



Introduction of Mirae SMT

❖ **Head Office : 102-405 Bucheon Techno Park**
Samjeong- dong Ojeong-gu Bucheon City Gyeonggi-do
Republic of Korea

❖ **TEL. : 82-32-326-4850 FAX. : 82-32-326-4877**

❖ **Web Site : www.miraesmt.com**

2011 . 05 . 24





INDEX

- A. Company Profile**
- B. Company Overview**
- C. Company History**
- D. Business**
- E. Organization Chart**
- F. Major Products**
- G. Facilities in Bucheon Factory**
- H. LINE Environment**
- I. Manufacturing Process**
- J. SMT Process**
- K. ISO Certification**
- L. Company Location**

A. Introduction

- Company Name : Mirae SMT
- C E O : Ha Young-Soo
- Foundation : 1993. 11.18
- Capital : 350 Million Won
- Address : 102-405 Bucheon Techno Park Samjeong-dong Ojeong-gu Bucheon City
Gyeonggi-do Republic of Korea
TEL : 82-32-326-4850 FAX : 82-32-326-4877
- Web : <http://www.miraesmt.com>
- Number of Employees : 90 (Bucheon:30, Guro:30, China: 30)
- Construction and Major Projects
Main Office in Bucheon : EMS and SMT Equipment
Guro Office : EMS
U.S. corporation : Exports Car Interior material, EMS & SMT
SooYoung Electronics in China : EMS
- Major Products
EMS : MODULE, Electronic DOOR-LOCK , Telecommunications Relay,
Credit Card Terminals , LED and so on.
SET : WiFi MODULE , CCM , ASM ...
SMT : SMT TOTAL SOLUTION
[REFLOW OVEN , SMD MOUNTER , SCREEN PRINTER , AOI , SPI...]

B. Motto

◆ MOTTO ◆

易地思之 Think and Do as the Customer's Perspective

◆ Philosophy ◆

- Securing an outstanding workforce
- Construction equipment manufacturer based on the best performance
- Provide the best quality and Service
- Becoming World Best Specialist

◆ Policies ◆

- Creative Organizational Culture
- Construction of Customer Satisfaction Quality System
- Securing SMT Competitiveness
- Settlements of Q.A PROCESS

C. Company History

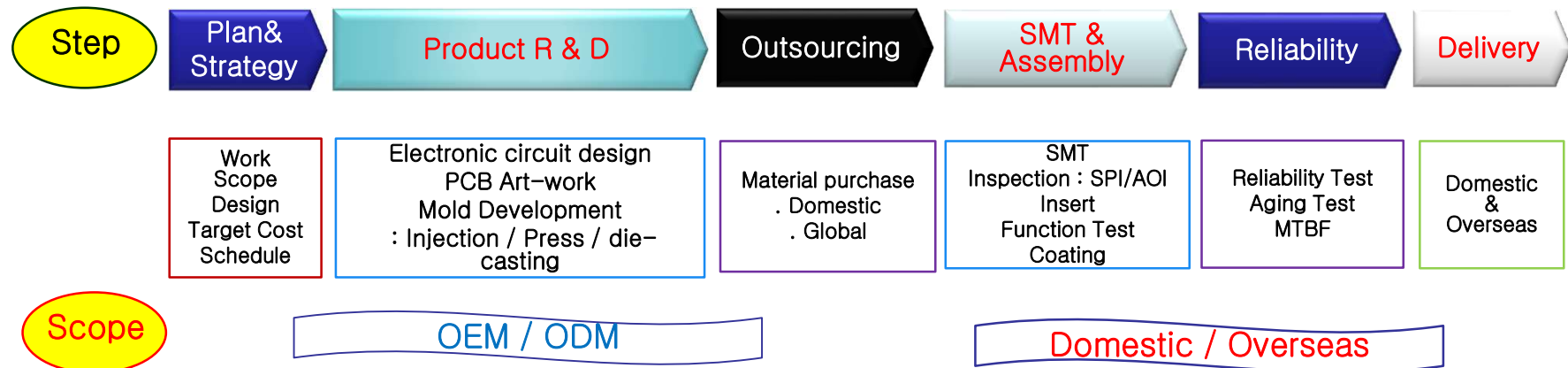
- 93. 11. Found Mirae Trading
Contract as Monopolize Supplier in South Korea
- 94. 04. of RENTHANG Co., Ltd. [TAIWAN] Component LEAD Forming M/C
- 94. 10. WAVE JET Co., Ltd. [TAIWAN] AIR REFLOW SOLDERING M/C
- 95. 05. FONTON Co., Ltd. [TAIWAN]
- 96. 10. ABLE Co., Ltd. [TAIWAN] SMT & BGA PACKAGE REWORK SYSTEM
- 98. 04. JIANN FUU LI INDUSTRIAL Co., Ltd. [TAIWAN] TEMP CONTROL SOLDERING STATION

- 00. 05. Rename to Mirae SMT : Bucheon Techno Park in Gyeonggi-do

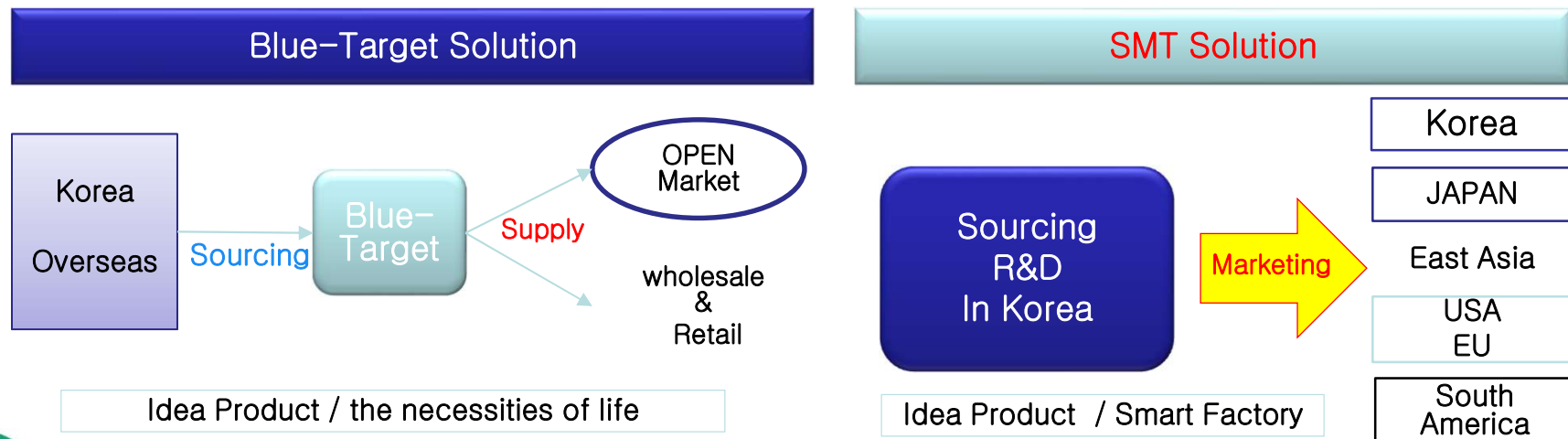
- 01. 06. Starting EMS Business - SMD LINE & PBA
- 04. 12. Expanded SMT & PBA Lines (Total 5 SMT Lines)
- 06. 01. Construct dedicated Line for CAMERA MODULE (Total 5 SMT Lines)
- 06. 11. Transfer 2 SMT Lines to Factories Corporation of America, Mexico
- 08. 10. Product Communication Relay for AnTs Co., Ltd.(Subsidiary company of SK Telesys)
- 08. 11. Found China Corporation – Soo Young Electronics (3 SMT Lines – Shenyang)
- 09. 08. Found Guro Factory – 2 SMT & Post Processing Lines : IREVO Co., Ltd.
- 10. 05. Construct 2 SMT Lines in Dae Woong Electronics (Samsung LCD)
- 10. 12. Closed China Branch
- 11. 06. Closed Guro branch and moved into Main Factory
- 13. 04. Extended Factory and use whole 4th floor, Bucheon Techno Park 102dong
- 13. 08. Set up 2 N2 Reflow M/Cs : HELLER 1809 MK III
- 13. 10. Expanded SMT Line (Total 6 SMT Lines)
- 14. 04. ADD a Insert Line as "Production Team III"

D. Business

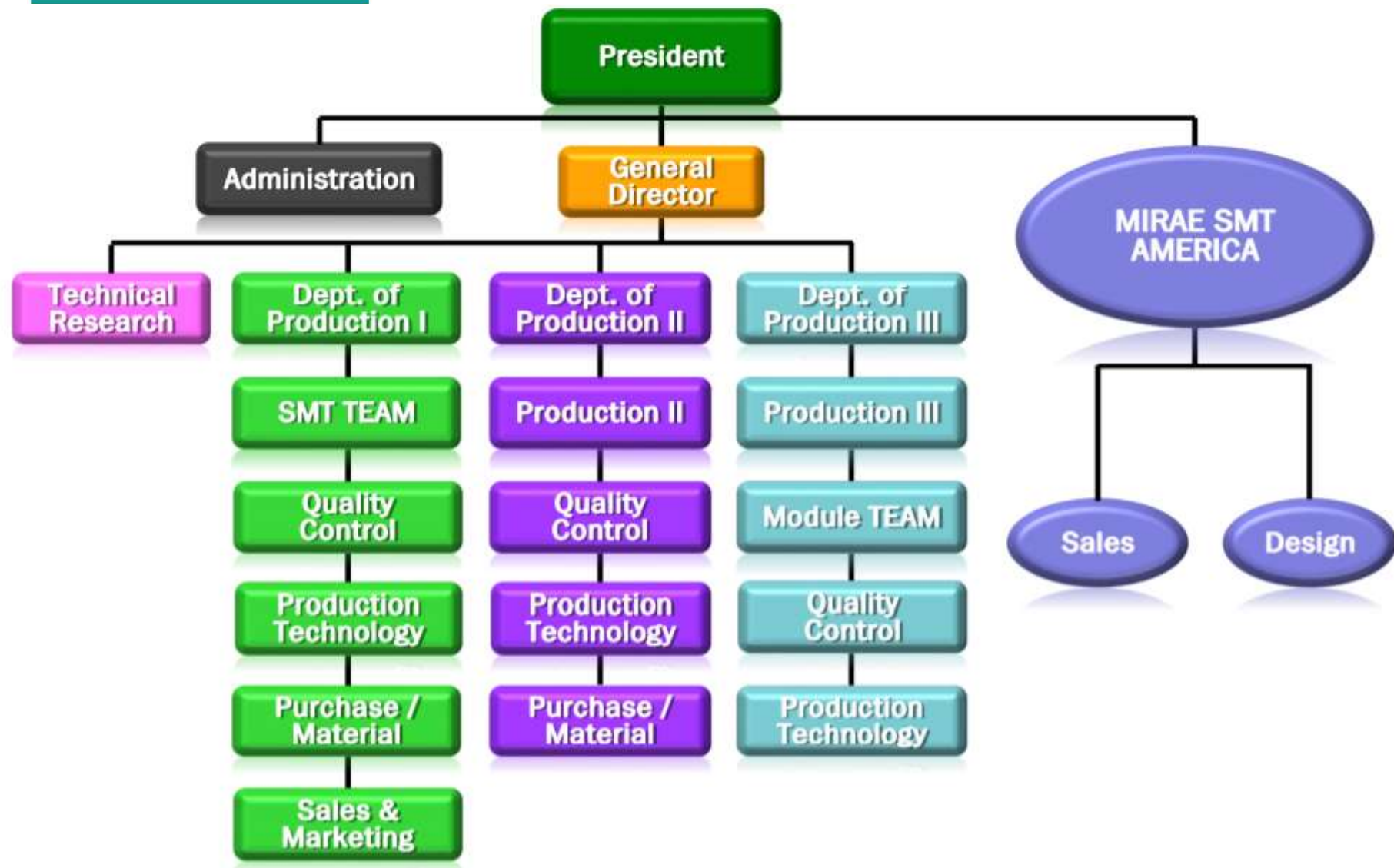
Smart EMS Solution For OEM / ODM



Marketing BIZ

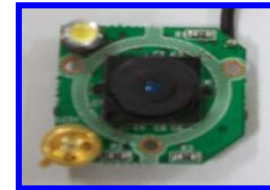
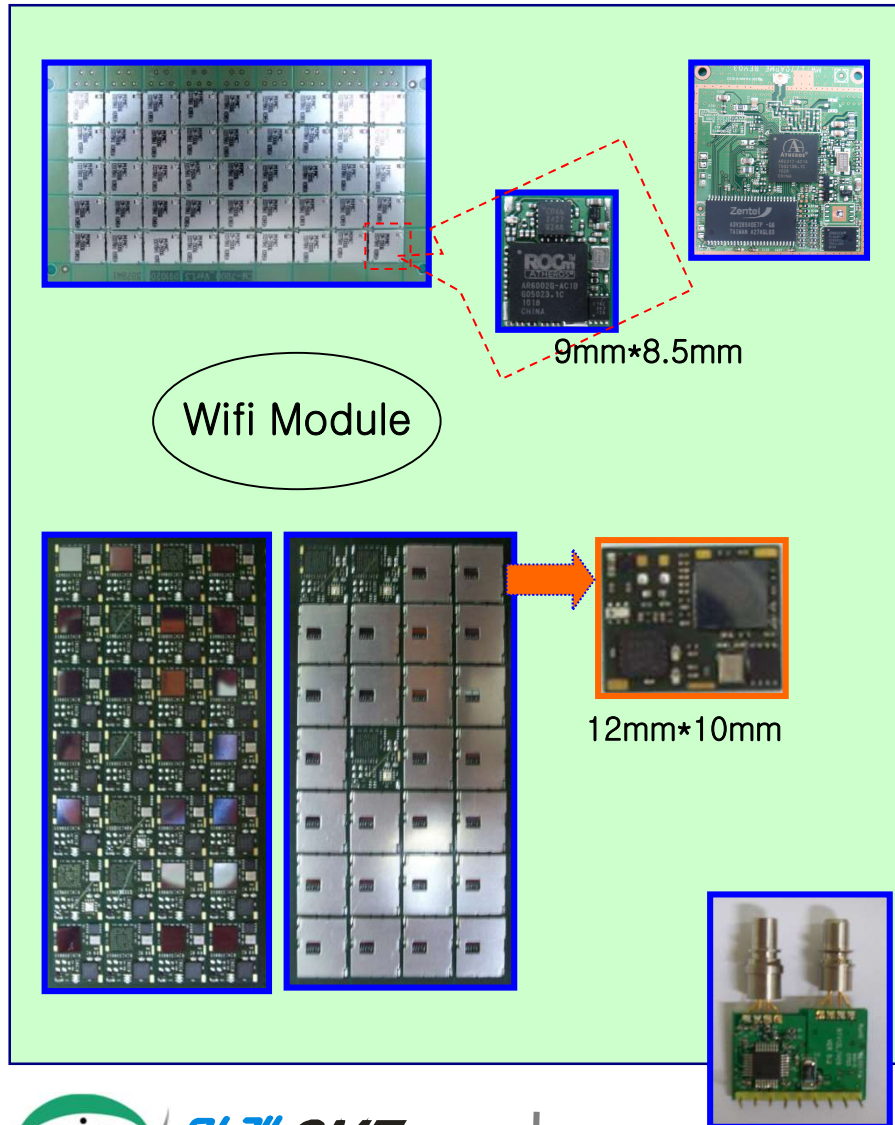


E. Organization



F. Major Products

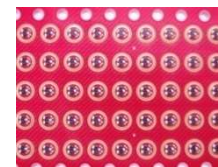
Modules



Camera Module



BLDC Motor

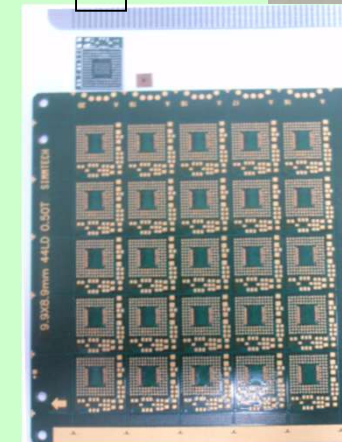
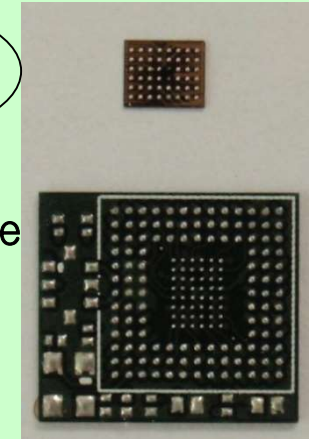


Micro phone



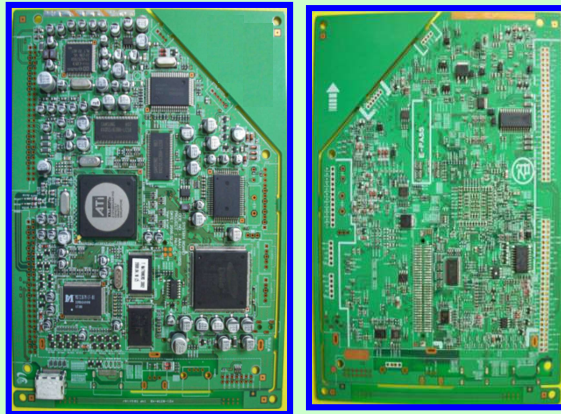
Bluetooth Module

Enlarge

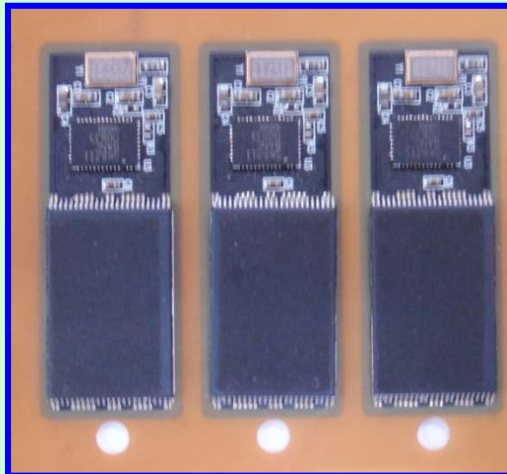


ASS'Y s

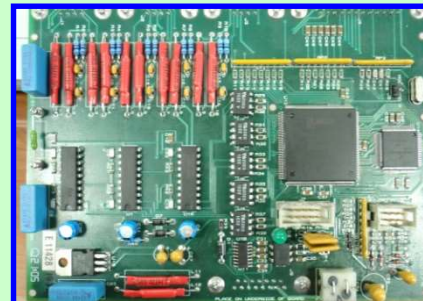
DVR



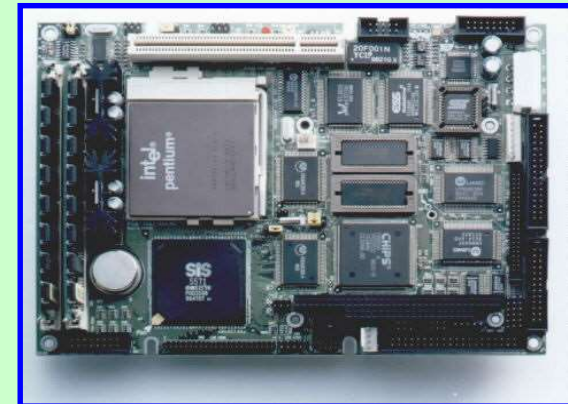
Memory



MAIN CONTROLLER



RF BOARD



G. Facilities in Bucheon

MACHINE NAME	LOADER	SCREEN PRINTER	CHIP MOUNTER		VISION MOUNTER	REFLOW OVEN	UNLOADER
1 LINE 27,000 CPH	ALD-12S	SVP-735 (SJ INNOTECH)	KE-2010L (JUKI)	KE-750L (JUKI)	KE-760L (JUKI)	NS-800-N (JT)	AUD-12S
	—	C/TIME: 11 sec	CHIP: 11,000 CPH	CHIP: 8,500 CPH	CHIP: 7,500 CPH	AIR TYPE	—
2 LINE 49,500 CPH	ALD-12S	SP28P-DH (Panasonic)	FX-1R (JUKI)	KE-2050M (JUKI)	KE-2060 (JUKI)	1809 MK III (HELLER)	AUD-12S
	—	C/TIME: 12.5 sec	CHIP: 25,000 CPH	CHIP: 12,500 CPH	CHIP: 12,000 CPH	N2	—
3 LINE 62,000 CPH	ELD-400	SMART M500 (MSYS)	FX-1R (JUKI)	FX-1R (JUKI)	KE-2060R (JUKI)	1809 MK III (HELLER)	AUD-22
	—	C/TIME: 13.5 sec	CHIP: 25,000 CPH	CHIP: 25,000 CPH	CHIP: 12,000 CPH	N2	—
4 LINE 35,500 CPH	ELD-400N	HP-520SPI (SJ INNOTECH)	KE-2050M (JUKI)	KE-2050M (JUKI)	KE-2020L (JUKI)	NS-800 (JT)	EUD-400N
	—	C/TIME: 13.5 sec	CHIP: 12,500 CPH	CHIP: 12,500 CPH	CHIP: 10,500 CPH	AIR TYPE	—
5 LINE 32,500 CPH	ELD-500	SMART M500 (MSYS)	KE-2010M (JUKI)	KE-2010M (JUKI)	KE-2020M (JUKI)	SS-800 (JT)	AUD-12F
	—	C/TIME: 13.5 sec	CHIP: 11,000 CPH	CHIP: 11,000 CPH	CHIP: 10,500 CPH	AIR TYPE	—
6 LINE 16,000 CPH	ALD-12S	SVP-735 (SJ INNOTECH)	KE-750 (JUKI)		KE-760 (JUKI)	SS-800 (JT)	EUD-500
	—	C/TIME: 11 sec	CHIP: 8,500 CPH		CHIP: 7,500 CPH	AIR TYPE	—

H. LINE Environment

H-1. Lines

AIR SHOWER



1Line



2Line



3LINE



AOI



REWORK



X-RAY



H-2. Lines Environment

Inspection & REWORK



Processing Equipment



Material Storage – 1.



Material Storage – 2.



Material Storage – 3.



I. Manufacturing Process

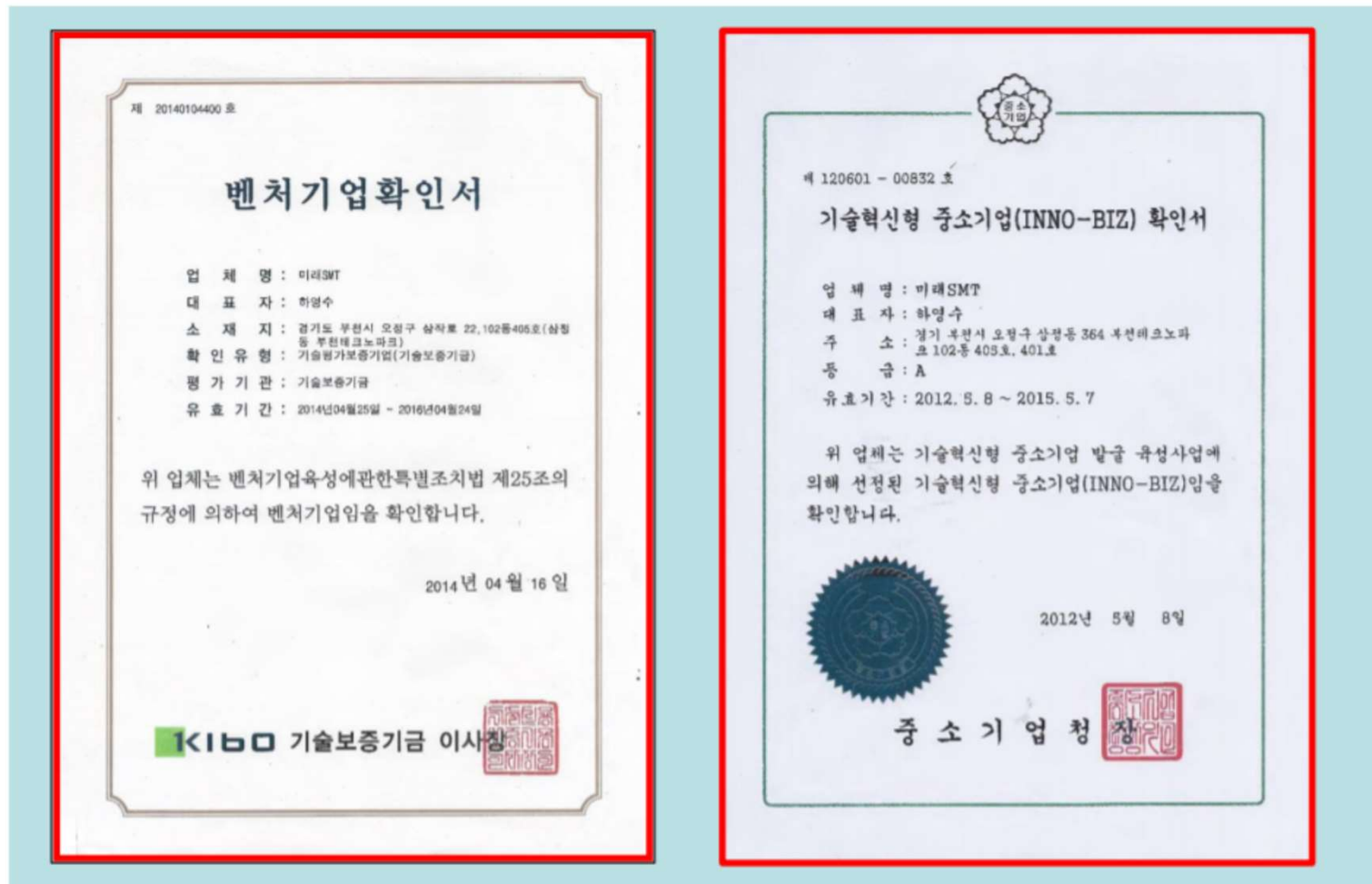
FLOW CHART	Process	Man. Point	Man. Standards	Related Documents	Rules	Man. Resp.
<pre> graph TD Start([Start]) --> D1{ } D1 -- NG --> Return([Correct / Return]) D1 -- OK --> E1([]) E1 --> D2{ } D2 -- NG --> Discard([Discard]) D2 -- OK --> D3{ } D3 -- OK --> End([End]) D3 -- NG --> Discard </pre>	❖Purchase Materials	❖ BOM Check ❖ Customer's Spec		❖ Material Receipt ❖ Incoming Inspection Report (Supplier)	❖ Rules of Purchase	❖ Head of Purchase Team
	❖Register Inspector	❖ Insp. Ability ❖ Insp. Career	❖ Inspector Standards	❖ Inspectors List ❖ Certification ❖ Inspectors Evaluations	❖ Rules of Education	❖ Q.A ❖ Head of Q.A Team
	❖Incoming Inspection	❖ BOM Check ❖ MSL Check	❖ Incoming Inspection Standards	❖Incoming Inspection Report	❖ Rules of Incoming Inspection	❖ Q.A ❖ Head of Q.A Team
	❖Prod uction	❖ SMT ❖ Map Check ❖ Assembly Diagram ❖ Set	❖Standards for each process ❖Standards for each process	❖ Production Request ❖ C/S for each process ❖ P/S for each process	❖ Rules of process management	❖ Prod. ❖ Head of Prod. Team
	❖Process Inspection	❖ Quality Check	❖ SMT Inspection Standards	❖ Process Insp. Sheet - SMT - Assay	❖ Rules of Q.A.	❖ Prod. ❖ Head of Prod. Team
	❖Handling NG / Make measures		❖ Customer's Inspection Standards	❖Trouble Shooting ❖ Fault Report ❖ Measures		❖ Everyone
	❖ Outgoing Inspection	❖ Qu'ty Check ❖ BOM Check ❖ AQL Check	❖ Outgoing Inspection Standards	❖ Outgoing Inspection Report	❖ Rules of Quality Assurance	❖ Q.A ❖ Head of Q.A Team
	❖ Deliver	❖ Packaging Condition ❖ Dealing Classification	❖ Deliver Standards	❖ Deliver Confirm Sheet - O.G Insp. Report - Profile Check Sheet - Manu. history CARD - Material Return Sheet ❖ Statement of account	❖ Rules of Sales	❖ Sales ❖ Head of Sales Team

J. SMT Process

Flow Chart	Process	Man. Points	Man. Standards	Related Documents	Man. Method	Man. Resp.
<pre> graph TD Start([Start]) --> Printing([Printing]) Printing --> Mounting([Mounting]) Mounting --> Reflow([Reflow Soldering]) Reflow --> Inspection{Inspection} Inspection --> Outgoing{Outgoing Inspection} Outgoing --> Packing([Products Packing]) </pre>	Material Kitting	❖ Quantity, Spec. Check, Input to Line and Return	❖ Materials List ❖ BOM	❖ Product Request Form	❖ Real / Quantity	❖ Purchase ❖ H of P.T.
	Printing	❖ Solder Cream condition ❖ Mask Check (appearance) ❖ Squeegee Check (appearance) ❖ Solder Spread State Check	❖ Solder Standards ❖ Mask Standards ❖ Squeegee Standards	❖ Solder in/out C/S ❖ Solder Label ❖ Mask List ❖ Squeegee C/S ❖ F/M/L Check Sheet	❖ Solder In / Out ❖ Team Change ❖ Team Change ❖ 6/a day (D/N)	❖ Prod. ❖ Head of Production Team
		❖ Solder Cream Condition ❖ Mask Check (Tension, No. of use) ❖ Squeegee Check (No. of use)	❖ Scheduled to 2 nd Process			
	Mounting	❖ PGM Manage ❖ P.M Manage (Facilities) ❖ Manage Mount Accuracy ❖ Component Change Check ❖ Capacity Check	❖ Operation guide ❖ P.M List ❖ BOM ❖ MAP	❖ Feeder Check Sheet ❖ Facilities Check Sheet ❖ P.M List ❖ Comp. change C/S ❖ Comp. Capacity C/S ❖ F/M/L Check Sheet	❖ 1 /2Hr ❖ 1 /a Day ❖ Yearly Sched. ❖ Change ❖ First Prod. ❖ 6 /a day (D/N)	❖ Prod. ❖ Head of Production Team
	Reflow Soldering	❖ Profile Spec. Check ❖ Soldering State	❖ Reflow Standards ❖ Appearance Inspection Standards	❖ Profile List ❖ F/M/L Check Sheet	❖ before F. Prod. ❖ 6 /a day (D/N)	❖ Prod. ❖ Head of Prod. Team
	Inspection	❖ Soldering state check ❖ First Prod. Inspection check ❖ Mount State check ❖ Component polarity check ❖ Component crack check	❖ App. Inspection Standards ❖ MAP ❖ BOM	❖ Process Insp. C/S ❖ First Prod. Check Sheet ❖ F. Prod. Approval Sheet ❖ F/M/L Check Sheet	❖ Every ❖ First Prod. ❖ 6/a day (D/N)	❖ Prod. ❖ Head of Production Team
	Outgoing Inspection	❖ Emphasis Manage CTQ ❖ Customer's Quality Standards (A.Q.L GII 0.1)	❖ O.G Inspection Standards ❖ AQL TABLE	❖ O.G Insp. List ❖ O.G Insp. Sheet	❖ Outgoing Inspection	❖ Q.A ❖ Head of Q.A Team
	Products Packing	❖ Goods list check ❖ Lot size check		❖ Product Request Form	❖ Finish Production	❖ Q.A ❖ Head of Q.A Team

K. ISO Certification





L. Company Location



Add. : 102-405 Samjeong-dong Ojeong-gu, Bucheon-si, Gyeonggi-do
 Tel : 82-32-326-4850
 Fax : 82-32-326-4877
 Homepage : www.miraesmt.com



THANK YOU