NXP Semiconductors Application Note

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i.MX 6Solo/DualLite Personality Fuses

1 Introduction

This document describes on-chip fuses (called personality fuses) that are used to define the characteristics of the i.MX 6Solo and 6DualLite SoCs.

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i.MX 6Solo/6DualLite Personality Fuses

2 i.MX 6Solo/6DualLite Personality Fuses

Table 1 shows the fuses related to the definition of the SoC.

Table 1. Personality Fuses

| Fuse Function | Fuse Address | OCOTP Address | Fuse Name | Settings | | | |
|-------------------|-----------------|--------------------|-------------------------------|---|--|---|------------------------------------|
| Dual/Solo | 0x430[20] | 0x021B_C430[20] | NUM_CORES | 0 – 2 Cores (DualLite) | | 1 – 1 Core (Solo) | |
| | | | | MCIMX6Uxxxxxxxx | | MCIMX6Sxxxxxxxx | |
| MLB | 0x430[26] | 0x021B_C430[26] | MLB_DISABLE | 0 – Enabled | | 1 – Disabled | |
| | | | | MCIMX6x1xxxxxxx MCIMX6x4xxxxxxx MCIMX6x6xxxxxxx | | MCIMX6x5xxxxxxx MCIMX6x7xxxxxxxx MCIMX6x8xxxxxxxxx | |
| VPU | 0x440[15] | 0x021B_C440[15] | VPU_DISABLE | 0 – Enabled | | 1 - Disabled | |
| | | | | MCIMX6x5xxxxxxx MCIMX6x6xxxxxxx MCIMX6x7xxxxxxx MCIMX6x8xxxxxxxx | | MCIMX6x1xxxxxxx MCIMX6x4xxxxxxx | |
| GPU | 0x440[2] | 0x021B_C440[2] | GPU3D_DISABLE | 0 – Enabled | | 1 – Disabled | |
| | | | | MCIMX6x5xxxxxx MCIMX6x6xxxxxx MCIMX6x7xxxxxx MCIMX6x8xxxxxx | | MCIMX6x1xxxxxx | |
| EPDC | 0x430[25] | 0x021B_C430[25] | EPDC_DISABLE | 0 – Enabled | | 1 – Disabled | |
| | | | | MCIMX6x8xxxxxxx | | MCIMX6x1xxxxxx MCIMX6x4xxxxxx MCIMX6x5xxxxxx MCIMX6x5xxxxxxx MCIMX6x6xxxxxxx MCIMX6x7xxxxxxx | |
| Market Segment | 0x480[7:6] | 0x021B_C480[7:6] | Market_ Segment[1:0] | 00 – Commercial 0C to 95C | 01 – Extended Commercial -20C to 105C | 10 – Industrial -40C to 105C | 11 – Automotive -40C to 125C |
| | | | | MCIMX6xxDxxxxxx MCIMX6xxDxxxxxx | MCIMX6xxExxxxxxx | MCIMX6xxCxxxxxx | MCIMX6xxAxxxxxxx |
| Speed | 0x440[17:16] | 0x021B_C440[21:20] | SPEED_ GRADING[5:4] | 00 – 800 MHz | 01 – Reserved | 10 – 1000 MHz | 11 – Reserved |
| | | | | MCIMX6xxxx00xx | MCIMX6xxxx01xx | MCIMX6xxxxx10xx | MCIMX6xxxxx11xx |
| HDCP | 0x460[16] | 0x021B_C460[16] | HDCP ENCRYPTION DISABLE | 0 – Encryption enabled | | 1 – Encryption disabled | |
| | | | | MCIMX6xxxxxCx | | MCIMX6xxxxxAx | |

3 Revision History

Revision 0 is the initial release of this document.

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