

Description

This document details the custom configuration that is programmed into the one-time-programmable (OTP) memory of the 9FGV1002C015NBGI. Please refer to the device datasheet for further information about the device.

General Configuration

Parameter	Value	Units
Device I ² C Address	Primary 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	100	100	100	100	MHz
Output 1	100	100	100	100	MHz
Output 2	100	100	100	100	MHz
Output 3	100	100	100	100	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	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	—	—	85	85	85	85	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	—	—	-0.1	-0.1	-0.1	-0.1	%
Spread Spectrum Modulation	—	—	31.5	31.5	31.5	31.5	kHz
LP-HCSL Impedance	—	—	85	85	85	85	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	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	—	—	-0.3	-0.3	-0.3	-0.3	%
Spread Spectrum Modulation	—	—	31.5	31.5	31.5	31.5	kHz
LP-HCSL Impedance	—	—	85	85	85	85	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	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	—	—	-0.5	-0.5	-0.5	-0.5	%
Spread Spectrum Modulation	—	—	31.5	31.5	31.5	31.5	kHz
LP-HCSL Impedance	—	—	85	85	85	85	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
9FGV1002C015NBGI	Tray	-40° to +85°C	External
9FGV1002C015NBGI8	Tape and Reel	-40° to +85°C	External

Revision History

Revision Date	Description of Change
September 16, 2020	Initial release.

IMPORTANT NOTICE AND DISCLAIMER

RENESAS ELECTRONICS CORPORATION AND ITS SUBSIDIARIES (“RENESAS”) PROVIDES TECHNICAL SPECIFICATIONS AND RELIABILITY DATA (INCLUDING DATASHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES “AS IS” AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for developers skilled in the art designing with Renesas products. You are solely responsible for (1) selecting the appropriate products for your application, (2) designing, validating, and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, or other requirements. These resources are subject to change without notice. Renesas grants you permission to use these resources only for development of an application that uses Renesas products. Other reproduction or use of these resources is strictly prohibited. No license is granted to any other Renesas intellectual property or to any third party intellectual property. Renesas disclaims responsibility for, and you will fully indemnify Renesas and its representatives against, any claims, damages, costs, losses, or liabilities arising out of your use of these resources. Renesas' products are provided only subject to Renesas' Terms and Conditions of Sale or other applicable terms agreed to in writing. No use of any Renesas resources expands or otherwise alters any applicable warranties or warranty disclaimers for these products.

(Rev.1.0 Mar 2020)

Corporate Headquarters

TOYOSU FORESIA, 3-2-24 Toyosu,
Koto-ku, Tokyo 135-0061, Japan
www.renesas.com

Contact Information

For further information on a product, technology, the most up-to-date version of a document, or your nearest sales office, please visit:
www.renesas.com/contact/

Trademarks

Renesas and the Renesas logo are trademarks of Renesas Electronics Corporation. All trademarks and registered trademarks are the property of their respective owners.