

**FREESCALE**

Freescale Semiconductor, Inc.

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**PRODUCT AND PROCESS CHANGE NOTIFICATION**  
Customer Copy

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**ISSUE DATE:** 23-Jan-2015  
**ATTN:** MOUSER ELECTRONICS  
**NOTIFICATION:** 16571  
**TITLE:** QFN 3x3, 4x4, 5x5 and 7x7 Assembly Site Expand to United Test and Assembly Center Ltd  
**EFFECTIVE DATE:** 23-Apr-2015  
**SALES CONTACT:** Scott Johnson  
Email Address: B37427@freescale.com  
Phone Number: 512-660-8291

**CUSTOMER(S)**

MOUSER ELECTRONICS  
(MOUSR)  
1000 N. MAIN STREET

MANSFIELD TX  
76063 USA

**DEVICE(S)**

| <b>CPN</b>    | <b>MPN</b>    |
|---------------|---------------|
| MKL05Z32VFK4  | MKL05Z32VFK4  |
| MKL04Z16VFK4  | MKL04Z16VFK4  |
| MKL04Z8VFK4   | MKL04Z8VFK4   |
| CRTOUCHB10VFM | CRTOUCHB10VFM |
| MKL04Z16VFM4  | MKL04Z16VFM4  |
| MKL04Z32VFM4  | MKL04Z32VFM4  |
| MKL04Z8VFM4   | MKL04Z8VFM4   |
| MKL14Z32VFM4  | MKL14Z32VFM4  |
| MKL14Z32VFT4  | MKL14Z32VFT4  |

|               |               |
|---------------|---------------|
| MKL14Z64VFM4  | MKL14Z64VFM4  |
| MKL05Z32VFM4  | MKL05Z32VFM4  |
| MCF51QU32VFM  | MCF51QU32VFM  |
| MKL14Z64VFT4  | MKL14Z64VFT4  |
| MKL15Z32VFM4  | MKL15Z32VFM4  |
| MKL15Z32VFT4  | MKL15Z32VFT4  |
| MKL15Z64VFM4  | MKL15Z64VFM4  |
| MKL24Z32VFT4  | MKL24Z32VFT4  |
| MK10DX128VFM5 | MK10DX128VFM5 |
| MK20DN32VFM5  | MK20DN32VFM5  |
| MKL03Z16VFG4  | MKL03Z16VFG4  |
| MKL03Z16VFK4  | MKL03Z16VFK4  |
| MKL03Z32VFG4  | MKL03Z32VFG4  |
| MKL03Z8VFK4   | MKL03Z8VFK4   |
| MKL24Z64VFM4  | MKL24Z64VFM4  |
| MK10DN32VFM5  | MK10DN32VFM5  |
| MKL05Z16VFM4  | MKL05Z16VFM4  |
| MKL25Z32VFT4  | MKL25Z32VFT4  |
| MK10DN32VFT5  | MK10DN32VFT5  |
| MK10DN64VFM5  | MK10DN64VFM5  |
| MK10DN64VFT5  | MK10DN64VFT5  |
| MK10DX32VFT5  | MK10DX32VFT5  |
| MK10DX64VFM5  | MK10DX64VFM5  |
| MCF51JU32VFM  | MCF51JU32VFM  |
| MKE04Z8VFK4   | MKE04Z8VFK4   |
| MKL24Z64VFT4  | MKL24Z64VFT4  |
| MKL16Z128VFM4 | MKL16Z128VFM4 |
| MKL16Z128VFT4 | MKL16Z128VFT4 |
| MKL16Z32VFM4  | MKL16Z32VFM4  |
| MKL16Z32VFT4  | MKL16Z32VFT4  |
| MKL16Z64VFM4  | MKL16Z64VFM4  |
| MKL16Z64VFT4  | MKL16Z64VFT4  |
| MKL26Z128VFM4 | MKL26Z128VFM4 |
| MKL26Z128VFT4 | MKL26Z128VFT4 |
| MKL26Z32VFM4  | MKL26Z32VFM4  |

|               |               |
|---------------|---------------|
| MKL26Z32VFT4  | MKL26Z32VFT4  |
| MKL26Z64VFT4  | MKL26Z64VFT4  |
| MKL26Z64VFM4  | MKL26Z64VFM4  |
| MKL02Z8VFG4   | MKL02Z8VFG4   |
| MKL02Z32VFG4  | MKL02Z32VFG4  |
| MKV10Z16VFM7  | MKV10Z16VFM7  |
| MKV10Z32VFM7  | MKV10Z32VFM7  |
| MWCT1000CFM   | MWCT1000CFM   |
| MK10DX64VFT5  | MK10DX64VFT5  |
| MK20DN128VFT5 | MK20DN128VFT5 |
| MK20DN64VFM5  | MK20DN64VFM5  |
| MK20DN64VFT5  | MK20DN64VFT5  |
| MK20DX32VFM5  | MK20DX32VFM5  |
| MK20DX32VFT5  | MK20DX32VFT5  |
| MK20DX64VFM5  | MK20DX64VFM5  |
| MK20DX64VFT5  | MK20DX64VFT5  |
| MKL02Z16VFG4  | MKL02Z16VFG4  |
| MKL05Z16VFK4  | MKL05Z16VFK4  |
| MKL05Z8VFK4   | MKL05Z8VFK4   |
| MKL25Z64VFT4  | MKL25Z64VFT4  |
| MK10DN128VFT5 | MK10DN128VFT5 |
| MKL24Z32VFM4  | MKL24Z32VFM4  |
| MC56F82743VFM | MC56F82743VFM |
| MKL25Z64VFM4  | MKL25Z64VFM4  |
| MK10DX32VFM5  | MK10DX32VFM5  |
| MKL04Z32VFK4  | MKL04Z32VFK4  |
| MKL02Z32VFM4  | MKL02Z32VFM4  |
| MK20DX128VFM5 | MK20DX128VFM5 |
| MK20DN32VFT5  | MK20DN32VFT5  |
| MKL03Z32VFK4  | MKL03Z32VFK4  |
| MKL05Z8VFM4   | MKL05Z8VFM4   |
| MK20DN128VFM5 | MK20DN128VFM5 |
| MKL15Z64VFT4  | MKL15Z64VFT4  |
| MKL25Z32VFM4  | MKL25Z32VFM4  |
| MK10DN128VFM5 | MK10DN128VFM5 |

|               |               |
|---------------|---------------|
| MK10DX128VFT5 | MK10DX128VFT5 |
| MKL02Z16VFK4  | MKL02Z16VFK4  |
| MKL02Z16VFM4  | MKL02Z16VFM4  |
| MKL02Z32VFK4  | MKL02Z32VFK4  |
| MKL15Z128VFM4 | MKL15Z128VFM4 |
| MKL25Z128VFM4 | MKL25Z128VFM4 |
| MKL03Z8VFG4   | MKL03Z8VFG4   |
| MKL15Z128VFT4 | MKL15Z128VFT4 |
| MKL25Z128VFT4 | MKL25Z128VFT4 |
| MK20DX128VFT5 | MK20DX128VFT5 |

**CUSTOMER(S)**

MOUSER ELECTRONICS  
(RSXBF)  
1000 N. MAIN STREET

MANSFIELD TX  
76063 USA

**DEVICE(S)**

| CPN           | MPN           |
|---------------|---------------|
| MKL04Z16VFM4  | MKL04Z16VFM4  |
| MKL15Z128VFM4 | MKL15Z128VFM4 |
| MKL14Z32VFM4  | MKL14Z32VFM4  |
| MKL02Z16VFG4  | MKL02Z16VFG4  |
| MKV10Z16VFM7  | MKV10Z16VFM7  |
| MC56F82743VFM | MC56F82743VFM |
| MKL05Z16VFK4  | MKL05Z16VFK4  |
| MKL05Z8VFK4   | MKL05Z8VFK4   |
| MKL25Z32VFT4  | MKL25Z32VFT4  |
| MKL25Z64VFT4  | MKL25Z64VFT4  |
| MKL16Z64VFM4  | MKL16Z64VFM4  |
| MK10DX64VFM5  | MK10DX64VFM5  |

|               |               |
|---------------|---------------|
| MKL16Z128VFM4 | MKL16Z128VFM4 |
| MKL05Z16VFM4  | MKL05Z16VFM4  |
| MKL15Z64VFM4  | MKL15Z64VFM4  |
| MK10DN64VFT5  | MK10DN64VFT5  |
| MK20DX128VFM5 | MK20DX128VFM5 |
| MKL25Z128VFM4 | MKL25Z128VFM4 |
| MK10DN128VFM5 | MK10DN128VFM5 |
| MK10DX128VFT5 | MK10DX128VFT5 |
| MK20DN128VFM5 | MK20DN128VFM5 |
| MKL16Z64VFT4  | MKL16Z64VFT4  |
| MKL26Z64VFM4  | MKL26Z64VFM4  |
| MKV10Z32VFM7  | MKV10Z32VFM7  |
| MKL02Z32VFG4  | MKL02Z32VFG4  |
| MKL16Z128VFT4 | MKL16Z128VFT4 |
| MKL26Z128VFT4 | MKL26Z128VFT4 |
| MWCT1000CFM   | MWCT1000CFM   |
| MKL26Z32VFM4  | MKL26Z32VFM4  |
| MKL02Z8VFG4   | MKL02Z8VFG4   |
| MKL26Z128VFM4 | MKL26Z128VFM4 |
| MKL16Z32VFM4  | MKL16Z32VFM4  |
| MKL16Z32VFT4  | MKL16Z32VFT4  |
| MKL26Z32VFT4  | MKL26Z32VFT4  |
| MKL26Z64VFT4  | MKL26Z64VFT4  |
| MKL24Z64VFT4  | MKL24Z64VFT4  |
| MCF51JU32VFM  | MCF51JU32VFM  |
| MKL02Z16VFK4  | MKL02Z16VFK4  |
| MKL24Z64VFM4  | MKL24Z64VFM4  |
| MK20DN32VFT5  | MK20DN32VFT5  |
| MK20DN64VFM5  | MK20DN64VFM5  |
| MK20DN64VFT5  | MK20DN64VFT5  |
| MK20DX32VFM5  | MK20DX32VFM5  |
| MK20DX32VFT5  | MK20DX32VFT5  |
| MK20DX64VFM5  | MK20DX64VFM5  |
| MK20DX64VFT5  | MK20DX64VFT5  |
| MKE04Z8VFK4   | MKE04Z8VFK4   |

|               |               |
|---------------|---------------|
| MKL03Z32VFG4  | MKL03Z32VFG4  |
| MKL02Z32VFM4  | MKL02Z32VFM4  |
| MKL04Z32VFM4  | MKL04Z32VFM4  |
| MKL04Z8VFM4   | MKL04Z8VFM4   |
| MKL14Z32VFT4  | MKL14Z32VFT4  |
| MKL14Z64VFM4  | MKL14Z64VFM4  |
| MKL24Z32VFT4  | MKL24Z32VFT4  |
| MK10DX128VFM5 | MK10DX128VFM5 |
| MK20DN32VFM5  | MK20DN32VFM5  |
| MKL15Z128VFT4 | MKL15Z128VFT4 |
| MKL04Z16VFK4  | MKL04Z16VFK4  |
| MKL14Z64VFT4  | MKL14Z64VFT4  |
| MKL02Z16VFM4  | MKL02Z16VFM4  |
| MKL02Z32VFK4  | MKL02Z32VFK4  |
| MKL05Z32VFK4  | MKL05Z32VFK4  |
| CRTOUCHB10VFM | CRTOUCHB10VFM |
| MK10DN128VFT5 | MK10DN128VFT5 |
| MK10DN32VFT5  | MK10DN32VFT5  |
| MK10DN64VFM5  | MK10DN64VFM5  |
| MK10DX32VFT5  | MK10DX32VFT5  |
| MK10DX64VFT5  | MK10DX64VFT5  |
| MK20DN128VFT5 | MK20DN128VFT5 |
| MKL03Z32VFK4  | MKL03Z32VFK4  |
| MKL15Z32VFM4  | MKL15Z32VFM4  |
| MK10DX32VFM5  | MK10DX32VFM5  |
| MKL25Z128VFT4 | MKL25Z128VFT4 |
| MKL24Z32VFM4  | MKL24Z32VFM4  |
| MKL15Z64VFT4  | MKL15Z64VFT4  |
| MKL25Z64VFM4  | MKL25Z64VFM4  |
| MKL15Z32VFT4  | MKL15Z32VFT4  |
| MKL05Z8VFM4   | MKL05Z8VFM4   |
| MKL04Z32VFK4  | MKL04Z32VFK4  |
| MKL04Z8VFK4   | MKL04Z8VFK4   |
| MCF51QU32VFM  | MCF51QU32VFM  |
| MKL25Z32VFM4  | MKL25Z32VFM4  |

|               |               |
|---------------|---------------|
| MK20DX128VFT5 | MK20DX128VFT5 |
| MKL05Z32VFM4  | MKL05Z32VFM4  |
| MK10DN32VFM5  | MK10DN32VFM5  |

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**AFFECTED CHANGE CATEGORIES**

- ASSEMBLY SITE

**DESCRIPTION OF CHANGE**

Freescale Semiconductor is announcing the assembly site expansion for the products listed in this notification from the current Freescale Tianjin Final Manufacturing (TJNFM), Tianjin, China and Advanced Semiconductor Engineering Chungli (ASECL), Taiwan to the United Test and Assembly Center Ltd (UDG), Dongguan, China Facility. Freescale qualified a new tray UBOT UF04041.01435XA for QFN MAP 24 4\*4\*1 P0.5 and QFN MAP 24 4\*4\*0.65 P0.5 packages.

Table below provides the sample part number:

| Freescal e Part Number | Sample Part Number from UDG | Package Description      |
|------------------------|-----------------------------|--------------------------|
| MKL27Z256VFT4          | PKL13Z256VFT4               | QFN MAP 48 7*7*0.65 P0.5 |
| MWPR1516CFM            | PWPR1516CFM                 | QFN 32 5*5*0.65 P0.5     |
| MKL02Z32VFG4           | PKL02Z32VFG4                | QFN-EP 16 3*3*0.65 P0.5  |
| MKE04Z8VFK4            | PKE04Z8VFK4                 | QFN MAP 24 4*4*1 P0.5    |
| MK20DX128VFT5          | PK10DX128VFT5               | QFN 48 EP 7SQ*1.0P0.5    |

## **REASON FOR CHANGE**

Qualification of the Nantong Fujitsu Microelectronics Co., Ltd. (NFME), Nantong, China assembly Facility to improve manufacturing flexibility and customer support.

## **ANTICIPATED IMPACT OF PRODUCT CHANGE(FORM, FIT, FUNCTION, OR RELIABILITY)**

There is no impact on device form, fit, function or reliability.

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According to JEDEC Standard JESD46, lack of acknowledgement of this PCN within 30 days will be considered acceptance of change. To request further data or inquire about the notification, please enter a [Service Request](#).

For sample inquiries - please go to [www.freescale.com](http://www.freescale.com)

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**QUAL DATA AVAILABILITY DATE:** 19-Feb-2015

**QUALIFICATION STATUS:** IN PROCESS

### **QUALIFICATION PLAN:**

Freescale Semiconductor Manufacturing standard specification for assembly transfers was followed for the Assembly Transfer.

### **RELIABILITY DATA SUMMARY:**

Will provide upon request.

### **ELECTRICAL CHARACTERISTIC SUMMARY:**



No change was made to the operating performance of the device. Electrical characterization of the device was not required.

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**CHANGED PART IDENTIFICATION:**

The assembly site, among other information, is reflected in the QFN7\*7 package trace code.

The current assembly site marking for site1 TJNFM is A=CT and site2 ASECL is A = X.

The marking for proposed assembly site3 UDG is A= CR.

**SAMPLE AVAILABILITY DATE:** 24-Dec-2014

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**ATTACHMENT(S):**

External attachment(s) FOR this notification can be viewed AT:

[16571 35100193-x QFN4X4 UBOT.pdf](#)

[16571 The difference between QFN4x4 ITW and Ubot Tray.pdf](#)

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