

Customer Complaints

1. ISSI RMA Process

Field quality information is an essential factor for improvement of product quality. Equally important are the investigation of field failures and feedback of results to the customers.

When a customer desires to return product, a return material authorization (RMA) form identifying the customer, the product, and the nature of the customer's concern should be completed. There are six types of returned material that ISSI accepts from customers. These are :

1) Administrative:

Customer received wrong parts, wrong quantity, order entry error, duplicate shipment barcode label errors, etc. Shipping discrepancies must be reported within 60 days of shipment.

2) Customer Convenience:

Customer doesn't want the parts even though they are what they ordered and work according to specification.

3) Electrical:

Parts failed to function as specified or did not work in the application.
Electrical RMAs usually require an FA.

4) Failure Analysis:

Customer has requested in depth failure analysis on returned part(s)

5) Stock Rotation:

Product returned from distributors

6) Visual/Mechanical:

Visual inspection failures such as bent leads, coplanarity, tape & reel

If the RMA involves a quality issue, a FA RMA is requested and the appropriate failure analysis engineer is immediately notified. A customer who needs to receive information on the cause of the failure can request failure analysis to be performed. Within 48 hours of ISSI QRA's receipt of the returned product, a preliminary report will be issued, to verify the customer complaint.

If the product function meets ISSI specifications, the customer will be contacted and the application will be investigated

If, on the other hand, the product proves to be defective, a failure analysis will be done to determine the cause and corrective action will be taken. Within two weeks of ISSI QRA's receipt of the returned product, the customer will receive a final report documenting the completion of the failure analysis and the cause of the failure.

2. RMA Flow Chart

ISSI has developed procedures and e-RMA system for providing and controlling returns from customers for failure and non-failure issues. See flow as shown in Figure 1 for failure

issues.

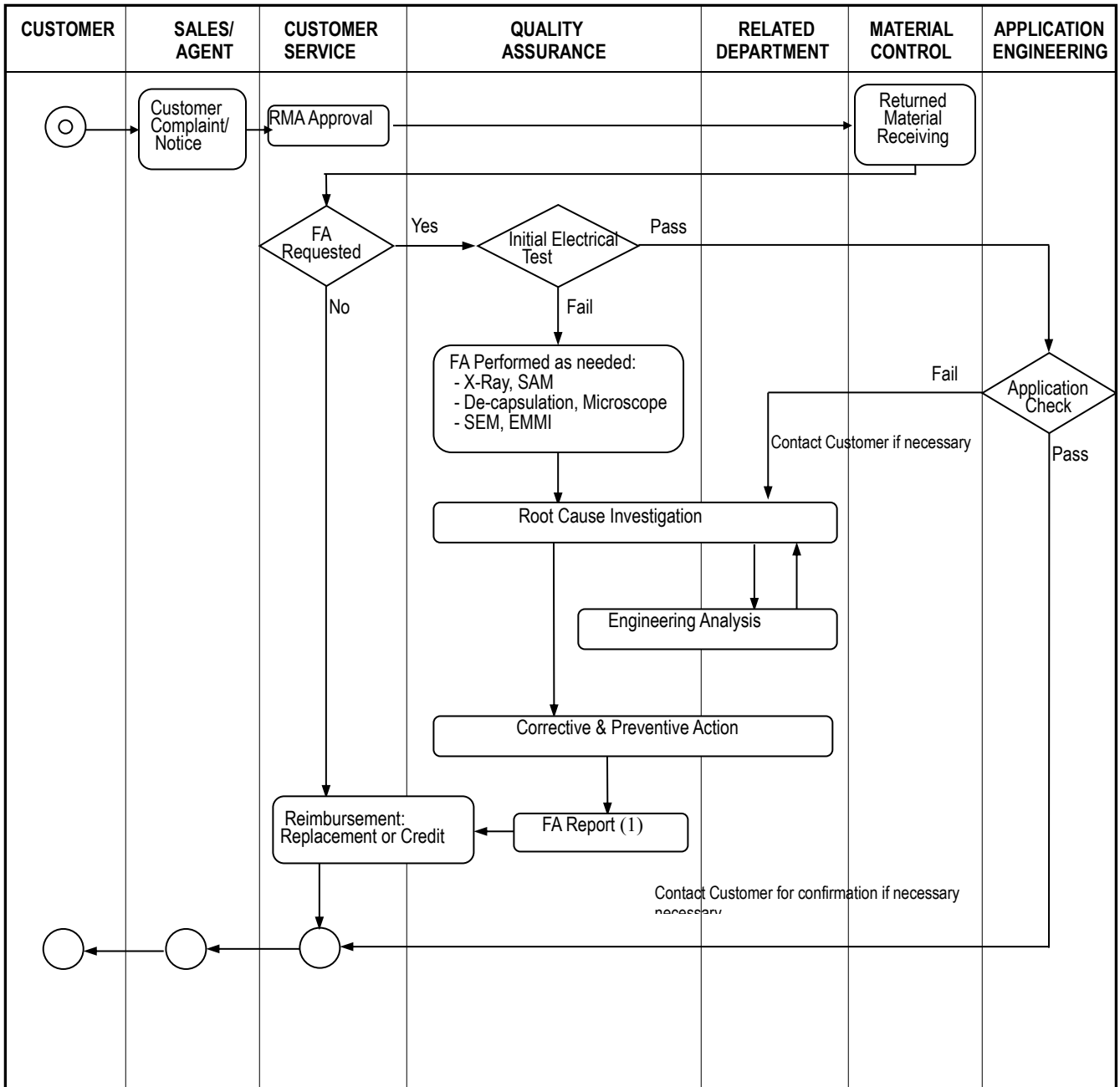


Figure 1 RMA Process Flow

3 Corrective Action

For ISSI's commitment to continuous quality improvement, a corrective action request (CAR) procedure is established according to the ISO 9001:2008 and JEDEC 671 standard. The Corrective Action methodology follows the 8 Discipline process.

ISSI shall take action to eliminate the cause of non-conformities in order to prevent recurrence. Corrective actions shall be appropriate to the effects of the non-conformities encountered. A documented procedure shall be established to define requirements for

- 1) reviewing non-conformities (including customer complaints),
- 2) determining the causes of non-conformities,
- 3) evaluating the need for action to ensure that non-conformities do not recur,
- 4) determining and implementing action needed,
- 5) recording the results of action taken, and
- 6) reviewing corrective action taken.
- 7.) verifying that the action taken is effective

4 Preventive Action

ISSI shall determine action to eliminate the causes of potential non-conformities in order to prevent their occurrence. Preventive actions shall be appropriate to the effects of the potential problems. A documented procedure shall be established to define requirements for

- 1) determining potential non-conformities and their causes,
- 2) evaluating the need for action to prevent occurrence of non-conformities,
- 3) determining and implementing action needed,
- 4) records of results of action taken, and
- 5) reviewing the preventive actions taken.

e-CAR

The electronic Corrective Action Request (e-CAR) system was established by ISSI IT and QRA on K2 Platform. The e-CAR is used to record and track the most important quality issues including in-house design and operations, customer complaint, and subcontractor's processes. The data is reported to periodic corporate meeting and quarterly management review meeting.

The e-CAR Report as shown in Figure 2 is a listing of the CAR's accumulated year to date. Each individual CAR is accessible electronically on the database. E-CAR can also be searched by date, processor or status. Online CAR is based on 8D method as shown in Figure 3

Customer CAR

CAR No.	<input type="text"/>
RMA No.	<input type="text"/>
ProductGrade.	--- Please Select ---
Received Date.	<input type="text"/> ~ <input type="text"/>
End Customer.	<input type="text"/>
Part No.	<input type="text"/>
Device.	<input type="text"/>
Root Cause.	<input type="text"/>
Dest. User	<input type="text"/>
Create Date	<input type="text"/> ~ <input type="text"/>
Status	ALL <input type="button" value="Query"/> <input type="button" value="CAR"/> <input type="button" value="Engineering"/> <input type="button" value="Create CAR"/>

CAR No.	Dest. User	ProductGrade	RMA No	Part No	Device	EndCustomer	Lot No	Date Code
2018-004		Auto	C01RMA-002882	IS46TR16256A-15HBLA1	K080	Delphi Portugal	P71530100EV1	1727

Figure 2 e-CAR Report

Hit Rate

CAR

ISSI CORRECTIVE ACTION REQUEST

CAR No.	2017-354
Ver.A	2017/12/24

RMA #	C01RMA-002830	Customer	
FA #	T17-475	End Customer	
Reject Qty	1	Customer Tracking #	
QA Personnel	Vika Hsu	Customer Contact(s)	
Device	K087	ISSI Part Number	IS46DR16120D-3DBLA2
Date Code	1701	Lot Number	BNF853000Y1
Fab Location	PTC	Assembly Location	

Non-conformance:
The DSP unit of the product does not communicate with the memory chip.

Location of Non-conformance:
End customer Warranty

D1 to D7	File Name	
	CAR2017354 C01RMA-002830	<input type="button" value="Download"/>
	K087 (Euro) 12212017.doc	

Figure 3 e-CAR Example

Change Control

Quite often, changes are made to products or manufacturing process in order to improve quality, reliability and/or productivity.

The feasibility of these changes is judged using sufficient data indicating that the change will not produce any negative effects.

When a change is planned, all related departments review the change and its potential impact. In the case of changes that have a significant effect on product, these results are conveyed in advance to customers to confirm that there is no deteriorated effect at the customer side.

After these judgments are received, if the change is acceptable, instructions are issued and initial control of floating data is performed as necessary for the final check.

The ISSI change list is shown below (Table 1) and its system flow is depicted in Figure 4.

<u>Item</u>	<u>Lead Time</u>
Die Technology	3 months
Foundry Site	3 months
Wafer Fabrication Process	3 months
Assembly House	3 months
Assembly Process	3 months
Marking	3 months
Data Sheet	3 months
Packing	3 months
Discontinue	6 months

Table 1 ISSI Change List

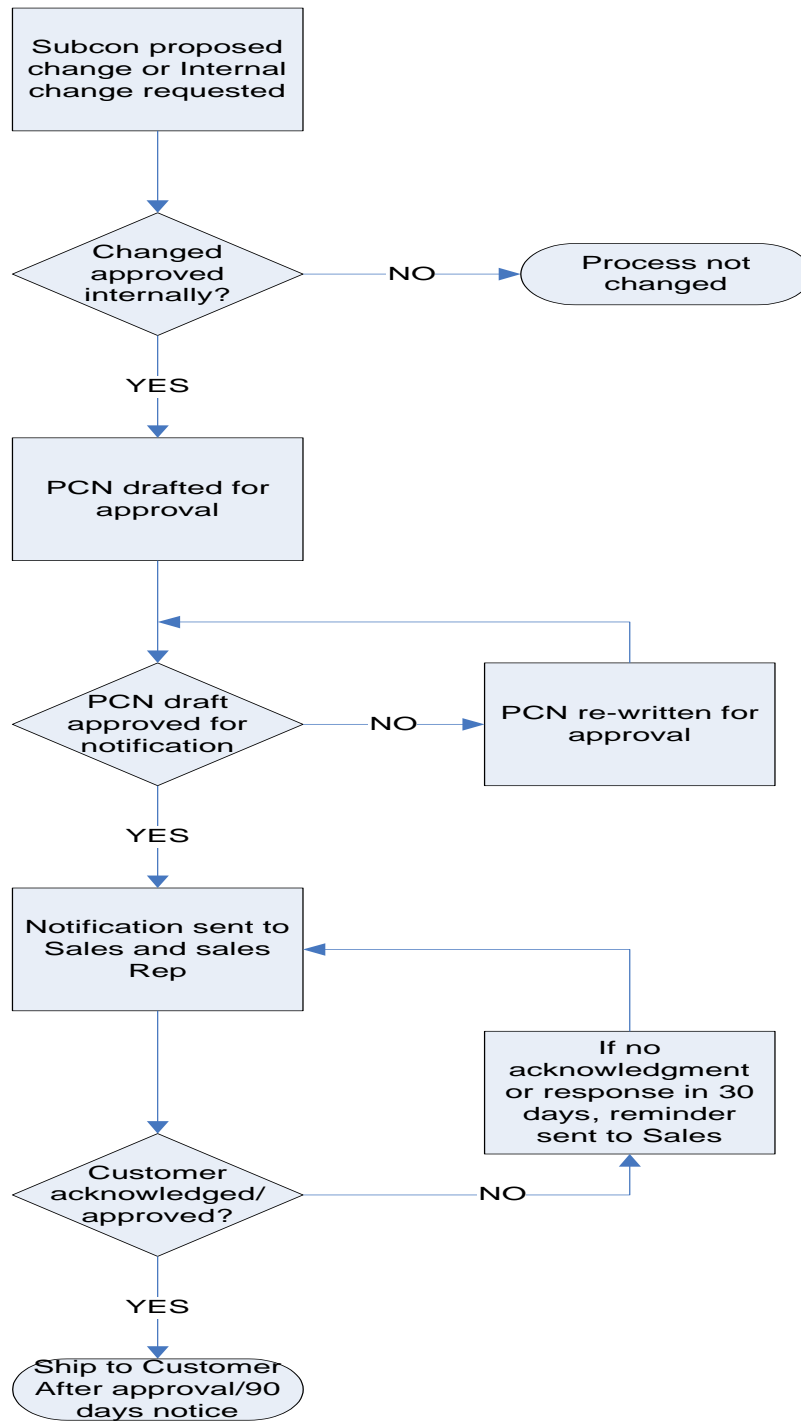


Figure 4 ISSI Change System