Screen Printing
Machine**



**Solder Mask Fully-auto
Exposure System Machine**



2. Topic brand highlight (PMQ_20)

Horizontal HAL Machine



Vertical Lead-Free HAL Machine



2. Topic brand highlight (PMQ_21)

OSP Line



Immersion Silver Line



2. Topic brand highlight (PMQ_22)

Immersion Tin Line



Immersion Gold Line



2. Topic brand highlight (PMQ_23)

Routing Machine



Punching Machine



2. Topic brand highlight (PMQ_24)

V-Cutting Machine



E-Tester



2. Topic brand highlight (PMQ_25)

Fully-auto E-Tester



Vacuum Package Machine

