Content

- Quality Policy Statement
- Quality Assurance Organization
- Quality System and Core Quality
- Supplier Management Structure
Quality Policy Statement

Himax is committed to achieving 100% customer satisfaction through continuous operational improvement -

Our Quality Policy Embraces

- Achieving customers’ overall satisfaction
- Continuous operational improvement
- Development of green products and prohibiting the use of hazardous substances
Himax Quality Goal

- Customer Return Defect Rate < 5 DPPM

Note: IC base
Quality Assurance Organization

President Office

Advanced Technology Dept.

Legal Dept.

- SHE Division
- Admin. Division
- QRA & System Support Center
- Finance Division
- Operation Division
- Design Center
- Marketing & Sales Center

SHE: Safety, Health and Environment
R & D: Research and Development
QRA: Quality & Reliability Assurance
Quality Assurance Organization

QRA & System Support Center

- QRA 1st Division
- QRA 2nd Division
- Technical supporting 1st Division
- Technical supporting 2nd Division

QRA: Quality & Reliability Assurance
Quality Assurance Organization

QRA 2nd Division (China)
- JQE
- RFA Dep.
- SQE Dep.

QRA 1st Division (Taiwan)
- QC Dep.
- RFA Dep.
- SQE Dep.

- Customer Quality Service
- Customer audit
- Abnormal Event Handling (non-electrical function issue)
- Supplier Quality Management
- Supplier Qualification
- New Product Qualification
- ORT Handling
- Physical Failure Analysis for IC issue
- Abnormal Event Review

- Document Control Center
- Green Product Management System
- Corporate Quality System
- Calibration
- Customer Quality Service
- Customer audit
- Abnormal Event Handling (non-electrical function issue)

- New Product Qualification
- ORT Handling
- Physical Failure Analysis for IC issue
- Abnormal Event Review
- Panel Bonding Handling

- Supplier Quality Management
- Supplier Qualification
- Nonconformance Material Disposition
- Warehouse IQC/OQC

RFA: Reliability & Failure Assurance
JQE: Joint Quality Engineering
# Milestone of Quality Management System

<table>
<thead>
<tr>
<th>Time</th>
<th>Development of Quality System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y2001</td>
<td>Himax was established in Jun.</td>
</tr>
<tr>
<td>Y2002</td>
<td>Himax had passed <strong>ISO 9001:2000</strong> certified by EAQA in Nov.</td>
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<tr>
<td>Y2004</td>
<td>E-countersign of documents was established in Nov.</td>
</tr>
<tr>
<td></td>
<td><strong>GPMS</strong> was introduced into Himax in Jan.</td>
</tr>
<tr>
<td></td>
<td><strong>FMEA</strong> was introduced into Himax in Jun.</td>
</tr>
<tr>
<td>Y2006</td>
<td>Himax had passed <strong>ISO 14001:2004</strong> certified by UL in Jan.</td>
</tr>
<tr>
<td>Y2007</td>
<td>Himax had passed <strong>OHSAS 18001:1999 &amp; IECQ QC080000</strong> certified by UL in Mar.</td>
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<tr>
<td></td>
<td>Himax had <strong>OHSAS 18001:2007</strong> renewed by UL in Mar.</td>
</tr>
<tr>
<td>Y2009</td>
<td>Himax had <strong>ISO 14001:2004</strong> renewed by UL in Mar.</td>
</tr>
<tr>
<td></td>
<td>Himax had passed <strong>SONY GP</strong> audit in April, and got certification in July.</td>
</tr>
<tr>
<td>Y2010</td>
<td>Himax had <strong>OHSAS 18001:2007 &amp; IECQ QC080000</strong> renewed by UL in Jan.</td>
</tr>
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</table>
# Milestone of Quality Management System

<table>
<thead>
<tr>
<th>Time</th>
<th>Development of Quality System</th>
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</thead>
<tbody>
<tr>
<td>Y2011</td>
<td>Himax had <strong>ISO 9001:2008</strong> renewed by UL in Jan</td>
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<tr>
<td></td>
<td>Himax had <strong>SONY GP</strong> renewed by <strong>SONY MD</strong> in May.</td>
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<tr>
<td>Y2013</td>
<td>Himax had OHSAS 18001:2007 &amp; IECQ QC080000 renewed by UL in Jan</td>
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<tr>
<td>Y2014</td>
<td>Himax had <strong>ISO 9001:2008</strong> renewed by UL in Jan</td>
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<tr>
<td>Y2015</td>
<td>Himax had <strong>ISO 14001:2004</strong> renewed by UL in Jan.</td>
</tr>
</tbody>
</table>
# Product Quality Control: Driver IC

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Input</th>
<th>Process</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Device</td>
<td></td>
<td></td>
<td>WAT data/FAB OQC report</td>
</tr>
<tr>
<td>Ass’y</td>
<td>FAB OQC report</td>
<td>Foundry</td>
<td>Bumping OQC report</td>
</tr>
<tr>
<td>Device/TE</td>
<td></td>
<td></td>
<td>CP test record</td>
</tr>
<tr>
<td>Ass’y</td>
<td>Tape OQC report</td>
<td>Bumping</td>
<td>Tape OQC report</td>
</tr>
<tr>
<td>Related Dept.</td>
<td>Tape OQC report</td>
<td>CP Test</td>
<td>Tape OQC report</td>
</tr>
<tr>
<td>Ass’y/TE</td>
<td></td>
<td></td>
<td>FT test record</td>
</tr>
<tr>
<td>QA</td>
<td>Assembly house OQC report</td>
<td>Foundry</td>
<td>FT test record</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bumping</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>CP Test</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tape Maker</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Others Assembly</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assembly/ TCP, COF</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>FT test</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Customer</td>
<td></td>
</tr>
</tbody>
</table>
Continuous Improvement

Customer Experience
Results of Success

Continuous Improvement
Action that Drives Success

Total Quality Process
Foundation and Enabler to Success
## CCN: Customer Complaint Handling Procedure

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Input</th>
<th>Process</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAE/JQE</td>
<td>Customer inform sheet</td>
<td>Complaints &amp; Reject products handling</td>
<td>Preliminary failure analysis report from Himax FAE (D+3 days) Issue CCN to FA</td>
</tr>
<tr>
<td>FAE</td>
<td></td>
<td>Verify</td>
<td></td>
</tr>
<tr>
<td>FA manager</td>
<td></td>
<td>Check</td>
<td></td>
</tr>
<tr>
<td>FA Engineer</td>
<td></td>
<td>Failure analysis</td>
<td></td>
</tr>
<tr>
<td>FA manager</td>
<td></td>
<td>Check</td>
<td>Final analysis report (D+10 days)</td>
</tr>
<tr>
<td>FAE</td>
<td>Final analysis report</td>
<td>Reply to Customer</td>
<td></td>
</tr>
</tbody>
</table>
Document Control

- E-countersign
- Version Management
- Poka Yoke skill helps reduce mistakes
- External documents control
- Convenient inquiry process
- System link and integration
- Security Management
Supplier management scope

- **Supplier Chain**

  - Material
    - Foundry FAB
    - CP house
    - Tape Supplier
  - OEM
    - Bumping house
    - Assembly House + FT

- **Supplier Management scope**
  - Customer quality target commitment
    - RMA
    - CCN
  - MP performance monitor and improve
    - Yield
    - SCAR & QAN
    - SPC
    - WAR / WRR / LRR
    - KPI
  - Shipping quality control
    - MRB
    - Supplier quality goal review
Supplier management structure

Supplier management

Routine handling

QAN
ECN
ASL certification
Audit
SCAR
Monthly KPI review
SQPR

Quality improvement

Web QAN
Web ECN Reply
Q.M.P.
Web SQPR
Supplier Management – QAN

1. **Supplier Issue QAN**
   - 24 hour
   - 7 day

2. **Product Judgment By SQE (within 7D)**

3. **Critical Defect or RA concern**
   - Yes
   - No

4. **Comment from RA/JQE**
   - Yes
   - No

5. **Need Inform**
   - Yes
   - No

6. **Customer Approval**
   - Yes
   - No

7. **SCAR Criteria**
   - Yes
   - No

8. **Issue SCAR to supplier**

9. **File in QAN Summary**

10. **Close**

Ref. Document:
- 2-023 不合格品通知程序
- 3-158 不合格品通知標準作業指導書
- 3-232-晶圓代工廠QAN 處理作業指導書
ASL Audit & Certification

New Supplier Evaluation

New Supplier Presentation

Initial Review

Audit

Conditional Approval

ASL

Quality Improvement

Disqualify

Close

Annual SQPR, Audit

Ref. document:
2-005 Supplier Management Procedure
3-024 供應商品質績效評鑑作業指導書

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Supplier Management - ECN

- Customer Special Request
- Supplier Special Request
- Himax Engineering Change Request

Verification

Countersign by System

Customer Approval

Approved and Released

Execution Confirmation

Ref. Document:
3-241-晶圓代工廠工程變更作業管理規
3-249 Assembly工程變更管理作業指導書
3-239 Tape工程變更管理作業指導書
Supplier Management Audit Categories

1. Supplier Periodical Audit Plan
   - SQE Periodical Audit

2. Score Judgment
   - 85~100
   - 70~84
   - <70

3. GM Judgment
   - Yes: Improve by QBR
   - No: Disqualified

4. Close

Ref. document:
3-172 供應商定期稽核作業指導書
Supplier Management - SCAR

- Event occurred
- SQE Judgment
- Issue SCAR
  - Yes: Issue SCAR to supplier
  - No: Scrap or Release
    - Scrap: Inform PP
    - Release: SQE Review
      - Ok: File in SCAR Summary table
      - 7 day: Release or Scrap

Ref. document: 3-262 供应商矫正措失发出时机作业指导书

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Supplier Management - Monthly Review

Monthly Quality Meeting

Himax’s 100% quality commitment to our customers

Suppliers’ 100% quality commitment to Himax

100% quality commitment to Himax’s customers

Review Items

- KPI
  - WAR & WRR
  - SCAR & QAN
  - SPC
  - Service

- Monthly report
  - Yield
  - Production abnormal case
  - SPC
  - CCN
  - ECN
  - OQC
Supplier Management - SQPR

Qualified Supplier Review

15 days after each end of quarter

Score and Ranking

20 days after each end of quarter

Level D

SQPR Meeting

Level A/B

Level C

Disqualified

Inform Supplier Top manager

Inform Supplier Quality Performance

CIP by supplier or Audit

Monthly Review

Scores \( \geq 90 \) – Grade A

90 > Scores \( \geq 80 \) – Grade B

80 > Scores \( \geq 70 \) – Grade C

70 > Scores – Grade D

Reference:

3-024 供應商品質績效評鑑指導書
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E-mail : victor_huang@himax.com.tw
Drive for better vision