

Description

This document details the custom configuration that is programmed into the one-time-programmable (OTP) memory of the 9FGV1001C001NBGI. Please refer to the device datasheet for further information about the device.

General Configuration

| Parameter | Value | Units |
|--|-------|-------|
| Device I ² C Address | 0xD0 | — |
| Default Configuration at I ² C Mode | 0 | — |

Frequency Overview

| Parameter | Configuration 0 | Configuration 1 | Configuration 2 | Configuration 3 | Units |
|-----------|-----------------|-----------------|-----------------|-----------------|-------|
| Input | 25 | 25 | 25 | 25 | MHz |
| REF 0 | — | — | — | — | — |
| REF 1 | — | — | — | — | — |
| Output 0 | 50 | 100 | 125 | 156.25 | MHz |
| Output 1 | 50 | 100 | 125 | 156.25 | MHz |
| Output 2 | 50 | 100 | 125 | 156.25 | MHz |
| Output 3 | 50 | 100 | 125 | 156.25 | MHz |

Configuration 0 Parameters: SEL[1:0] = 00

Input frequency: 25MHz; crystal load capacitance: 7.97pF

| Parameter | REF 0 | REF 1 | Output 0 | Output 1 | Output 2 | Output 3 | Units |
|----------------------------|---------|---------|----------|----------|----------|----------|-------|
| Frequency | 25 | 25 | 50 | 50 | 50 | 50 | MHz |
| Default Output Status | Off | Off | On | On | On | On | — |
| VDDO Voltage | Low | Low | 3.3 | 3.3 | 3.3 | 3.3 | V |
| Output Type | LVC MOS | LVC MOS | LP-HCSL | LP-HCSL | LP-HCSL | LP-HCSL | — |
| Spread Spectrum | — | — | — | — | — | — | % |
| Spread Spectrum Modulation | — | — | — | — | — | — | kHz |
| LP-HCSL Impedance | — | — | 100 | 100 | 100 | 100 | Ω |

Configuration 1 Parameters: SEL[1:0] = 01

Input frequency: 25MHz; crystal load capacitance: 7.97pF

| Parameter | REF 0 | REF 1 | Output 0 | Output 1 | Output 2 | Output 3 | Units |
|----------------------------|---------|---------|----------|----------|----------|----------|-------|
| Frequency | 25 | 25 | 100 | 100 | 100 | 100 | MHz |
| Default Output Status | Off | Off | On | On | On | On | — |
| VDDO Voltage | Low | Low | 3.3 | 3.3 | 3.3 | 3.3 | V |
| Output Type | LVC MOS | LVC MOS | LP-HCSL | LP-HCSL | LP-HCSL | LP-HCSL | — |
| Spread Spectrum | — | — | — | — | — | — | % |
| Spread Spectrum Modulation | — | — | — | — | — | — | kHz |
| LP-HCSL Impedance | — | — | 100 | 100 | 100 | 100 | Ω |

Configuration 2 Parameters: SEL[1:0] = 10

Input frequency: 25MHz; crystal load capacitance: 7.97pF

| Parameter | REF 0 | REF 1 | Output 0 | Output 1 | Output 2 | Output 3 | Units |
|----------------------------|---------|---------|----------|----------|----------|----------|-------|
| Frequency | 25 | 25 | 125 | 125 | 125 | 125 | MHz |
| Default Output Status | Off | Off | On | On | On | On | — |
| VDDO Voltage | Low | Low | 3.3 | 3.3 | 3.3 | 3.3 | V |
| Output Type | LVC MOS | LVC MOS | LP-HCSL | LP-HCSL | LP-HCSL | LP-HCSL | — |
| Spread Spectrum | — | — | — | — | — | — | % |
| Spread Spectrum Modulation | — | — | — | — | — | — | kHz |
| LP-HCSL Impedance | — | — | 100 | 100 | 100 | 100 | Ω |

Configuration 3 Parameters: SEL[1:0] = 11

Input frequency: 25MHz; crystal load capacitance: 7.97pF

| Parameter | REF 0 | REF 1 | Output 0 | Output 1 | Output 2 | Output 3 | Units |
|----------------------------|---------|---------|----------|----------|----------|----------|-------|
| Frequency | 25 | 25 | 156.25 | 156.25 | 156.25 | 156.25 | MHz |
| Default Output Status | Off | Off | On | On | On | On | — |
| VDDO Voltage | Low | Low | 3.3 | 3.3 | 3.3 | 3.3 | V |
| Output Type | LVC MOS | LVC MOS | LP-HCSL | LP-HCSL | LP-HCSL | LP-HCSL | — |
| Spread Spectrum | — | — | — | — | — | — | % |
| Spread Spectrum Modulation | — | — | — | — | — | — | kHz |
| LP-HCSL Impedance | — | — | 100 | 100 | 100 | 100 | Ω |

Package Outline Drawings and Marking Diagrams

Refer to the [datasheet](#) for detailed information pertaining to package outline drawings and marking diagrams.

Ordering Information

| Orderable Part Number | Carrier Type | Temperature | Crystal |
|-----------------------|---------------|---------------|----------|
| 9FGV1001C001NBGI | Tray | -40° to +85°C | External |
| 9FGV1001C001NBGI8 | Tape and Reel | -40° to +85°C | External |

Revision History

| Revision Date | Description of Change |
|--------------------|-----------------------|
| September 15, 2020 | Initial release. |

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