



Date: 23.09.2014

Federal Communications Commission
Authorization and Evaluation Division
7435 Oakland Mills Road
Columbia, MD 21046

Attn: OET Dept.

Ref: FCC Class II Permissive change for FCC ID: WNS-020000007
(Original Grant date: 11/13/2008)
Applicant: Delphi Delco

Dear Examiner,

This is to request a Class II permissive change for FCC ID: WNS-020000007 originally granted on 11/13/2008.

The major changes filed under this application are:

All listed products in the specification description are new revisions of old products (certified in 2008) due to several discontinued components. With respect to the FBDII building block PCB design as well SW is identical with the initial homologation!
All changed FBDII relevant components are drop in replacements and are described in the next pages!

The RF part still remains the same!

If you have any questions regarding this application, please feel free to contact me.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Thomas Riß'.

CSA Group Bayern GmbH
Ohmstrasse 1-4
94342 Strasskirchen

Name: Thomas Riß
Titel: Teamleader Global Market Access

CSA Group Bayern GmbH
Ohmstrasse 1-4
94342 Strasskirchen, Germany

Supplier Suggestion Change Request # 52932

Date Submitted : 24-Sep-2013

CONTACT INFORMATION

Name	Entered By	Owner
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Supplier Ultimate Name	ATMEL CORP	
Supplier Ultimate DUNS	121385264	
Supplier Manufacturing Location Name	Atmel	Supplier Manufacturing Location Duns 266358084
Supplier Manufacturing Location City	Nantes	Supplier Manufacturing Location State
Supplier Manufacturing Location Country	FRANCE	

AFFECTED PART INFORMATION

Is this a pass-thru or direct ship product? ☒ No ☐ Yes

Ship To Location(s) DELPHI DEUTSCHLAND GMBH
Division Delphi Electronics & Safety
Region Europe

Commodity Group Electrical

Delphi Part # / PO # (for Indirect)	Revision	Drawing No.	Part / Project Name
28094363	0		0

Additional Parts

Supplier Part #	Supplier Part Name
ATMEGA168-15MZ	

Additional Part Numbers

Product Application

Delphi Buyer Name	Shaikhadeh, Leo	Product Engineer Name
Delphi Buyer Phone		Delphi Engineer Phone
Delphi SQE / AQE Name	Denys Chock	

Is this an Emergency ? ☒ No ☐ Yes

Other Delphi Contact	Title	Name	Phone
1			
2			

DEFINE CHANGE REQUEST

Title
Technology Shrink of Automotive Microcontrollers

Detail Description of Change Proposal
Optimized std logic cells and metal interconnection width reduction. Resulting is reduced die size. Replacements are: pin-to-pin and backward compatible; production tested using similar automotive test programs; meet similar datasheet specifications as the current products.

Reason for Change
Optimized std logic cells and metal interconnection width reduction. Resulting is reduced die size. Replacements are: pin-to-pin and backward compatible; production tested using similar automotive test programs; meet similar datasheet specifications as the current products.

Reference PCR Number :

CHANGE IMPACT

Types of Improvement

- | | | | |
|---|---|--|---|
| ☐ Cost | ☐ Quality | ☐ Delivery | ☐ Logistics |
| ☐ Consumer Appeal | ☐ Maintenance & Support | ☐ Equipment Upgrade | ☐ Software Enhancement |
| ☐ Network Capability | ☒ Other : Upgrade | | |

Affects

- | | | | |
|-------------------------------------|------------------------------------|---|--|
| ☐ Appearance | ☐ Function | ☐ Process | ☐ Location change |
| ☐ Material | ☐ Packaging | ☐ Customer Interface | ☒ Other : design & fab process |

Impact Change will have

No change in fit form and function. Some flexibility was added from an application perspective

Estimated Implementation Lead Time :	4 Weeks	
Requested Disposition Date :	15-Mar-2014	Sample Parts to Delphi By : 30-Sep-2013
Component Data / Test Data to Delphi By :	30-Sep-2013	Desired Date for Production at Supplier Facility : 30-Sep-2013
Date Supplier can Support Production quantities to Delphi : 15-Feb-2014		Target PPAP Submission Date : 30-Sep-2013

If One or More Product Lines Deny Change, Can Supplier Support Both Old and New Parts or Materials ? ☒ No ☐ Yes

Alternative

The two parts are still in mass production. However the old process will be stopped in the next years. the eventuality of a product continuation needs discussion with sales contact and marketing.

Supplier Suggestion Change Request # 49279

Date Submitted : 14-Jan-2013

CONTACT INFORMATION

Name	Entered By	Owner
Title	Sherry Rosselot	Sherry Rosselot
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		Y
Supplier Ultimate Name	NXP SEMICONDUCTORS N.V.	
Supplier Ultimate DUNS	414955513	
Supplier Manufacturing Location Name	NXP Semiconductors Netherlands	Supplier Manufacturing Location Duns 415097385
Supplier Manufacturing Location City	Nijmegen	Supplier Manufacturing Location State
Supplier Manufacturing Location Country	NETHERLANDS	

AFFECTED PART INFORMATION

Is this a pass-thru or direct ship product? ☒ No ☐ Yes

Ship To Location(s) Texton, DA31, DAT3, Megamos, Fuba, Hungary

Division Delphi Electronics & Safety

Region North America

Commodity Group Electrical

Delphi Part # / PO # (for Indirect)	Revision	Drawing No.	Part / Project Name
9397553	B	Unknown	Unknown`
FRD13544012	A	Unknown	Unknown

Additional Parts

Supplier Part #	Supplier Part Name
TJA1020T/VM	LIN Transceiver SO8
Additional Part Numbers	
TJA1020T/VM	Lin Transceiver SO8

Product Application Unknown

Delphi Buyer Name May Leong

Delphi Buyer Phone +65-6450-8655

Delphi SQE / AQE Name Burkhard Exner / Loris Rolfe

Product Engineer Name Yogesh L

Delphi Engineer Phone Unknown

Is this an Emergency ? ☒ No ☐ Yes

Other Delphi Contact	Title	Name	Phone
1			
2			

DEFINE CHANGE REQUEST

Title

TJA1020T Fab Transfer Hamburg 6inch to ICN8 8inch

Detail Description of Change Proposal

NXP's TJA1020T/VM LIN transceiver is being transferred from our Hamburg Germany 6inch waferfab to our 8inch (ICN8) waferfab in Nijmegen Netherlands, where the newest generation of IVN products is manufactured. The new ICN8 product has an updated Bill of Materials. Changes that will occur: - Backside Metal (BSM) will be removed -Wafercoat will added, improving product robustness - Die thickness will change from 380um to 280um - Bondwire will change from 25um Au to 20um AuPd - Sawlane will change to 50um - Topside marking format will change (details in attachment with submission) Because of this transfer announcement, Delphi's options are as follows: 1. Evaluate and qualify the ICN8 version and approve it against 9397553. This option would not require a BOM change for Delphi. 2. Evaluate and qualify the next generation for existing programs. TJA1021T (Delphi has already qualified TJA1021T under cpn's 28136407 & 28148503, see SCR48319 for changes occurring to this part), or TJA1029T (3rd generation). 3. Make a lifetime buy of the Hamburg device (TJA1020T/VM). LTB date is 06/30/13 with a LTD date of 04/30/14. For all new designs, Delphi should take the necessary steps and immediately start using TJA1020T/CM, TJA1021T/xx/C, TJA1021T or TJA1029T. Also note that this change will enable NXP to eventually implement a dual fab sourcing strategy for our automotive customers, scheduled for 2014."

Reason for Change

The automotive market shows a strong demand for our newest generation automotive IC's, which are all manufactured in 8inch wafer fabs. However, the demand for our mature TJA1020 LIN transceiver also remains stronger than expected, which challenges a future in the current 6inch production out of Hamburg. To ensure continued availability for our customers, NXP has decided to make this transfer, from Hamburg 6" to Nijmegen 8".

Reference PCR Number :

CHANGE IMPACT

Types of Improvement

- | | | | |
|---|--|--|---|
| ☐ Cost | ☒ Quality | ☐ Delivery | ☐ Logistics |
| ☐ Consumer Appeal | ☐ Maintenance & Support | ☐ Equipment Upgrade | ☐ Software Enhancement |
| ☐ Network Capability | | | |

Affects

- | | | | |
|--|------------------------------------|---|---|
| ☐ Appearance | ☐ Function | ☒ Process | ☒ Location change |
| ☒ Material | ☐ Packaging | ☐ Customer Interface | |

Supplier Suggestion Change Request # 48319

Date Submitted : 29-Oct-2012

CONTACT INFORMATION			
Name	Entered By	Owner	
Title	Sherry Rosselot	Sherry Rosselot	
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Receive Status Email	N	sherry.rosselot@nxp.com	
Supplier Ultimate Name	NXP SEMICONDUCTORS N.V.		
Supplier Ultimate DUNS	414955513		
Supplier Manufacturing Location Name	NXP Semiconductors Netherlads	Supplier Manufacturing Location Duns	415097385
Supplier Manufacturing Location City	Nijmegen	Supplier Manufacturing Location State	
Supplier Manufacturing Location Country	NETHERLANDS		

AFFECTED PART INFORMATION			
Is this a pass-thru or direct ship product? ☒ No ☐ Yes			
Ship To Location(s) DA31, DAT3, Hungary, Gdansk, DA26, Megamos, fuba, Texton & Braga			
Division Delphi Electronics & Safety			
Region North America			
Commodity Group		Electrical	
Delphi Part # / PO # (for Indirect)	Revision	Drawing No.	Part / Project Name
28136407	A	Unknown	Unknown
Additional Parts			
28148503	A	Unknown	Unknown
Supplier Part #		Supplier Part Name	
TJA1021T/20/C		LIN Transceiver SO8	
Additional Part Numbers			
TJA1021T/10/C		LIN Transceiver SO8	
Product Application	Unknown		
Delphi Buyer Name	May Leong	Product Engineer Name	Ramon Aziz
Delphi Buyer Phone	Unknown	Delphi Engineer Phone	Unknown
Delphi SQE / AQE Name	Burkhard Exner / Loris Rolfe		
Is this an Emergency ? ☒ No ☐ Yes			
Other Delphi Contact	Title	Name	Phone
1			
2			

DEFINE CHANGE REQUEST	
Title	Quality Improvements to TJA1021T LIN Transceiver
Detail Description of Change Proposal	
NXP TJA1021T LIN transceivers out of ABCD-3 process will have the following quality improvements made: - Process update to PA100TMX04 using HDP passivation - Mould compound (Sumitomo EME6210 to Nitto GE7470) - Die attach material (Ablebond 8390P to Henkel QMI-519) - Roughened top side leadframe (already used in other transceivers, reference SCR30756) - Wafer thickness (380um to 280um) - Bondwire diameter and material (25um AuBe to 20um AuPd) - Sawlane change to 50um - Product marking will change, outlined in attachment to change submission - Type description will also change: TJA1021T/10/C to TJA1021T/10/CM and TJA1021T/20/C to TJA1021T/20/CM - No change to the existing NXP datasheet.	
Reason for Change	
These changes are a result of ongoing quality improvements and industrial standardizations and not from any underlying quality issue	
Reference PCR Number :	

CHANGE IMPACT	
Types of Improvement	
☐ Cost	☒ Quality
☐ Consumer Appeal	☐ Maintenance & Support
☐ Network Capability	☐ Delivery
	☐ Equipment Upgrade
	☐ Logistics
	☐ Software Enhancement
Affects	
☐ Appearance	☐ Function
☒ Material	☐ Packaging
	☒ Process
	☐ Customer Interface
	☐ Location change
Impact Change will have	
A more robust part. Should have no negative impact to customer.	

Estimated Implementation Lead Time :	1 Months	Sample Parts to Delphi By :	03-Dec-2012
Requested Disposition Date :	31-Mar-2013	Desired Date for Production at Supplier Facility :	31-Mar-2013
Component Data / Test Data to Delphi By :	29-Oct-2012		

Supplier Suggestion Change Request # 48318

Date Submitted : 29-Oct-2012

CONTACT INFORMATION			
Name	Entered By	Owner	
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Receive Status Email	N	sherry.rosselot@nxp.com	
Supplier Ultimate Name	NXP SEMICONDUCTORS N.V.		
Supplier Ultimate DUNS	414955513		
Supplier Manufacturing Location Name	NXP Semiconductors Netherlands	Supplier Manufacturing Location Duns	415097385
Supplier Manufacturing Location City	Nijmegen	Supplier Manufacturing Location State	
Supplier Manufacturing Location Country	NETHERLANDS		

AFFECTED PART INFORMATION			
Is this a pass-thru or direct ship product? ☒ No ☐ Yes			
Ship To Location(s) Fuba			
Division Delphi Electronics & Safety			
Region Europe			
Commodity Group		Electrical	
Delphi Part # / PO # (for Indirect)	Revision	Drawing No.	Part / Project Name
28086447	A	Unknown	Unknown
Additional Parts			
28117864	A	Unknown	Unknown
Supplier Part #		Supplier Part Name	
PQJ7980AHN/C0CH		LoPSTer 1.25	
Additional Part Numbers			
PQJ7980AHN/C0DL		LoPSTer 1.25	
Product Application	Unknown		
Delphi Buyer Name	Unknown		
Delphi Buyer Phone	Unknown		
Delphi SQE / AQE Name	Burkhard Exner		
Is this an Emergency ?	☒ No ☐ Yes		
Other Delphi Contact	Title	Name	Phone
1			
2			

DEFINE CHANGE REQUEST	
Title	Quality Improvements to LoPSTer 1.25 PQJ7980AHN
Detail Description of Change Proposal	
NXP is making the following design, manufacturing and test changes to the listed types: -New passivation stack (HDP stack) This will give an increased mechanical robustness. -Wafercoating change which will also improve mechanical robustness. -Improved leadframe version. This will increase robustness against moisture. -Moisture Sensitivity Level will change from MSL-3 to MSL-2a -EMC (clock spurs) to improve EMC performance at clock input -Adjust PA regulator thresholds which will improve power output control. -PA and VCO isolation improvement which will improve robustness at TX application with SAW filter (1.25 only) -ESD improvement--> Specification upgrade -DC testing PA which will give test coverage improvement -New type description for PQJ7980AHN/C0CH, once qualified will be PQJ7980AHN/C0IH -New type description for PQJ7980AHN/C0DL, once qualified will be PQJ7980AHN/C0JL	
Reason for Change	
Quality improvements being made for a more robust part, but not for any underlying quality issue.	
Reference PCR Number :	

CHANGE IMPACT			
Types of Improvement			
☐ Cost	☒ Quality	☐ Delivery	☐ Logistics
☐ Consumer Appeal	☐ Maintenance & Support	☐ Equipment Upgrade	☐ Software Enhancement
☐ Network Capability			
Affects			
☐ Appearance	☐ Function	☒ Process	☐ Location change
☐ Material	☐ Packaging	☐ Customer Interface	
Impact Change will have			
Improved part robustness.			

Estimated Implementation Lead Time :	1 Months	Sample Parts to Delphi By :	15-Nov-2012
Requested Disposition Date :	01-Feb-2013		