

Inner Box Change for Automation Packing

WHAT is the change?

Changed in Inner Box for 13" T&R to accommodate Manual packing to Automated Packing (refer below for details)

	Change Before	Change After	Remark
PN	3CP71972	3CP90018	Changed
Box Opening Method	Side opening	Top opening	Changed
Inner Box Inner Dimension	340x340x38mm	340x340x38 mm	No change
Inner Box Outer Dimension	344x344x42mm	344x344x42mm	No change
Label Positioning	Customized label on right side Bulk label on left side	Customized label on right side Bulk label on left side	No change

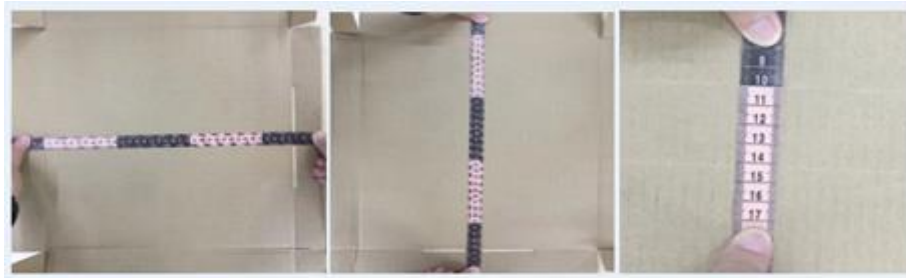
Reference Picture

- Box Opening Method



- Inner Box Measurement Illustration

Reference 1: Inner Dimension Measurement (LxWxH)



Reference 2: Outer Dimension Measurement (LxWxH)



WHY?

- To deploy **Automation** on Packing Line in ST Shenzhen.
- Current inner box 3CP71972 can only be open in side direction, this can't be handled by Automation Handler.
- To introduce new inner box design 3CP90018 which could be open on top direction to accommodate by the machine.

WHEN will this change occur?

November 25th, 2019

HOW will the change be qualified?

The New Inner Box packing has been qualified using Standard ST Microelectronics Specifications for Quality.

Major steps of the qualification plan are:

- Internal Quality Control / IQC
- Workability
- Drop Test
- Line Stressing (To be completed by November 18th, 2019).
Note: If result of Line stressing is good, shipment of this lot can be made on November 25th, 2019.

IMPACTS of the Change

Form: No change

Fit: No change (Inner Box opening from Side direction to Top direction)

Function: No change

Reliability: No change

Processability: No change

APPENDICES:

APPENDIX 1 Risk assessment

APPENDIX 2 Qualification plan / result

APPENDIX 1: RISK ASSESSMENT

#	Risks identified	Potential risk resulting from	Class (Low / Medium)	Considered action
1	The way of taking out the product from inner box	Can't take out product the same way	Low	Inform customer of this change
2	Damage device	Can't protect product as good as the current one	Low	Use same paper for inner box and performed drop test verification

APPENDIX 2: QUALIFICATION PLAN / RESULT

n	Qualification item	Condition	Sample Size	Criteria	When	Status	Result
1	FAI sample preparation / IQC Test	Dimension	5 Boxes	Pass / Fail	Nov'18	Done	Pass
2	Workability Test	Box can be handled well / no issue in manual process	10 Boxes	Pass / Fail	Nov'18	Done	Pass
3	Drop Test	1. No vacuum leakage 2. No Moisture Bag Damage 3. No Bent Lead / Package damage	9 Inner Box with complete Finish Goods	Pass / Fail	Nov'18	Done	Pass
4	Line stressing	Box can be handled well / no issue in manual process	100 Inner Box with complete Finish Goods	Pass / Fail	Nov 18 th , 2019	Pending	Pending