

# Kinetis 100 MHz (non-FPU) Mask Sets and Revision Numbers

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## Contents

|   |  |   |
|---|--|---|
| 1 | Introduction.....                        | 1 |
| 2 | Device revision numbers.....             | 1 |
| 3 | JTAG device identification register..... | 2 |
| 4 | Revision history.....                    | 2 |

## 1 Introduction

This engineering bulletin contains the device revision numbers (REVID) along with their corresponding Mask Set numbers and JTAG ID codes for all existing revisions of Freescale's Kinetis 100 MHz 32-bit MCUs. Device revisions can be referred to by either the revision number or the silicon mask set identifier. Both of these are provided in this document for easy reference.

## 2 Device revision numbers

The following table shows the mask set number along with corresponding device revision number found in the System Device Identification Register (SIM\_SDID[REVID]), Part Identification Number (PRN) from the JTAG ID Register, as well as the external revision number associated with each silicon mask set. The silicon mask set is marked on the top of each chip package below the part number.

**Table 1. Device revision numbers**

| Mask Set      | REVID | PRN  | Revision Number |
|---------------|-------|------|-----------------|
| 0M33Z         | 0000  | 0000 | 1.0             |
| 0N30D         | 0001  | 0001 | 1.1             |
| 1N30D / 2N30D | 0010  | 0010 | 1.2             |
| 4N30D         | 0011  | 0011 | 1.4             |
| 8N30D         | 0111  | 0111 | 1.8             |
| 2N22D         | 1010  | 1010 | 2.2             |
| 4N22D         | 1100  | 1100 | 2.4             |
| 5N22D         | 1101  | 1101 | 2.5             |

### 3 JTAG device identification register

The Kinetis family of devices have two JTAG TAPs. One is the ARM® Cortex-M4™ JTAG TAP and the second is the SoC JTAG TAP.

The ARM® Cortex-M4™ JTAG TAP, which is accessed first by default with IDCODE (1110), reads back as 0x4BA0\_0477. For further details, please refer to the ARM website at <http://www.arm.com>.

The SOC JTAG TAP, accessible via SOC\_IDCODE (0000), allows the part revision number, design center, part identification number, and manufacturer identity code to be determined through the TAP. The part revision number (PRN), which is a copy of the SIM\_SDID[REVID], may change for a mask revision and the part identification number (PIN) will vary depending on the Kinetis family identification SIM\_SDID[FAMID] and pin count identifications SIM\_SDID[PINID] fields. Further details can be found in the Kinetis device specific Reference Manual in the JTAG Chapter.

### 4 Revision history

The table given in this section provides details regarding the current and previous versions of this document and the major changes incorporated in each of these versions.

**Table 2. Revision history**

| Rev No. | Substantive change(s)  |
|---------|--|
| 0       | Initial release  |
| 1       | Added rows for 8N30D and 4N22D to Device Revision Numbers table. |
| 2       | Added row for 5N22D to Device Revision Numbers table.            |

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