



**Product Change Notification**

**CN-202303025F**

**Issue date:** 30 Jun 2023

**Effective date:** 28 Sep 2023

Here's your personalized quality information concerning products our customers and partners purchased from Nexperia.

For more details please contact your respective Nexperia CSR/AM.



**Expansion of wafer fab capacity by introduction GTA Semiconductor (former ASMC) for selected HEF types in PC900SMB, PC950SM and PC95SSMB process**

**Change Category**

|                                     |                          |                                                     |                                         |                                                         |
|-------------------------------------|--------------------------|-----------------------------------------------------|-----------------------------------------|---------------------------------------------------------|
| <input type="checkbox"/>            | <input type="checkbox"/> |                                                     |                                         |                                                         |
| Wafer                               | Assembl                  |                                                     |                                         |                                                         |
| Fab                                 | y                        |                                                     |                                         |                                                         |
| Process                             | Process                  | <input checked="" type="checkbox"/> Product Marking | <input type="checkbox"/> Test Location  | <input type="checkbox"/> Design                         |
| <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> Mechanical Specification   | <input type="checkbox"/> Test Process   | <input type="checkbox"/> Errata                         |
| Wafer                               | Assembl                  | <input type="checkbox"/>                            | <input type="checkbox"/> Test Equipment | <input type="checkbox"/> Electrical spec./Test coverage |
| Fab                                 | y                        |                                                     |                                         |                                                         |
| Materials                           | Materials                | Packing/Shipping/Labeling                           |                                         |                                                         |
| s                                   | <input type="checkbox"/> |                                                     |                                         |                                                         |
| <input checked="" type="checkbox"/> | Assembl                  |                                                     |                                         |                                                         |
| Wafer                               | y                        |                                                     |                                         |                                                         |
| Fab                                 | Location                 |                                                     |                                         |                                                         |
| Location                            |                          |                                                     |                                         |                                                         |

**Details of this change**

Expansion of wafer fab capacity by introduction GTA Semiconductor (former ASMC) Shanghai China for selected Logic HEF types in PC950SM, PC95SSMB and PC900SMB process to meet customer demand

- Additional source for PC9xx process at GTA Semiconductor (Shanghai China) next to NXP ICN8 (Nijmegen The Netherlands)
- For selected Logic HEF product types
- Release PC9xx process cluster at GTA (PC950SM, PC95SSMB and PC900SMB process)
- No change in datasheet, form, fit, function, quality or reliability anticipated
- Matching wafer PCM (Process Control Modules) and product parameters by 1.5 delta/sigma and Cpk > 1.67
- No change in die layout, all masks are produced from the same GDS2 file
- No change in ordering code 12NC and product type name
- No change in wafer fab process
- No change in BOM

SQR\_CN-202303025F.pdf: [https://qcm.nexperia.com/Document/DOC-556891/SQR\\_CN-202303025F.pdf](https://qcm.nexperia.com/Document/DOC-556891/SQR_CN-202303025F.pdf)

### **Why do we implement this change?**

- Introduce second source wafer fab location
- To support increased customer demand
- Order Lead-Time Improvement
- Flexibility

### **Identification of affected products**

- The change can be identified by backward traceability
- Applied wafer fab is indicated on the reel and box label and product marking

Indicators:

"Y"= GTA (ASMC), Shanghai, China

"T"= NXP ICN8, Nijmegen, Netherlands

## **Management summary**

- Release 2nd source PC9xx process
- Introduction of GTA Semiconductor (former ASMC) wafer fab in Shanghai China for selected Logic HEF products in PC9xx process

## Product availability

### Production

Planned first shipment: 30 Sep 2023

### Sample information

Samples are available upon request

## Impact

No impact to the product's functionality anticipated

### Data sheet revision

No impact to existing datasheet

### Disposition of old products

Not applicable introduction of 2nd source

### Feedback

Your acknowledgement of this change, conform JEDEC J-STD-046, is expected till 30 Jul 2023. Lack of acknowledgement of the PCN constitutes acceptance of the change.

## Additional information

[View Change Notification Online](#)

### Remarks

- No change in ordering code 12NC - Samples are available upon request via Helpdesk+ from BG Analog & Logic ICs sample store in Nijmegen The Netherlands

## Contact and support

For all Quality Notification content inquiries, please contact your local Nexperia Sales Support Team.

For specific questions on this notice or the products affected please contact our specialist directly: [pcn@nexperia.com](mailto:pcn@nexperia.com)

In case of distribution, please contact your distribution partner.

## About Nexperia B.V.

We at Nexperia are the efficiency semiconductor company. We deliver over 90 billion products a year and as such service thousands of global customers, both directly and through our extensive network of channel partners. We are at the heart of billions of electronic devices in the Automotive, Mobile, Industrial, Consumer, Computing, and Communication Infrastructure segments.

You have received this email because you are a designated contact or subscribed to Nexperia Quality Notifications. Nexperia shall not be held liable if this Notification is not correctly distributed within your organization.

This message has been automatically distributed. Please do not reply.

If you would like to adjust your mailing preferences, please [click here](#).



| SalesItem_name | SalesItem_orderablePartNumber | SalesOrder_customerPartNumber | ProductType_name | BasicType_description               | PackageOutlineVersion_description | PackageType_description | SalesItem_state | SalesItem_customerSpecificIndicator | BusinessLine_description |
|----------------|-------------------------------|-------------------------------|------------------|-------------------------------------|-----------------------------------|-------------------------|-----------------|-------------------------------------|--------------------------|
| 933406960653   | HEF40106BT,653                | HEF40106BT,653                | HEF40106BT       | Hex inverting Schmitt trig          | SOT108-1                          | SO14                    | RFS             | No                                  | Analog & Logic           |
| 935270276118   | HEF40106BTT,118               | HEF40106BTT,118               | HEF40106BTT      | Hex inverting Schmitt trig          | SOT402-1                          | TSSOP14                 | RFS             | No                                  | Analog & Logic           |
| 933372640653   | HEF4011BT,653                 | HEF4011BT,653                 | HEF4011BT        | Quad 2-input NAND gate              | SOT108-1                          | SO14                    | RFS             | No                                  | Analog & Logic           |
| 933372650653   | HEF4013BT,653                 | HEF4013BT,653                 | HEF4013BT        | Dual D-type flip-flop               | SOT108-1                          | SO14                    | RFS             | No                                  | Analog & Logic           |
| 935283039118   | HEF4013BT,118                 | HEF4013BT,118                 | HEF4013BT        | Dual D-type flip-flop               | SOT402-1                          | TSSOP14                 | RFS             | No                                  | Analog & Logic           |
| 933372680653   | HEF4015BT,653                 | HEF4015BT,653                 | HEF4015BT        | Dual 4-bit static shift regis       | SOT109-1                          | SO16                    | RFS             | No                                  | Analog & Logic           |
| 933372740653   | HEF4021BT,653                 | HEF4021BT,653                 | HEF4021BT        | 8-bit static shift register         | SOT109-1                          | SO16                    | RFS             | No                                  | Analog & Logic           |
| 935302448118   | HEF4021BTT,653                | 935302448118                  | HEF4021BTT       | 8-bit static shift register         | SOT403-1                          | TSSOP16                 | RFS             | No                                  | Analog & Logic           |
| 933372790653   | HEF4027BT,653                 | HEF4027BT,653                 | HEF4027BT        | Dual JK flip-flop                   | SOT109-1                          | SO16                    | RFS             | No                                  | Analog & Logic           |
| 933372820653   | HEF4030BT,653                 | HEF4030BT,653                 | HEF4030BT        | Quad 2-input EXCLUSIVE- $\wedge$    | SOT108-1                          | SO14                    | RFS             | No                                  | Analog & Logic           |
| 933372910653   | HEF4047BT,653                 | HEF4047BT,653                 | HEF4047BT        | Monostable/bistable multi           | SOT108-1                          | SO14                    | RFS             | No                                  | Analog & Logic           |
| 933372920653   | HEF4049BT,653                 | HEF4049BT,653                 | HEF4049BT        | Hex inverting buffers               | SOT109-1                          | SO16                    | RFS             | No                                  | Analog & Logic           |
| 933372940013   | HEF4051BT,013                 |                               | HEF4051BT        | 8-channel analog multiple           | SOT109-1                          | SO16                    | RFS             | No                                  | Analog & Logic           |
| 933372940653   | HEF4051BT,653                 | HEF4051BT,653                 | HEF4051BT        | 8-channel analog multiple           | SOT109-1                          | SO16                    | RFS             | No                                  | Analog & Logic           |
| 935278637118   | HEF4051BTT,118                | HEF4051BTT,118                | HEF4051BTT       | 8-channel analog multiple           | SOT403-1                          | TSSOP16                 | RFS             | No                                  | Analog & Logic           |
| 933372950013   | HEF4052BT,013                 |                               | HEF4052BT        | Dual 4-channel analog mu            | SOT109-1                          | SO16                    | RFS             | No                                  | Analog & Logic           |
| 933372950653   | HEF4052BT,653                 | HEF4052BT,653                 | HEF4052BT        | Dual 4-channel analog mu            | SOT109-1                          | SO16                    | RFS             | No                                  | Analog & Logic           |
| 935289483118   | HEF4052BTT,118                | HEF4052BTT,118                | HEF4052BTT       | Dual 4-channel analog mu            | SOT403-1                          | TSSOP16                 | RFS             | No                                  | Analog & Logic           |
| 933372960653   | HEF4053BT,653                 | HEF4053BT,653                 | HEF4053BT        | Triple single-pole double- $\wedge$ | SOT109-1                          | SO16                    | RFS             | No                                  | Analog & Logic           |
| 935263512118   | HEF4053BTT,118                | HEF4053BTT,118                | HEF4053BTT       | Triple single-pole double- $\wedge$ | SOT403-1                          | TSSOP16                 | RFS             | No                                  | Analog & Logic           |
| 933567150653   | HEF4060BT,653                 | HEF4060BT,653                 | HEF4060BT        | 14-stage ripple-carry bina          | SOT109-1                          | SO16                    | RFS             | No                                  | Analog & Logic           |
| 935302658118   | HEF4060BTT,653                |                               | HEF4060BTT       | 14-stage ripple-carry bina          | SOT403-1                          | TSSOP16                 | RFS             | No                                  | Analog & Logic           |
| 933372970653   | HEF4066BT,653                 | HEF4066BT,653                 | HEF4066BT        | Quad single-pole single-th          | SOT108-1                          | SO14                    | RFS             | No                                  | Analog & Logic           |
| 933373000013   | HEF4069UBT,013                |                               | HEF4069UBT       | Hex inverter                        | SOT108-1                          | SO14                    | RFS             | No                                  | Analog & Logic           |
| 933373000653   | HEF4069UBT,653                | HEF4069UBT,653                | HEF4069UBT       | Hex inverter                        | SOT108-1                          | SO14                    | RFS             | No                                  | Analog & Logic           |
| 935283025118   | HEF4069BTT,118                | HEF4069BTT,118                | HEF4069BTT       | Hex inverter                        | SOT402-1                          | TSSOP14                 | RFS             | No                                  | Analog & Logic           |
| 933373010653   | HEF4070BT,653                 | HEF4070BT,653                 | HEF4070BT        | Quad 2-input EXCLUSIVE- $\wedge$    | SOT108-1                          | SO14                    | RFS             | No                                  | Analog & Logic           |
| 933373090653   | HEF4081BT,653                 | HEF4081BT,653                 | HEF4081BT        | Quad 2-input AND gate               | SOT108-1                          | SO14                    | RFS             | No                                  | Analog & Logic           |
| 933373130653   | HEF4093BT,653                 | HEF4093BT,653                 | HEF4093BT        | Quad 2-input NAND Schm              | SOT108-1                          | SO14                    | RFS             | No                                  | Analog & Logic           |
| 933406660653   | HEF4094BT,653                 | HEF4094BT,653                 | HEF4094BT        | 8-stage shift-and-store req         | SOT109-1                          | SO16                    | RFS             | No                                  | Analog & Logic           |
| 935302209118   | HEF4094BTT,653                | 935302209118                  | HEF4094BTT       | 8-stage shift-and-store req         | SOT403-1                          | TSSOP16                 | RFS             | No                                  | Analog & Logic           |
| 933508000118   | HEF4541BT,118                 |                               | HEF4541BT        | Programmable timer                  | SOT108-1                          | SO14                    | RFS             | No                                  | Analog & Logic           |
| 933373300653   | HEF4543BT,653                 | HEF4543BT,653                 | HEF4543BT        | BCD to 7-segment latch/d            | SOT109-1                          | SO16                    | RFS             | No                                  | Analog & Logic           |
| 935194380118   | HEF4894BT,118                 | HEF4894BT,118                 | HEF4894BT        | 12-stage shift-and-store r          | SOT163-1                          | SO20                    | RFS             | No                                  | Analog & Logic           |
| 935283158118   | HEF4894BTT,118                |                               | HEF4894BTT       | 12-stage shift-and-store r          | SOT360-1                          | TSSOP20                 | RFS             | No                                  | Analog & Logic           |