



PRODUCT BULLETIN

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ISSUE DATE: 06-Aug-2014
NOTIFICATION: 16372
TITLE: K22 120MHz and KV31 120MHz 256K Data Sheet and Reference Manual Change Notification
EFFECTIVE DATE: 07-Aug-2014

DEVICE(S)

MPN
MK22FN256VDC12
MK22FN256VLH12
MK22FN256VLL12
MKV31F256VLH12
MKV31F256VLL12

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AFFECTED CHANGE CATEGORIES

- DATASHEET
- REFERENCE MANUAL

DESCRIPTION OF CHANGE

The K22 120MHz and KV31 120MHz 256K Microcontroller Datasheet has been updated to revision 4. The revision history included in the updated document provides a detailed description of the changes.

The K22 120MHZ and KV31 120MHz 256K Microcontroller Datasheet can be found at

K22 120MHZ

http://cache.freescale.com/files/microcontrollers/doc/data_sheet/K22P121M120SF8.pdf?&Parent_nodeId=&Parent_pageType=

KV31 120MHz

http://cache.freescale.com/files/microcontrollers/doc/data_sheet/KV31P100M120SF8.pdf?&Parent_nodeId=&Parent_pageType=

A summary of the document changes are below.

- In "Power consumption operating behaviors table":
 - Updated existing typical power measurements
 - Added new typical power measurements for the following:
 - IDD_HSRUN (High Speed Run mode current executing CoreMark code)
 - IDD_RUNCO (Run mode current in Compute operation, executing CoreMark code)
 - IDD_RUN (Run mode current in Compute operation, executing while(1) loop)
 - IDD_VLPR (Very Low Power mode current executing CoreMark code)
 - IDD_VLPR (Very Low Power Run mode current in Compute operation, executing while(1) loop)
- For K22 100MHz 256K: Added thermal data for 64 MAPBGA package

The reference manual has been updated for the K22 120MHz and KV31 120MHz 256K product lines.

The updated reference manual can be found at

K22 120MHZ

http://cache.freescale.com/files/microcontrollers/doc/ref_manual/K22P121M120SF8RM.pdf?&Parent_nodeId=&Parent_pageType=

KV31 120MHz

http://cache.freescale.com/files/microcontrollers/doc/ref_manual/KV31P100M120SF8RM.pdf?&Parent_nodeId=&Parent_pageType=

The following sections have been updated:

"Kinetis Flashloader" chapter was added to the document.

"Flash Memory Module" chapter:

- "Flash Access Protection" section: Clarified that FSACC contents do not impact flash command operation.
- "Read Once Command" section: Clarified wording.
- "Program Once Command" section: Clarified wording.

For K22 120MHz 256K devices, the following additional sections have been updated:

"Universal Serial Bus Full Speed OTG Controller" chapter: In "Device mode IRC48 operation" section, updated step 5 of IRC48 initialization code sequence to "The USB clock source must choose the output of the divided clock by setting SIM_SOPT2[USBSRC] = 1b" (instead of 0b).

"Integrated Interchip Sound (I2S) / Synchronous Audio Interface (SAI)" chapter: In "Features" section, added the following:

NOTE: About data lines and audio channels: Typically there are one or more data lines for TX and RX sides of the SAI peripheral, depending on the device's design. Each SAI data line may support 1 - 32 audio channels (or audio words).

Refer to the document revision history for detailed information.

REASON FOR CHANGE

The K22 120MHz and KV31 120MHz 256K Microcontroller Datasheet has been updated to provide additional technical clarification on some device features.

The reference manual for the K22 120MHz and KV31 120MHz 256K product lines has been updated.

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

No changes to form, fit, function or reliability.

NOTE:

THE CHANGE(S) SPECIFIED IN THIS NOTIFICATION WILL BE IMPLEMENTED ON THE EFFECTIVE DATE LISTED ABOVE. To request further data or inquire about the notification, please enter a [Service Request](#)

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QUAL DATA AVAILABILITY DATE: 08-Aug-2014

QUALIFICATION STATUS: N/A

QUALIFICATION PLAN:

N/A

RELIABILITY DATA SUMMARY:

N/A

ELECTRICAL CHARACTERISTIC SUMMARY:

N/A

CHANGED PART IDENTIFICATION:

N/A

ATTACHMENT(S):

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

[16372 k22 256r-data-sheet Rev4 RC.pdf](#)

[16372 kv31 256r-data-sheet Rev4 RC.pdf](#)

[16372 K22 256R-reference-manual Rev3 RC.pdf](#)

[16372 KV31 256R-reference-manual Rev3 RC.pdf](#)
