

Supplier Handbook

A Practical Guide to the Supplier Development Process from **onsemi**

BRD8024S/D
Rev. 27, Sept-2025
68AON48659E.AA



Pushing innovation to create intelligent power and sensing technologies that solve the most challenging customer problems.

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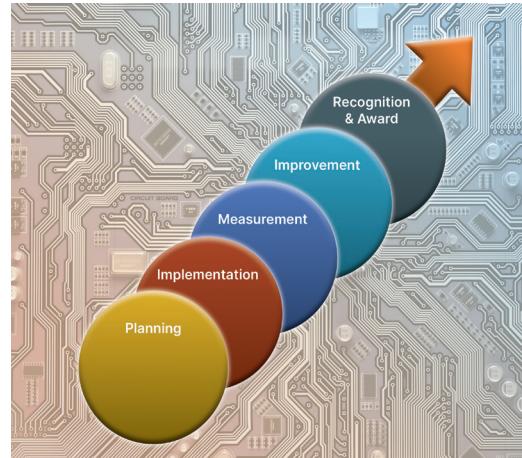
Welcome

onsemi Global Sourcing and Procurement recognizes the critical role our suppliers play in an increasingly competitive environment. Strong collaborative relationships are built upon clear communication of performance expectations, alignment of performance goals, and establishing mutual trust and cooperation. Your performance is a vital business strategy for controlling and managing risk, and driving continuous improvement into the supply chain.

The purpose of this Supplier Handbook is to communicate our expectations and to establish a process that will successfully foster a partnership to align supplier goals with **onsemi** goals. This document also serves as a vehicle to communicate important **onsemi** customer requirements to our key suppliers. It is therefore vital that our suppliers review the expectations put forth in this handbook and affirm their ability to meet these expectations as part of the Customer Specification review process. This alignment allows our key suppliers to be part of our growth and success. Exceptions to this requirement may impact supplier ratings and/or scorecards.

The Supplier Goal Plan described in this handbook will help us prioritize and focus on common key objectives. Through our common priorities, we can continue to meet or exceed our goals in cost, quality, delivery, service and technology. We welcome the improvement collaboration with our suppliers to achieve continuous growth and mutual success.

Respectfully,
onsemi Procurement,



Developed by: Rock Chen, Hong Fong Yap, Edward Chung, Rebecca Turner, Beng Hooi Swa, **onsemi** Supplier Quality

For the latest revision please visit www.onsemi.com, or request a copy of BRD8024S/D from your local Supply Management representative.

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Introduction

onsemi (Nasdaq: ON) offers an extensive portfolio of power- and data-management semiconductors that address the design needs of today's sophisticated electronic products, appliances, and automobiles. The company's technology portfolio is led by its power-management products that set the industry standard by reducing "leaky electricity" in everyday products and perform the precise management of power in today's portable electronic devices.

It is the goal of **onsemi** to develop a supply base that provides the quality, productivity, and cost of ownership that enable us to be competitive in the markets we serve. **onsemi** is committed to ensuring that our suppliers have a clear understanding of our expectations, and have the information required to successfully meet our needs.

PURPOSE

onsemi has created a Supplier Development Program that is designed with the goal of aligning suppliers with our corporate "Cycle of Success". At the center of Cycle of Success is **onsemi's** Core Values, every piece of the cycle of success represents an area how **onsemi's** expectations of suppliers tie into the cycle of success. The Supplier Development Program encourages constant communication between **onsemi** and our suppliers, which enables our suppliers to better understand the role they play in the success of **onsemi** for our mutual benefit.

We have several processes in place for managing and developing our suppliers. These processes are managed following internal work

instructions. This handbook is provided to our suppliers so that they can better understand these processes and their interrelationships.

This handbook also contains **onsemi's** mutually agreed customer specific requirements (CSRs). Any questions regarding the content of this handbook should be directed to your local site contact.

There are five steps to the Supplier Development Program: Planning, Implementation, Measurement, Improvement, and Recognition. Each step has been developed with the total supply management cycle in mind, from the time the supplier is first introduced as a potential supplier to the time they become fully mature and require less guidance. This handbook outlines the steps of the Supplier Development Program and provides insight to how the program ties into **onsemi's** "plan to win."

BUSINESS PARTNERS

Building quality relationships with other companies gives **onsemi** a competitive advantage.



Figure 1. Culture of Success

General Expectations

PURCHASING PRACTICES

We will make purchase decisions based solely on the best interest of **onsemi**. Suppliers win **onsemi** business based on product or service suitability, price, delivery and quality. Purchasing agreements should be documented, clearly identify the services or products to be provided, the basis for earning payment and the applicable rate or fee. The amount of payments must be commensurate with the services or products provided.

Quotations and Bidding. Upon request, Supplier will use **onsemi's** preferred platform (or third party platform identified by **onsemi**) to submit bids and communicate with sourcing representatives for the purpose of establishing pricing for goods and/or services.

CONTROL OF SUB-TIER SUPPLIERS

To ensure requirements are fully met, it is necessary to flow down **onsemi** requirements to any sub-tier suppliers the 1st tier may choose to use in support of Purchase Orders placed by **onsemi**. 1st tier suppliers are fully responsible for the control of all work placed by them on such sources to ensure it meets both their and our defined requirements.

BUSINESS PARTNER INFORMATION

We will protect business partner information that is sensitive, privileged or confidential just as carefully as our own. Only those who have a need to know should have access to confidential information. In addition, we will take the steps necessary to ensure that our business partners protect the **onsemi** confidential information provided to them.

B2B and Invoicing. Upon request, the supplier will use **onsemi's** preferred platform (or a third-party platform designated by **onsemi**) to acknowledge Purchase Order (PO), including confirming receipt, any modifications and submit invoices to **onsemi**.

NON-DISCLOSURE AGREEMENTS

onsemi requires non-disclosure agreements to protect both **onsemi** and our suppliers in the event that confidential information is exchanged. The non-disclosure agreement must be in place and have the appropriate language stated within the agreement prior to the exchange of such

confidential information. The confidentiality agreement does not serve as a contract between both parties for other purposes and does not substitute for agreements such as; a purchase agreement, consulting agreement, development agreement or technology agreement.

A separate confidentiality agreement is not required if prior to the exchange of information, **onsemi** and our supplier have or will have entered into another form of agreement (e.g., a purchase agreement) which contains approved confidentiality language.

DATA PROTECTION AGREEMENTS

onsemi is committed to complying with all privacy and data protection laws and regulations that apply to our operations. We strive to protect the personal data of our employees, customers, and business partners by ensuring all transfers and processing of such data are conducted with adequate safeguards and appropriate security measures in place. **onsemi's** data protection agreement outlines the expectations and obligations on both the data controller/exporter (**onsemi**) and the data processor/importer with respect to the transfer, processing and security of personal data.

CORPORATE SOCIAL RESPONSIBILITY (CSR) AND RBA CODE OF CONDUCT

onsemi is committed to the mission and principles of the Responsible Business Alliance (RBA) Code of Conduct relating to labor, ethics, environmental, health and safety. In addition, **onsemi** certifies that its products are free from these restricted materials and that all metals utilized in our products are not sourced from conflict-affected and high-risk areas. **onsemi** is a signatory to the United Nations Global Compact and committed to international human rights standards and local laws. These are rooted in our core values and reinforced through our Code of Business Conduct. **onsemi** is committed to ensuring the highest standards of social responsibility wherever our products are made. We insist that our suppliers provide safe working conditions, treat workers with dignity and respect, prohibit human trafficking and slavery (including the procurement of commercial sex acts and the use of forced or child labor), promote ethical behavior, use environmentally responsible manufacturing processes, and follow principles similar to those stated in our Code

General Expectations (cont.)

of Business Conduct and Supplier Social Compliance Commitment. The supplier must conform to all environmental laws, all applicable laws and regulations, behave ethically and conform to all social responsibility and conflict mineral requirements which are required in **onsemi's** Statement of Conformance, provide any requested certifications, and cascade all applicable requirements down their supply chain.

onsemi Social Responsibility

CLIMATE CHANGE

Addressing global climate change is a challenge of our time. **onsemi** is dedicated to developing strategies and programs to meet this challenge. This includes introducing technology and methods to reduce our impact on greenhouse gas emissions, air, water and waste, including effectively utilizing renewable energy and creating semiconductor products that enable our customers to lower their carbon footprint. We have a Climate Change Policy and are developing a holistic climate action plan. We will be reaching out to our suppliers in the future to learn more about their climate actions and how we can work together to meet our goals.

We require all **onsemi** suppliers to conduct and report greenhouse gas emission inventories on 2024 calendar year for Scope 1 and Scope 2 emissions by July 1, 2025. All inventories must receive 3rd party data assurance; submission of data to CDP (the Carbon Disclosure Project) meets this requirement and is preferred. We will require all onsemi suppliers to conduct and report their greenhouse gas emission inventories on 2025 calendar year for Scope 1 and 2 emissions as well as Scope 3 emissions (if applicable) by May 1, 2026. Supplier Scope 3 emissions must be included in the inventory if they equate to more than 40% of total emissions (i.e., Scope 3 emissions is greater than or equal to 40% of the sum of Scope 1, 2, and 3 emissions). Suppliers should establish a corporate-wide greenhouse gas emissions reduction goal. Suppliers shall continually strive to reduce overall greenhouse gas emissions. All greenhouse gas emissions inventories and 3rd party assurance assessments shall be reported to **onsemi**.

DECARBONIZATION, ENERGY EFFICIENCY AND RECYCLING

New onsemi Supplier Greenhouse Gas Emissions Inventory Requirements	Deadline
Greenhouse gas emission inventories of the 2024 calendar year for Scope 1 and Scope 2 emissions. onsemi requires 3rd party data assurance; submission of data to CDP meets this requirement and is preferred.	July 01, 2025
Greenhouse gas emission inventories of the 2025 calendar year, for Scope 1 and 2 (mandatory) and Scope 3 emissions (if applicable). Scope 3 emissions must be included in the inventory if they amount to more than 40% of total emissions. onsemi requires 3rd party data assurance; submission of data to CDP meets this requirement and is preferred.	May 01, 2026

The decarbonization of **onsemi's** operations is being achieved through optimization of manufacturing processes, fuel and switching of high global warming potential process gases, abatement, energy efficiency, and leveraging renewable energy. Thus, **onsemi** will be engaging with suppliers to understand their carbon emissions and to collaborate on the decarbonization of our suppliers' operations. In addition, **onsemi** will also be working with suppliers to improve upon the reuse, recycling, and other recovery operations for reprocessing materials to make new materials.

Climate-Related **onsemi** Resources:

- www.onsemi.com/site/pdf/Climate-Change-Policy.pdf
- www.onsemi.com/site/pdf/sustainability-report.pdf

ENVIRONMENTAL

All purchased materials, services and products used in part manufacture shall satisfy current governmental, statutory and regulatory requirement, and safety constraints on restricted, toxic and hazardous materials; as well as environmental, electrical and electromagnetic considerations applicable to the country of manufacture and sale. All purchased materials, services and products must conform to **onsemi** environmental requirements

General Expectations (cont.)

described in the latest revision of Product Chemical Content Brochure BRD8022/D (68MON39567E). Suppliers must be prepared to provide supporting evidence of conformance.

http://www.onsemi.com/pub_link/Collateral/BRD8022-D.PDF

COMPLIANCE WITH THE LAWS

Supplier agrees that in all dealings with the U.S. Government or with its customers that do business with the U.S. Government, compliance to the Federal Acquisition Regulation ("FAR") rules will apply.

DELIVERY REQUIREMENTS

onsemi requires suppliers to strive for 100% On-Time Delivery (OTD) performance utilizing FIFO methodology. **onsemi** will monitor the supplier's delivery performance and request corrective actions when appropriate.

Suppliers should take the necessary actions to avoid premium freight charges. In the event that premium freight will be charged to **onsemi** and cannot be avoided, the supplier shall contact **onsemi** and receive approval prior to shipment. Failure to comply may result in premium freight charges debited to the supplier's account.

QUALITY SYSTEM

Risk management focused ISO9001 QMS certification is the minimum expectation required for the direct material supplier, foundry and subcontractors. ISO9001 certification must include accreditation mark from recognized IAF MIL member. Demonstration of conformance to IATF16949 may be required. Use of Process FMEA (Failure Modes and Effects Analysis) and other Automotive Core tools is recommended. Foundry and subcontractor suppliers who supply the product to our automotive customers need to be in compliance with IATF16949 requirement.

onsemi shall be afforded the right to evaluate and monitor the supplier's quality system as needed. Suppliers that currently meet recognized industry standards but have a history of poor performance or chronic quality issues will be monitored and assessed to ensure proper improvement. Suppliers must be prepared to provide the copy of the latest valid certification. Suppliers are required

to notify **onsemi** immediately, in the case of ISO9001 or IATF16949 certification loss or temporary suspension.

RIGHT OF ENTRY

onsemi, regulatory authorities and our customers shall be afforded the right to verify at the supplier's premises that the supplier's material, services or product conforms to specified requirements. This includes all facilities involved in the order, including sub-tier processes and all applicable records. Verification shall not absolve the supplier of the responsibility to provide acceptable material, services or product, nor shall it preclude subsequent rejection by **onsemi**.

BUSINESS CONTINUITY PLANS

All suppliers are expected to develop a documented business continuity plan that enables the supplier to continue to perform critical functions and/or provide services in the event of an unexpected interruption. These plans should be verified through Business continuity assessment.

Financial Records. Upon request, Supplier will provide financial records, such as and including complete income statements, balance sheets, and cash flow statements, to Customer (or third party identified by **onsemi**) to enable Customer to evaluate the financial health of Supplier.

Supplier Disruptions. Upon request, Supplier will provide their site and sub supplier site location data for the purpose of Customer to Map Supplier in Customers' risk platform (or third-party platform identified by **onsemi**). Supplier will also agree to provide emergency contacts and respond in such platform of their site status upon disruptions that have been mapped to their direct sites and sub supplier sites.

SUPPLY CHAIN SECURITY

Suppliers are expected to ensure the Security of the Supply Chain. Suppliers are expected to participate in US Customs and Border Protection's C-TPAT (Customs-Trade Partnership Against Terrorism) program, (or international equivalent), or provide a written confirmation of meeting the minimum-security criteria of the program. Suppliers will provide **onsemi** their SVI (Status Verification Indicator) number as evidence that they are a member

Planning

of C-TPAT. Suppliers, appropriate to the product, shall have a process and controls in place to prevent the use of counterfeit parts.

PURPOSE

The first step in Supplier Development Program is planning with emphasis on supplier selection. We must ensure that we only select suppliers that meet our expectations and have the capability to fulfill all of our requirements. The supplier selection process enables the Strategic Sourcing team at **onsemi** to review suppliers and select the most qualified based on the supplier's performance and the needs of **onsemi**. Below is a general outline to the supplier selection process.

SUPPLIER SELECTION

The supplier selection process begins when the technology development group or **onsemi's** manufacturing operation has a requirement for a new material, or we are looking for alternate sources of supply for existing materials, services or products. The Strategic Sourcing Managers will review the current supply base and determine if there are any current suppliers that can meet our business needs. Our goal is to direct new business to our preferred or approved suppliers. If the Strategic Sourcing Manager determines that our current supply base does not have the capability to meet our needs, a new supplier will be selected.

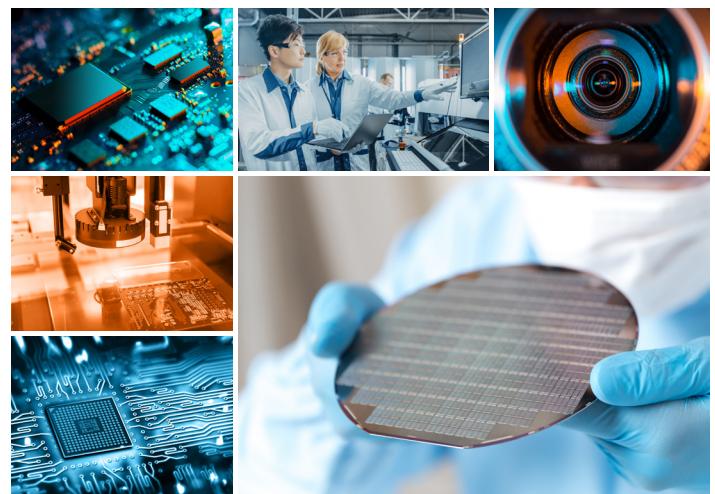
The Strategic Sourcing Managers at **onsemi** have the ultimate responsibility in selecting suppliers. There are several factors that are evaluated in the selection process. Examples of these factors are listed below

- Does the supplier have the technology to meet **onsemi's** needs?
- Is the supplier cost competitive?
- Is the supplier able to meet delivery/capacity requirements?

- Does the supplier agree to support value added service programs and initiatives?
- Does the supplier have the technical, physical and financial resources to support **onsemi's** future demands?

Potential Suppliers are also evaluated based on the status of their quality system by VDA 6.3 audit methodology by Supplier Quality Engineers (SQEs). The assessment process is outlined on page 12 of this manual. After the supplier has been evaluated and it is determined that the supplier meets **onsemi's** needs, the supplier is asked to provide material to begin the material, services or product qualification process, according to the applicable Production Part Approval Process (PPAP) and **onsemi** requirement.

The implementation step ensures that the supplier's material, services or product processes are properly qualified by **onsemi**. This step also ensures that there is a material, services or product verification process in place and that suppliers stay current with material, services or product specification revisions.



Implementation

QUALIFICATION REQUIREMENTS AND PSWs

onsemi requires completion of a qualification process prior to the first production shipment, for example: a new material, service or product supplier or a re-qualification due to expiration (no shipments for 2 years) or disqualification. The qualification (or re-qualification) requires a PSW (or level 1 PPAP) in addition to site level qualification requirements.

Before engaging in the qualification process, the onsemi contact person will review the applicability of requirements in the "QUALITY SYSTEM" section for the supplier and confirm the requirements are met.

The qualification process could entail review of supplier documents and production data, processing of sample material as engineering/split lots, processing of soft-landing material/risk production, and a production site audit (as applicable).

The signed PSW (Parts Submission Warrant) will also be used to communicate the final notification of approval for the proposed change.

When samples are required for qualification, to clearly categorize and segregate these samples as non-production material, the evaluation or qualification samples shall be clearly identified on outer packaging/shipping containers nearby or next to the product labels (as applicable).

PRODUCT/PROCESS CHANGE NOTIFICATION (PCN)

Any plans to pursue a major change in the manufacturing of the material, service, product, or process flow requires a notification to **onsemi** as our customer requirements for changes must be applied to suppliers and sub-suppliers.

The qualification process is also required prior to the first production shipment of an existing material, service or product modified by a major engineering change.

This encompasses all items within the "Cycle of Success" including New Product Development. These changes may include but are not limited to:

- A change to design records
- A change in a quality conformance including procedure, test/inspection methods

- A change in the site of manufacture
- New tooling or modified tools which can be expected to influence the integrity of the final product, upgrade or rearrangement of existing tooling or equipment, including equipment transferred to and from a different site
- A change/addition/deletion of a process step (which could affect customer requirement for fit, form, function, performance)
- A source change for raw material or supplier
- A change in raw material composition
- A change to handling, packaging or storage methods
- Additional changes as defined in material specification

Notification of any intended source change during New Product Development phase, shall be in writing to the Project Manager and Development Engineer prior to change.

The Manufacturer, Supplier or Distributor shall notify **onsemi (notify both the onsemi Supplier Quality Engineers and the Commodity Buyers)** with a letter of intent and obtain **onsemi's** written approval at least 6 months in advance of the implementation of the above major changes to their processes (Product/Process Change Notification, PCN). If documented in the material specification, the notification could be at a minimum of 12 months before the first ship date of product. **onsemi** prefers to minimize the number of PCNs and group them into a single qual as much as possible.

Signed PSW (Parts Submission Warrant) by **onsemi** is required for above major changes for all direct material suppliers. Additional PPAP data with PSW are required for Backend or Plating supplier's changes. Subcontractor and foundry suppliers must allow **onsemi** a minimum period of 24 months for automotive, military, aerospace or medical products and 12 months for others products from the time of submission until the effective change takes place.

For subcontractor and foundry change requests, the change information needs to be managed via PCN submission into the CRM (Change Request Management) system. The timeline will be initiated from the point of acceptance.

Implementation (cont.)

The change notification (PCN) shall contain following:

- A description of the proposed change and supplier's PCN number
- A list of part numbers affected
- An explanation of the reason(s) for the change, including any benefits to **onsemi**
- A proposed timeline for the implementation of the change
- Supporting data such as: records of results, conclusions from the supplier site change management
- Plan to roll back the change due to unexpected adverse effects of the change

Once the change notification has been reviewed and the change level has been determined, the **onsemi** contact person will provide an initial response to the supplier. This response will be one of the following:

- The proposed change is not significant and the supplier may proceed with implementation
- The proposed change is significant and will be approved for implementation once the conditions of the qualification requirements outlined in the change request are satisfied and approved by the **onsemi** Change Action Board (CAB)
- The proposed change is significant and is not acceptable to **onsemi** and may not be implemented on product supplied to **onsemi**

For all subcontractors and foundry change requests, the acceptance and approval of all PCNs will be formally communicated through the CRM system.

For all direct material suppliers, the change acceptance and approval of all PCNs will be formally communicated through the PSW sign off process.

In the event that qualification is required, the **onsemi** contact person will communicate all sample and data requirements and will provide final notification of approval. The PSW will also be used to communicate the final notification of approval for the proposed change.

END OF LIFE (EOL) NOTICE REQUIREMENT

When a product is terminated a product termination notice (PTN or EOL) has to be sent at least one year prior to the termination of the product, allowing a minimum 6 months from the notice to place final orders, and 12 months from the notice for final shipments. If documented in the material specification, notice of product discontinuance will be 12 months for placing final orders and 24 months from the notice for final shipments.

Subcontractor and foundry suppliers must allow **onsemi** a minimum of 24 months for automotive, military, aerospace or medical product and 12 months for other product from the time of submission of the EOL notice.

EVALUATION AND QUALIFICATION SAMPLE SHIPMENT

To clearly categorize and segregate these samples as non-production material, the evaluation or qualification samples shall be clearly identified on outer packaging/shipping containers nearby or next to the product labels (as applicable).



MATERIAL, SERVICE OR PRODUCT VERIFICATION

To ensure our customers receive only the highest quality product, **onsemi** has developed a material, service or product verification process that verifies conformance to specifications. **onsemi** manufacturing operation or SQE's will work with suppliers to implement one of the following methods of verification:

- Receipt and evaluation of statistical data provided by the supplier
- Confirmation of C of C or C of A as per customer requirement

Implementation (cont.)

- Second or third party assessments of supplier sites
- Receiving inspection and/or testing
- Part evaluation by an accredited laboratory or Reliability Audit Program (RAP)

There are several factors that determine which method will be used. In general, for suppliers with demonstrated process capability we will utilize assessments, whereas receiving inspection or SPC data will be required for suppliers with unstable capability. When requested, suppliers are expected to provide statistical data and/or allow quarterly assessments at their facilities.

SPECIFICATION DISTRIBUTION AND ACCEPTANCE VIA EXMAN

The External Manufacturing system (ExMAN) ensures our suppliers stay current with applicable material, service or product specification revisions. Suppliers are subscribed to specifications using the supplier's email addresses. When changes are made to specifications, the supplier will be automatically notified via email thru the ExMAN system. Suppliers must assign the contact that will be responsible to review, distribute specification changes and releases throughout the supplier's facility. These contacts must understand the urgency to specification changes and respond to the system accordingly with compliances.

The ExMAN system provides different types of notices:

- New Subscription (new document to review)
- Activity (new spec revision or record of compliance response)

For material specifications, suppliers must log into the system via the Manufacturing Portal page on onsemi.com within 14 days to notify onsemi that they either:

- "Comply" – Supplier agrees to meet the full requirements listed in the document
- "Comply w/ Exception" – Supplier agrees to meet the full requirements listed in the document except for specific noted requirements in the "User Comment" section
- "Do Not Comply" – Supplier does not agree to review the specification or cannot supply the specified material/service. Supplier is not eligible for the business opportunity

For direct materials, the suppliers' comments will be included in the PSW. For policy specifications, suppliers have 30 days to review new/revised specifications and the same response options are available. The response from the supplier will be sent to the local site contact if the response is "Comply w/ Exception" or "Do Not Comply" and onsemi contact person will work with the supplier and local site contact to correct the specification as applicable.

CORRECTIVE ACTION AND PREVENTIVE ACTION (CAPA)

onsemi and our suppliers should strive for "Zero Quality Incidents," but when they do occur, the supplier must have a Corrective and Preventive Action System that includes containment, root cause analysis, (including 5-Why analysis, Ishikawa analysis, or other root cause determination tool applied to the system and escape root cause) corrective action, effectiveness verification and prevention of recurrence. When **onsemi** issues a Supplier Quality Incident (SQIN) or External Failure Analysis Request (EFAR) for material or product out of conformance, the supplier must provide the **onsemi** site contact with a containment action within 24 hours, and a detailed corrective action plan (in 8D format, **including FA time**) within 14 calendar days. Final closure of 8D is subject to **onsemi** assessment.

NON-CONFORMING MATERIAL, SERVICE OR PRODUCT CONTROL

onsemi will not accept material, which does not conform to specified requirements, and it may be cause for rejection and return to the supplier for credit or replacement, as mutually agreed.

Occasionally, however, a supplier may wish to submit variant material, service or product for consideration. To avoid rejection upon receipt, a request for temporary deviation from specification shall be submitted to **onsemi** prior to shipment. This request will be evaluated, and only after a written approval from **onsemi**, the material, service or product can be shipped to **onsemi**. Lack of response from **onsemi** does NOT constitute acceptance of the non-conforming material, service or product.

Implementation (cont.)

PROCESS CONTROL

The supplier must have a documented process for planning and implementing production activities. Production must occur under controlled conditions using documented and revision-controlled procedure, instructions, and reference material, as requested by the latest release of ISO9001 and IATF16949.

INSPECTION & TESTING

The supplier must have a documented process to verify that all requirements for **onsemi** product have been met prior to shipment. Appropriate measurement and test equipment must be available, and record of inspection must be maintained. Should supplier subcontract to another party for measurement, supplier must ensure the subcontractor is in accordance with these requirements and provide documentation to **onsemi**.

CERTIFICATE OF CONFORMANCE (C OF C)

The supplier must issue a C of C for each lot, run or batch of material, service or product shipped to **onsemi** stating conformance to the requirements stipulated in the PO, detail specifications and this document. **onsemi** strives to collect C of C data electronically whenever possible. The C of C elements may appear on a traveler or other documentation accompanying a shipment, but must satisfy the following minimum requirements:

- Manufacturer's name and address
- **onsemi**'s or Customer's name and address, as applicable to the shipment
- Part/Device identification
- Lot/date code(s)
- Quantity of devices in shipment
- Statement certifying product conformance and traceability (For Mold compound suppliers, include annual UL94 results with the test date, test sample thickness and test result.)
- Name and date of transaction
- PO number
- Specification number
- Drawing number, if applicable

CERTIFICATE OF ANALYSIS (C OF A)

Certificate of Analysis requirements, if applicable, will be specified in the PO and Procurement Specification or **onsemi** detailed specifications

STATISTICAL PROCESS CONTROL (SPC)

Suppliers must be actively pursuing the use of SPC throughout their processes. Suppliers must send applicable statistical reports to governing site as defined in the appropriate baseline and/or procurement specification.

The supplier must be able to demonstrate continual improvement through the utilization of SPC methods and meet $Cpk \geq 1.67$ for critical parameters of the qualified parts. (see AIAG SPC manual for guidance).

An action plan shall accompany the report for all agreed critical parameters with a $Cpk < 1.67$.

Any exceptions must be reviewed and approved by **onsemi**.

CALIBRATION

Calibration of equipment used in the manufacturing of product for **onsemi** shall be in accordance with ANSI/NCSL (1) Z540.1, ISO/IEC17025 or other International traceable standard. Should supplier subcontract to another party to perform the calibration, supplier must ensure the subcontractor is in accordance with same requirements and provide documentation to **onsemi**.

MEASUREMENT SYSTEM ANALYSIS (MSA)

Before a measurement system can be used to verify a DOS (Design Output Specification) on **onsemi** product, it must demonstrate required detection capability. The supplier should repeat gage R & R studies when warranted by measurement system change and have a systematic method to improve gage system.

DOCUMENT CONTROL

The supplier must have a documented process to ensure that quality system documents, design specification, and other product related documents are controlled. Controlled documents must be reviewed by appropriate personnel and approved prior to their release and use.

Implementation (cont.)

CONTROL OF RECORDS

Quality records shall be maintained in a manner so they remain legible and retrievable upon request. As a default, without product specific requirements, the supplier shall keep the quality records for a minimum of 15 years unless otherwise specified. These records shall also include product workflow history, travelers, measurement date, inspections, tests, Material Review Board (MRB) documents, product/process/equipment qualifications, C of A's and C of C's..

The supplier must retain quality records for provided products and each component or materials within those products.

IDENTIFICATION & TRACEABILITY

The supplier is obliged to ensure the traceability of the materials or products that it supplies. The traceability code, at a minimum, shall be put on each of the packing

boxes for every lot that is delivered. The supplier must be able to perform forwards and backwards manufacturing lot identification and traceability for any material or component used in the supplied product.

The supplier must ensure that in the event an error is discovered, it will be possible to identify and isolate the defective materials or products and therefore limit the quantities and period affected by the problem, including personnel contribution to product or service conformity and product safety (if applicable).

TRAINING

The supplier must have a documented process defining qualification and training and maintain records for all personnel. Training and certification activities must be planned, carried out, and documented, including personnel contribution to product or service conformity and product safety (if applicable).

Measurement

PURPOSE

onsemi utilizes several processes to evaluate and control our supplier's quality systems and products. Business reviews, assessments, performance rating, and material/product verification are used to evaluate our suppliers performance to our expectations. Below is a brief outline of the controls that **onsemi** uses.

BUSINESS REVIEWS

On an annual basis, **onsemi** Strategic Sourcing Managers and Manufacturing Operation will schedule business reviews with preferred suppliers. The purpose of the meetings is to review items such as:

- Supplier Performance
- Progress toward established goals-SGP
- Assignment and review of action items
- Expectations
- Technical issues
- Cost reduction opportunities
- Market conditions
- Future demand

- New products and technologies
- Additional business opportunities
- Financial issues
- Corrective action status
- Premium freight
- Quality System
- Planned major process changes / product terminations expected (next 5-10 years' horizon)

The business reviews are essential in forming and maintaining a strong relationship with our preferred suppliers. Both the supplier and **onsemi** are able to communicate each other's goals and identify opportunities for improvement.

QUALITY SYSTEM ASSESSMENTS

Supplier assessments are used as a systematic and independent examination to determine whether a supplier's quality system meets the quality standard requirements. These assessments are also used to develop ISO9001 certified suppliers to automotive standards and other applicable **onsemi** customer requirements.

Measurement (cont.)

At **onsemi**, suppliers will be assessed by performing initial assessments for new suppliers and periodic monitoring assessments through either MEA or VDA6.3 check list with focus on risk management and the use of automotive core tools such as SPC, MSA, FMEA and Control plans. Re-Audit and Purchase Prohibit shall be identified based on VDA6.3 rating for material supplier, and other criteria for foundry and subcontractors. **onsemi** shall develop an annual supplier audit plan, employing a risk based approach to prioritize monitoring audits. Additionally, onsemi may choose to audit each supplier's manufacturing site (including sub-tier suppliers as needed) at least every 5 years.

New Supplier / Supplier Site	
P1 Potential Analysis	Required to begin engagement with supplier
Green	OK to proceed with samples
Yellow	Supplier Development Plan Needed Before Samples
Red	NOT Approvable
New Supplier / Supplier Site	
VDA 6.3 P2-P7*	Required to begin engagement with supplier
A	OK to add to Preferred / Approved Supplier List
B	Must Pass Re-Audit within 12 Months, No New Business
C	Must Pass Re-Audit within 6 Months, No New Business
Supplier Monitoring Program (Existing Suppliers / Sites)	
VDA 6.3 P2-P7*	Defined by risk based planning process
A	OK to continue purchases
B	Must Pass Re-Audit within 12 Months, No New Business
C	Must Pass Re-Audit within 6 Months, No New Business
* may also be P5-P7	
Note: P1 Audits typically assigned as self audits with a review meeting with SQE	
Note: VDA6.3 Audits typically assigned as onsite by SQE	

PERFORMANCE RATING

onsemi has developed a performance rating system that measures preferred suppliers in the areas of Quality & Reliability, Delivery, Cost, and Technology & Service. The supplier's performance is tracked on a quarterly basis and is frequently reviewed to ensure that suppliers are meeting the needs of **onsemi**. Each category is weighted based on the criticality to **onsemi**.

The rating system also serves as a useful tool in tracking data in several ways such as:

- Tracking a supplier's progress
- Evaluating suppliers by commodity
- Evaluating suppliers by **onsemi** manufacturing site

The system works well and has become a useful tool in the supplier development process. Following is the measurement criteria defined for each area.

Quality

- Incoming Quality Incidents
- Line Quality Incidents
- Repeat Quality Incidents
- Quality System Assessments
- Assembly and Test Yield Improvement
- Process Monitoring
- Returned Material Authorization (RMA)
- 8D Responsiveness and Effectiveness

Delivery

- Stockouts (Line Down)
- Delivery Performance (Including Premium Freight)
- Capacity
- Cycle Time Reduction

Service

- Responsiveness
- Accurate Reporting

Measurement (cont.)

Cost

- Price Leadership
- Participation in 3 Year Price Productivity Roadmaps
- Participation in Cost Reduction Programs
- Payment Terms
- Provide Cost Transparency
- Cost Sharing
- Support of **onsemi** Systems/Tools

Technology

- Capability to meet current technology requirements
- Technology roadmap aligns with **onsemi** future technology

The Supplier Quality team or External Manufacturing operation team will evaluate the performance of the preferred suppliers and notify the suppliers of the results. (Quarter/Semi-annual/ Annual)

Suppliers with scores below Set Goal of Total scores or Quality scores will have a specific improvement action plan that may include onsite assessment. Goals and ratings will be communicated with supplier by Score Card.

SPR Performance Expectations	
Total Score	FE 65 pts / BE 70%
Quality Score	FE 25 pts / BE 90%
Improvement actions necessary to avoid performance downgrade	
Consecutive ratings not meeting threshold will result in supplier goal plan	

Improvement

PURPOSE

To remain competitive we must continuously improve our products and processes and work with our suppliers to improve them as well. To achieve this, **onsemi** has developed the Supplier Goal Plan (SGP). The SGP is used to prioritize goals and track progress. This process enables both the supplier and **onsemi** to work together and form a strong working relationship.

This process ensures a working relationship between both parties and helps the supplier understand how they can improve their performance. The Supplier improvement will be reviewed on a quarterly basis. Time will be set aside for suppliers to provide updates during scheduled business reviews or other previously scheduled meetings.



SUPPLIER GOAL PLAN (SGP), CONTINUAL IMPROVEMENT PLAN (CIP), SUPPLIER IN FOCUS (SIF)

The **onsemi** SGP/CIP/SIF process is used to identify goals and opportunities for improvement based on the controls listed in the previous section (i.e. performance rating, assessments/audits, material verification, etc.).

The process is simple. First, the cross functional team within **onsemi** will evaluate the overall performance of the supplier. After opportunities for improvement or specific goals are identified, **onsemi** will schedule a meeting with the supplier to review the results. During this meeting, both parties will work together to develop and agree upon the SGP, CIP or SIF activity.

Change History

Letter Revision	Number Revision	Effective Date	Summary of Changes
Z	26	Nov-2024	<p>New Table of Contents</p> <p>Welcome: Clarification to the impact of taking exceptions on scorecard.</p> <p>General Expectations: Added language for quotations and bidding, B2B invoicing, right of entry for sub-tier processes, access to financial records upon request, access to sub supplier site location to manage supplier disruptions.</p> <p>Qualification Requirements: Clarified to indicate need for QMS assessment.</p> <p>PCN: Clarifications to PCN requirements and procedures including grouping PCNs when possible and planning for roll backs when needed.</p> <p>Spec Compliance / EXMAN: Clarification and descriptions of response options. Certificate of Conformance: Emphasizing electronic format is preferred when possible. Audit planning: Clarification that audit schedule is risk based with a goal of visiting every 5 years.</p>
AA	27	Sept-2025	<p>Clarification of existing requirements in Supplier Selection, PCN</p> <p>Update to 8D CT to better align with customer expectations</p> <p>Clarification of existing requirements for Quality System Assessments and response to low scores</p> <p>Added Existing Thresholds for Performance Ratings to better align with customer expectations</p>

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