



## General Description

This document details the custom configuration that is programmed into the one-time-programmable (OTP) memory of the 5P49V5901A689NLGI. Please refer to the device datasheet for further information about the device.

### General Configuration

Parameter	Value	Units
Device I <sup>2</sup> C Address	Secondary 0xD0	
XTAL Load Capacitor	4.5	pF
SD/OE Pin Function	Output Enable	
SD/OE Polarity	Negative	

### Frequency Overview

Parameter	Configuration 0	Configuration 1	Configuration 2	Configuration 3	Units
Input	25	25	25	25	MHz
Output 0	25	25	25	25	MHz
Output 1	150	150	150	150	MHz
Output 2	100	100	100	100	MHz
Output 3	100	100	100	100	MHz
Output 4	133	133	133	133	MHz

### Input Configuration

Parameter	Input when CLKSEL = LOW or OPEN	Input when CLKSEL = HIGH
Configuration 0	Single-ended clock on XIN crystal input (crystal overdrive)	No active input (differential clock input is disabled)
Configuration 1	Single-ended clock on XIN crystal input (crystal overdrive)	No active input (differential clock input is disabled)
Configuration 2	Single-ended clock on XIN crystal input (crystal overdrive)	No active input (differential clock input is disabled)
Configuration 3	Single-ended clock on XIN crystal input (crystal overdrive)	No active input (differential clock input is disabled)

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

Parameter	Output 0	Output 1	Output 2	Output 3	Output 4	Units
Input Frequency	25	25	25	25	25	MHz
Default Output Status	On	On	On	On	On	
VDDO Voltage	2.5	1.8	3.3	3.3	1.8	V
Output Type	LVC MOS	LVDS	HCSL	HCSL	LVC MOSD, 2 outputs, 180° out of phase	
Frequency	25	150	100	100	133	MHz
Spread Spectrum			33KHz Down	33KHz Down	60KHz Down	
Spread Spectrum Modulation			-0.5%	-0.5%	-1%	%
Slew Rate	1.0x nominal				1.0x nominal	
Phase Shift		0	0	0	0	Degrees

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

Parameter	Output 0	Output 1	Output 2	Output 3	Output 4	Units
Input Frequency	25	25	25	25	25	MHz
Default Output Status	On	On	On	On	On	
VDDO Voltage	2.5	1.8	3.3	3.3	1.8	V
Output Type	LVC MOS	LVDS	HCSL	HCSL	LVC MOSD, 2 outputs, 180° out of phase	
Frequency	25	150	100	100	133	MHz
Spread Spectrum			33KHz Down	33KHz Down	Off	
Spread Spectrum Modulation			-0.5%	-0.5%		%
Slew Rate	1.0x nominal				1.0x nominal	
Phase Shift		0	0	0	0	Degrees

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

Parameter	Output 0	Output 1	Output 2	Output 3	Output 4	Units
Input Frequency	25	25	25	25	25	MHz
Default Output Status	On	On	On	On	On	
VDDO Voltage	2.5	1.8	3.3	3.3	1.8	V
Output Type	LVC MOS	LVDS	HCSL	HCSL	LVC MOSD, 2 outputs, 180° out of phase	
Frequency	25	150	100	100	133	MHz
Spread Spectrum		Off	Off	Off	60KHz Down	
Spread Spectrum Modulation					-1%	%
Slew Rate	1.0x nominal				1.0x nominal	
Phase Shift		0	0	0	0	Degrees

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

Parameter	Output 0	Output 1	Output 2	Output 3	Output 4	Units
Input Frequency	25	25	25	25	25	MHz
Default Output Status	On	On	On	On	On	
VDDO Voltage	2.5	1.8	3.3	3.3	1.8	V
Output Type	LVC MOS	LVDS	HCSL	HCSL	LVC MOSD, 2 outputs, 180° out of phase	
Frequency	25	150	100	100	133	MHz
Spread Spectrum		Off	Off	Off	Off	
Spread Spectrum Modulation						%
Slew Rate	1.0x nominal				1.0x nominal	
Phase Shift		0	0	0	0	Degrees

**5P49V5901A689NLGI Ordering Information**

Part/Order Number	Marking	Package	Shipping Packaging	Temperature
5P49V5901A689NLGI	5901A 689 YWW**\$	"Lead-Free" 24-pin VFQFPN	Tray	-40° to +85°C
5P49V5901A689NLGI8	5901A 689 YWW**\$	"Lead-Free" 24-pin VFQFPN	Tape and Reel	-40° to +85°C

**Marking notes:**

1. Line 1 is the truncated part number.
2. Line 2 is the dash code.
3. "YWW" is the last digit of the year and work week that the part was assembled.
4. "\*\*\*" denotes the lot number.
5. "\$" denotes the mark code.


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