

Product / Process Change Notice

PCN No.: Q000-PCN-TL201806-01

Date: 2018-06-25

Change Title: KYEC testing site change from Chu-Nan factory to Tong-Luo factory.

Change Classification: ☒ Major ☐ Minor

Change item: ☐ Design ☐ Raw Material ☐ Wafer FAB ☐ Package Assembly ☒ Testing ☐ Others: _____

Affected Product(s) :

The affected part no. list, please refer to the Table I for more information.

Description of Change(s) :

The affected CP(Chip Probing) testers at CP testing house at KYEC(King Yuan Electronics CO., LTD.) will be moved from Chu-Nan factory(No.118, Chung-Hua Rd., Chu-Nan, Miao-Li 350, Taiwan (R.O.C.)) to Tong-Luo factory(No.8, Tongke N. Rd., Tong-Luo Miao-Li 366, Taiwan, (R.O.C.)).

Reason for Change(s) :

Due to capacity limitation, the affected testers will be moved from Chu-Nan factory to Tong-Luo factory.

Impact of Change(s) : (positive & negative)

Form: No concern

Fit: No concern.

Function: No concern.

Reliability: No concern.

Qualification Plan/ Results :

Passed the testing equipment verification and correlation, please refer to appendix A for the details.

Implementation Plan :

☐ Date Code: _____ onward ☐ Lot No.: _____ onward ☐ Implemented date: September 23, 2018

Originator:

H.Y. Lai / Q100

Approval:(Vice President of Quality & Logistic Center)

H.J. Tsai/ A00Q

Contact for Questions & Concerns

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Customer Comments:

Note: Please sign this notice, and return to Nuvoton contact within **30** days. If no response is received within **30** days, this Change Request will be assumed to meet your approval.

☐ Approval	☐ Disapproval	☐ Conditional Approval: _____
Date: _____	Dept. name: _____	Person in charge: _____

Follow-up and Tracing:

A. copies to

FAB :

Test / Product:

Design/ Marketing:

Production control/ Others:

B. Changes:

1. Document / Test program:

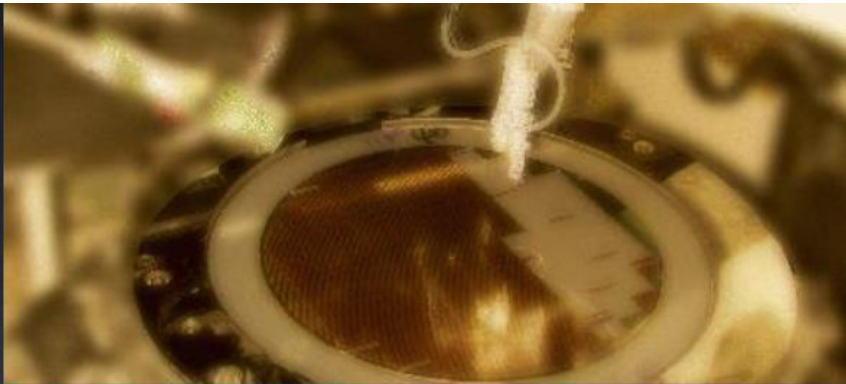
Document No/ test program	Document name/ test program name	version		responsibor	Completed date	Remark
		before	after			
NA	NA	NA	NA	NA	NA	NA

Verified by: _____.

Table I: Affected parts list

Part No.	Part No.	Part No.	Part No.	Part No.	Part No.
C32IPM52T	M054LDE	MINI54LDE	NUC122ZD2DN	NUC230LD2AE	NUC442RG8AE
HL004	M054ZDE	MINI54TDE	NUC123LC2AE1	NUC230LE3AE	NUC442RI8AE
HL016Z	M058LDE	MINI54ZDE	NUC123LC2AP1	NUC230SC2AE	NUC442VG8AE
HW503	M058ZDE	MPT001	NUC123LC2AP2	NUC230SD2AE	NUC442VI8AE
JULI002	M2300	NM1330LC1AE	NUC123LD4AE0	NUC230SE3AE	NUC472HG8AE
LC001	M2301	NM1330LD2AE	NUC123LD4BN0	NUC230VE3AE	NUC472HI8AE
M0516LDE	MINI51FDE	NM1520LC2AE	NUC123SD4BN0	NUC240LC2AE	NUC472JG8AE
M0516ZDE	MINI51LDE	NM1520LD2AE	NUC123SD4SN3	NUC240LD2AE	NUC472JI8AE
M0519LD3AE	MINI51TDE	NM1520RD2AE	NUC123SD4SN4	NUC240LE3AE	NUC472KG8AE
M0519LE3AE	MINI51ZDE	NM1530VD3AE	NUC123SD4SN5	NUC240SC2AE	NUC472KI8AE
M0519SD3AE	MINI52FDE	NM1530VE3AE	NUC123SD4SN6	NUC240SE3AE	NUC472VG8AE
M0519SE3AE	MINI52LDE	NTINY51FDE	NUC123ZC2AE1	NUC240VE3AE	NUC472VI8AE
M0519VE3AE	MINI52TDE	NTINY54FDE	NUC123ZD4AE0	NUC442JG8AE	PH-MN1-33
M0519WLE3AE	MINI52ZDE	NUC029FAE	NUC12SRE3DE	NUC442JI8AE	PT54V00
M0519WVE3AE	MINI54FDE	NUC122SD2AN	NUC220LE3AE	NUC442KG8AE	SMOK1
M052LDE	MINI54FHC	NUC122SD2DN	NUC230LC2AE	NUC442KI8AE	

Appendix A: Testing equipment verification and correlation report at Tong-Luo factory.



KYEC Testing Site Change (Chu-Nan site→ Tong Luo site)

- IC Test Service
- Burn-In service
- Tape & Reel
- Wafer Grinding & Dicing
- Turnkey Operation

	As Is (Chu-Nan)	To Be (Tong-Luo)	Remark
1. ISO certificate	o	o	
2. Quality Manual & Quality Procedure	O (The systems of Quality, Program, Manufacturing are the same with two sites)		
3. Work Instruction & Form			
4. QA Organization & QSA			
5. PGM control & QPA			
6. Clean Room & ESD Control	o	o	 ESD CONTROL  ESD制度  ESD作業書  ESD作業書
7. Machine Operation Certification & Specification	o	o	SPEC# WWF2122 W/S Setup & Machine abnormal operation instructions
8. Machine Calibration Verification	o	o	As page 7.  PM Calibration system
9. Preventive Maintenance	o	o	
10. Qualification Run	o	o	As page 9
11. Equipment Release Definition	o	o	Follow SPEC# WWF1002 Equipment Release Operation Instruction



International Certificates

• Item 1 Certificates

ISO Certificate	As Is (Chu-Nan)	To Be (Tong-Luo)	Remark
ISO 9001	○	○	 ISO 9001
ISO/TS 16949	○	○	 TS16949
TL 9000	○	○	 TL9000
ANSI/ESD S20.20	○	○	 ANSI ESD S20.20
IEC-61340-5-1	○	○	 IEC-61340-5-1

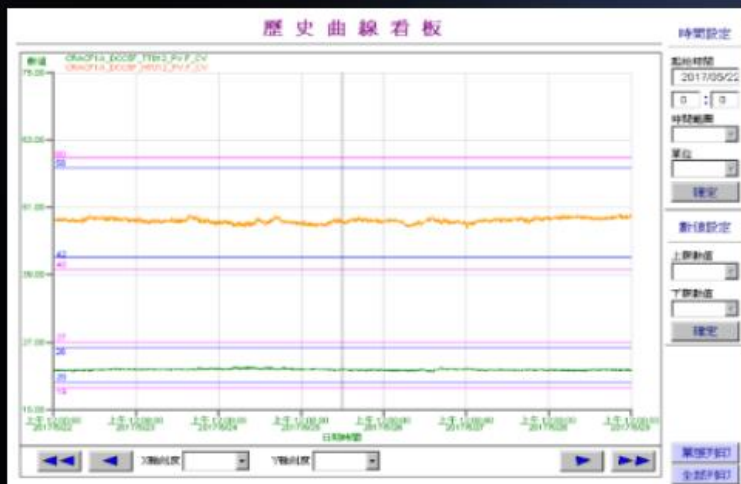


Environment Control System

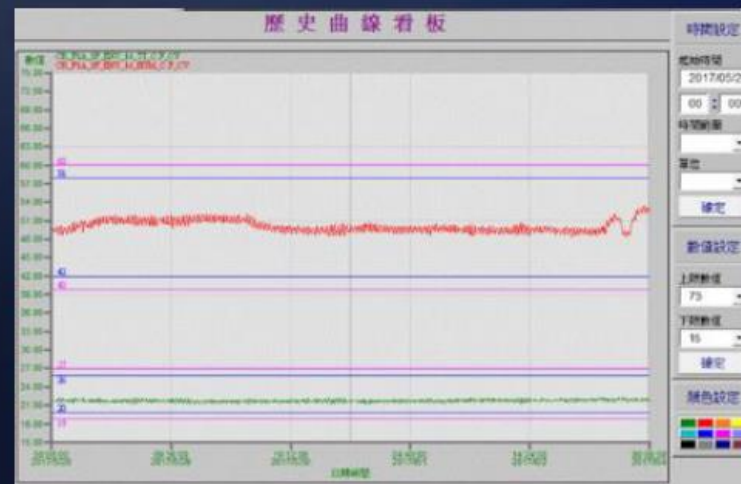
- Item 6 Real time central monitoring system to control environmental

Process	Clean Room (Area)	Temperature (°C)		Relative Humidity (%RH)	
		Control Limit	Specification	Control Limit	Specification
CP	Class 1K	23 ±3	23 ±4	50 ±8	50 ±10

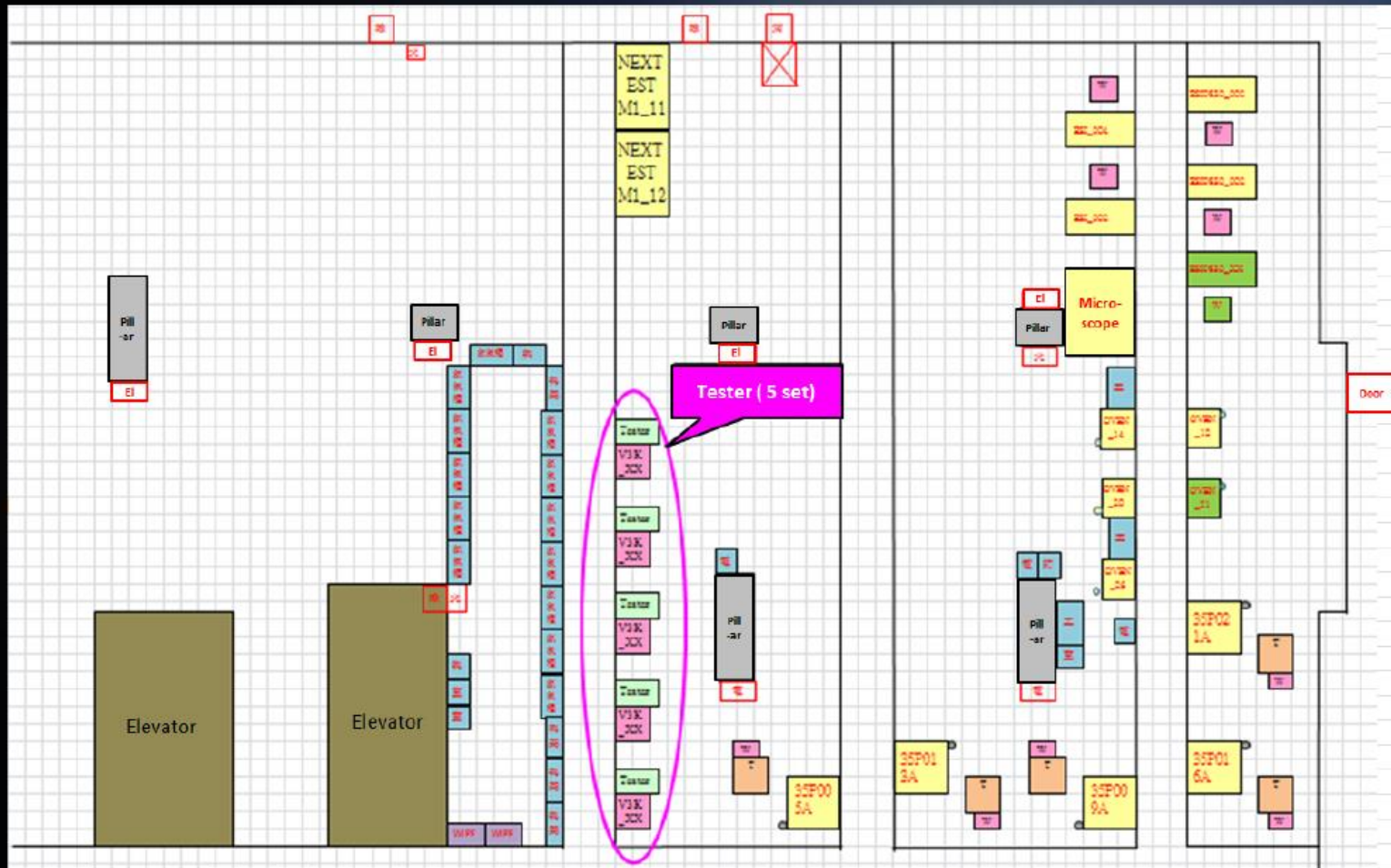
Chu-Nan Site



Tong-Luo Site



• Item 6 Tong-Luo Site Lay Out





- Training record

Operation Training List as attached file.



人員訓練



•Item 8,9 Machine Verification

	As Is (Chu-Nan)	To Be (Tong-Luo)	Remark
Calibration	○	○	 V3K-Calibration
Preventive Maintenance	○	○	 V3K-PM
Tooling	○	○	



•Item 8,9 Machine Verification

Gage R& R Data Collection Sheet





• Item10. Qualification Verification

Nuvoton Product Device Number	Tester Type	Tong-Luo		Status
FB5996NT	KALOS-LC	Triton22		Done
FB8236	KALOS-LC	Triton39		Done
FB8239	VERSA3000	V3K_44		Done
FB8248(指定機台)	VERSA3000	V3K_35	V3K26	Done
FC8238	VERSA3000	V3K_22		Done
FC8243	VERSA3000	V3K_34	V3K_30	Done
FC8244	VERSA3000	V3K_34	V3K_30	Done
FA8249	VERSA3000	V3K_51		Done

Qual. Run Reference data as attached

