



## ABSTRACT

This document provides the configuration information for the LMK3H2104A0E device. For the default configuration of the LMK3H2104 device, see the [LMK3H2104 Register Map](#).

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## 1 Configuration Overview

This section provides an overview of the critical device settings of the LMK3H2104A0E configuration.

### 1.1 LMK3H2104A0E Configuration Information

**Table 1-1. LMK3H2104A0E Frequency Configuration**

| OTP Page   | OUT0 (MHz) | OUT1 (MHz) | OUT2 (MHz) | OUT3 (MHz) | REF0 (MHz) | REF1 (MHz) |
|------------|------------|------------|------------|------------|------------|------------|
| OTP Page 0 | 125        | 125        | 125        | 125        | 50         | 50         |
| OTP Page 1 | 125        | 125        | 125        | 125        | 50         | 50         |
| OTP Page 2 | 125        | 125        | 125        | 125        | 50         | 50         |
| OTP Page 3 | 125        | 125        | 125        | 125        | 50         | 50         |

**Table 1-2. LMK3H2104A0E I2C Configuration**

| OTP Page   | I2C Configuration                               |
|------------|---|
| OTP Page 0 | I2C Address: 0x68<br>1 Byte Register Addressing |
| OTP Page 1 | I2C Address: 0x68<br>1 Byte Register Addressing |
| OTP Page 2 | I2C Address: 0x68<br>1 Byte Register Addressing |
| OTP Page 3 | I2C Address: 0x68<br>1 Byte Register Addressing |

**OTP Page 0**

**Table 1-3. LMK3H2104A0E GPI Settings, OTP Page 0**

| GPI Pin | Pin Behavior                          | Polarity | Internal Pull-Down | Internal Pull-Up |
|---------|---------------------------------------|----------|--------------------|------------------|
| GPI0    | GPI                                   | Normal   | Enabled            | Disabled         |
| GPI1    | GPI                                   | Normal   | Enabled            | Disabled         |
| GPI2    | Alternative OE, Alternative Mapping 2 | Normal   | Enabled            | Disabled         |

**Table 1-4. LMK3H2104A0E GPIO Settings, OTP Page 0**

| GPIO Pin | Pin Behavior                          | Polarity | Internal Pull-Down | Internal Pull-Up |
|----------|---------------------------------------|----------|--------------------|------------------|
| GPIO0    | Alternative OE, Alternative Mapping 2 | Normal   | Enabled            | Disabled         |
| GPIO1    | GPI                                   | Normal   | Enabled            | Disabled         |

**Table 1-5. LMK3H2104A0E Input Settings, OTP Page 0**

| Input | Powered Up/Down | Input Format     | Input Termination |
|-------|-----------------|------------------|-------------------|
| IN_0  | Powered Down    | N/A (IN0 Unused) | None, DC          |

**Table 1-6. LMK3H2104A0E Output Settings, OTP Page 0**

| Output | Frequency (MHz) | Format  | Clock Source | Output State | OE Group    | SSC Behavior |
|--------|-----------------|---------|--------------|--------------|-------------|--------------|
| OUT0   | 125             | AC-LVDS | PATH1        | Enabled      | No OE Group | Disabled     |
| OUT1   | 125             | AC-LVDS | PATH1        | Enabled      | No OE Group | Disabled     |
| OUT2   | 125             | AC-LVDS | PATH1        | Enabled      | No OE Group | Disabled     |
| OUT3   | 125             | AC-LVDS | PATH1        | Enabled      | No OE Group | Disabled     |
| REF0   | 50              | N/A     | PATH1        | Enabled      | No OE Group | Disabled     |
| REF1   | 50              | N/A     | PATH1        | Enabled      | No OE Group | Disabled     |

**OTP Page 1**

**Table 1-7. LMK3H2104A0E GPI Settings, OTP Page 1**

| GPI Pin | Pin Behavior                          | Polarity | Internal Pull-Down | Internal Pull-Up |
|---------|---------------------------------------|----------|--------------------|------------------|
| GPI0    | GPI                                   | Normal   | Enabled            | Disabled         |
| GPI1    | GPI                                   | Normal   | Enabled            | Disabled         |
| GPI2    | Alternative OE, Alternative Mapping 2 | Normal   | Enabled            | Disabled         |

**Table 1-8. LMK3H2104A0E GPIO Settings, OTP Page 1**

| GPIO Pin | Pin Behavior                          | Polarity | Internal Pull-Down | Internal Pull-Up |
|----------|---------------------------------------|----------|--------------------|------------------|
| GPIO0    | Alternative OE, Alternative Mapping 2 | Normal   | Enabled            | Disabled         |
| GPIO1    | GPI                                   | Normal   | Enabled            | Disabled         |

**Table 1-9. LMK3H2104A0E Input Settings, OTP Page 1**

| Input | Powered Up/Down | Input Format     | Input Termination |
|-------|-----------------|------------------|-------------------|
| IN_0  | Powered Down    | N/A (IN0 Unused) | None, DC          |

**Table 1-10. LMK3H2104A0E Output Settings, OTP Page 1**

| Output | Frequency (MHz) | Format  | Clock Source | Output State | OE Group    | SSC Behavior |
|--------|-----------------|---------|--------------|--------------|-------------|--------------|
| OUT0   | 125             | AC-LVDS | PATH1        | Enabled      | No OE Group | Disabled     |
| OUT1   | 125             | AC-LVDS | PATH1        | Enabled      | No OE Group | Disabled     |
| OUT2   | 125             | AC-LVDS | PATH1        | Enabled      | No OE Group | Disabled     |
| OUT3   | 125             | AC-LVDS | PATH1        | Enabled      | No OE Group | Disabled     |
| REF0   | 50              | N/A     | PATH1        | Disabled     | No OE Group | Disabled     |
| REF1   | 50              | N/A     | PATH1        | Disabled     | No OE Group | Disabled     |

**OTP Page 2**

**Table 1-11. LMK3H2104A0E GPI Settings, OTP Page 2**

| GPI Pin | Pin Behavior                          | Polarity | Internal Pull-Down | Internal Pull-Up |
|---------|---------------------------------------|----------|--------------------|------------------|
| GPI0    | GPI                                   | Normal   | Enabled            | Disabled         |
| GPI1    | GPI                                   | Normal   | Enabled            | Disabled         |
| GPI2    | Alternative OE, Alternative Mapping 2 | Normal   | Enabled            | Disabled         |

**Table 1-12. LMK3H2104A0E GPIO Settings, OTP Page 2**

| GPIO Pin | Pin Behavior                          | Polarity | Internal Pull-Down | Internal Pull-Up |
|----------|---------------------------------------|----------|--------------------|------------------|
| GPIO0    | Alternative OE, Alternative Mapping 2 | Normal   | Enabled            | Disabled         |
| GPIO1    | GPI                                   | Normal   | Enabled            | Disabled         |

**Table 1-13. LMK3H2104A0E Input Settings, OTP Page 2**

| Input | Powered Up/Down | Input Format     | Input Termination |
|-------|-----------------|------------------|-------------------|
| IN_0  | Powered Down    | N/A (IN0 Unused) | None, DC          |

**Table 1-14. LMK3H2104A0E Output Settings, OTP Page 2**

| Output | Frequency (MHz) | Format  | Clock Source | Output State | OE Group    | SSC Behavior |
|--------|-----------------|---------|--------------|--------------|-------------|--------------|
| OUT0   | 125             | AC-LVDS | PATH1        | Enabled      | No OE Group | Disabled     |
| OUT1   | 125             | AC-LVDS | PATH1        | Enabled      | No OE Group | Disabled     |
| OUT2   | 125             | AC-LVDS | PATH1        | Enabled      | No OE Group | Disabled     |
| OUT3   | 125             | AC-LVDS | PATH1        | Enabled      | No OE Group | Disabled     |
| REF0   | 50              | N/A     | PATH1        | Disabled     | No OE Group | Disabled     |
| REF1   | 50              | N/A     | PATH1        | Disabled     | No OE Group | Disabled     |

## OTP Page 3

Table 1-15. LMK3H2104A0E GPI Settings, OTP Page 3

| GPI Pin | Pin Behavior                          | Polarity | Internal Pull-Down | Internal Pull-Up |
|---------|---------------------------------------|----------|--------------------|------------------|
| GPI0    | GPI                                   | Normal   | Enabled            | Disabled         |
| GPI1    | GPI                                   | Normal   | Enabled            | Disabled         |
| GPI2    | Alternative OE, Alternative Mapping 2 | Normal   | Enabled            | Disabled         |

Table 1-16. LMK3H2104A0E GPIO Settings, OTP Page 3

| GPIO Pin | Pin Behavior                          | Polarity | Internal Pull-Down | Internal Pull-Up |
|----------|---------------------------------------|----------|--------------------|------------------|
| GPIO0    | Alternative OE, Alternative Mapping 2 | Normal   | Enabled            | Disabled         |
| GPIO1    | GPI                                   | Normal   | Enabled            | Disabled         |

Table 1-17. LMK3H2104A0E Input Settings, OTP Page 3

| Input | Powered Up/Down | Input Format     | Input Termination |
|-------|-----------------|------------------|-------------------|
| IN_0  | Powered Down    | N/A (IN0 Unused) | None, DC          |

Table 1-18. LMK3H2104A0E Output Settings, OTP Page 3

| Output | Frequency (MHz) | Format  | Clock Source | Output State | OE Group    | SSC Behavior |
|--------|-----------------|---------|--------------|--------------|-------------|--------------|
| OUT0   | 125             | AC-LVDS | PATH1        | Disabled     | No OE Group | Disabled     |
| OUT1   | 125             | AC-LVDS | PATH1        | Disabled     | No OE Group | Disabled     |
| OUT2   | 125             | AC-LVDS | PATH1        | Disabled     | No OE Group | Disabled     |
| OUT3   | 125             | AC-LVDS | PATH1        | Disabled     | No OE Group | Disabled     |
| REF0   | 50              | N/A     | PATH1        | Disabled     | No OE Group | Disabled     |
| REF1   | 50              | N/A     | PATH1        | Disabled     | No OE Group | Disabled     |

## 2 Revision History

NOTE: Page numbers for previous revisions may differ from page numbers in the current version.

| DATE         | REVISION | NOTES           |
|--------------|----------|-----------------|
| January 2026 | *        | Initial Release |

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