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| BOSCH  AUTOMOTIVE | PCN Questionnaire | AE/PUR-E3, AE/QMS |
| | | PCN16441 |

Formular F-F0219, V: 1.0 (01.07.2008), Responsible AE/QMS-P-Gu

Identification of the PCN

| | |
|----------------------------------|---|
| Suppliers company name | ON Semiconductor |
| Subject (PCN short name) | ACMOS 2nd Source Qualification to Gresham FAB |
| Supplier's identification number | 16441 |
| Date of issue | 27-May-2011 |

Supplier's contact person for this PCN

| | |
|---------------|---------------------------|
| Name | Jaromir Ftorek |
| Phone number | +421 33 790 2475 |
| email address | jaromir.ftorek@onsemi.com |

Product / Process – Changes

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|---|--|
| Detailed description of change(s) | |
| Comparison: unchanged vs changed component. At least all changes within the device questionnaire must be described (attach additional information) | before change |
| | wafer fabrication in Aizu, Japan only |
| | after change |
| | wafer fabrication in Aizu, Japan + wafer fabrication in Gresham, U.S.A (*other changes to QSD tracked device parameters related to sourcing from new wafer fab will be provided in related QSD questionnaire for device from new source -Gresham) |
| Reference parts (if applicable) | not applicable |
| Reasons for change(s) | wafer capacity expansion |
| Benefit for Bosch (quality, cost,) | capacity increase to support Bosch on high runner projects for ACMOS technology products |
| Has the change any impact on form, fit, function, quality, reliability or processability? | Form, Fit, Function - No Quality, Reliability, Processability - Yes |
| Any other PCNs planned for the products /product family within next 2 years? | no additional change planned at the time |
| Additional comments | not applicable |

PCN Scheduling & Data

| | | |
|------------------------------------|--|-------------|
| Supplier's qualification finished? | <input type="checkbox"/> yes -> a) <input checked="" type="checkbox"/> no -> specify | 01-Sep-2011 |
| Qualification samples available? | <input checked="" type="checkbox"/> yes <input type="checkbox"/> no -> specify | 01-Sep-2011 |
| Date of planned production change | 30-Mar-2012 | |
| Last time buy (LTB) | not applicable for additional new source qualification | |
| Last shipment date (LSD) | not applicable for additional new source qualification | |
| Qualification done according AEC? | Yes | |

a) If your qualification is finished, please attach qualification report

will be send in separate email, once internal ON Semiconductor qualification is completed.
Attached is Qualification plan proposed by ON Semiconductor for this qualification



Product – Identification

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|--|--|
| Component function | Voltage regulators |
| Component family name | NCV30xLSNxxT1G |
| Mode of change-over | second source qualification |
| How can the new / changed products be identified at Bosch? | based on wafer lot number, more details on traceability will be provided in customer presentation for this change |

Remarks:

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| For PCNs where we have to notify our customers we have to explain the change(s). Please specify explicitly if data within this PCN should not be shown to our customers. |
| This form sheet should be send back as Excel-file, <u>not</u> as PDF only! |

Product – part numbers

All affected Bosch part numbers (890...) have to be listed, even if they have not been ordered by Bosch or shipped to Bosch within the last years. Do not use spaces or dots within Bosch part numbers.

| # | Bosch part number (890....) | supplier's device name or part number | Bosch spec |
|----|-----------------------------|---------------------------------------|------------|
| 1 | 8905501613 | NCV300LSN28T1G | IS 64.6 |
| 2 | 8905959976 | NCV301LSN40T1G | IS 64.6 |
| 3 | 8905501104 | NCV301LSN12T1G | IS 64.22 |
| 4 | 8905501035 | NCV301LSN16T1G | IS 64.22 |
| 5 | 8905501125 | NCV301LSN28T1G | IS 64.22 |
| 6 | 8905506160 | NCV303LSN13T1G | HA 240.101 |
| 7 | 8905506161 | NCV303LSN20T1G | HA 240.101 |
| 8 | 8905506162 | NCV303LSN23T1G | HA 240.101 |
| 9 | 8905506163 | NCV303LSN30T1G | HA 240.101 |
| 10 | 8905506164 | NCV303LSN45T1G | HA 240.101 |
| 11 | 8905505800 | NCV303LSN10T1G | HA 240.101 |
| 12 | 8905508162 | NCV303LSN12T1G | HA 240.101 |
| 13 | 8905508163 | NCV303LSN29T1G | HA 240.101 |
| 14 | 8905508164 | NCV303LSN43T1G | HA 240.101 |