

# 5P35023B-000NLGI

Data Sheet

Programmable	VersaClock®	Clock Generator	
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## **General Description**

The 5P35023 is a VersaClock programmable clock generator and is designed for low power, consumer, and high performance PCI Express applications. The 5P35023 device is a three PLL architecture design, and each PLL is individually programmable and allowing for up to five unique frequency outputs. The 5P35023 has built-in unique features such as Proactive Power Saving (PPS), Performance-Power Balancing (PPB), Overshot Reduction Technology (ORT) and Extreme Low Power DCO. An internal OTP memory allows the user to store the configuration in the device without programming after power up, then program the 5P35023 again through the I2C interface.

The device has programmable VCO and PLL source selection to allow the user to do power-performance optimization base on the application requirements. It also supports three single-ended output and two pair of differential outputs that support LVCMOS, LVPECL, LVDS and LPHCSL. A Low Power 32.768kHz clock is supported with only less than  $5\mu$ A current consumption for system RTC reference clock.

### Features

Configurable OE pin function as OE, PD#, PPS or DFC control function

Configurable PLL bandwidth/minimizes jitter peaking

PPS: Proactive Power Saving features save power during the end device power down mode

PPB: Performance- Power Balancing feature allows minimum power consumption base on required performance

DFC: Dynamic Frequency Control feature allows up to 4 difference frequencies switch dynamically

Spread Spectrum clock support to lower system EMI

I2C interface

Also supports crystal input

Supported by Timing Commander<sup>TM</sup> software tool

Available in AEC-Q100 qualified, Grade 2 (-40°C to +105°C) version

#### **Related Products**



5P35021-000NDGI Renesas Technology Corp 20-VFQFN



Renesas Technology Corp TSSOP-16

#### 5PB1102PGGI

**5PB1108PGGI** 

Renesas Technology Corp TSSOP-8

#### 5P49V6975A000LTGI



Renesas Technology Corp 24-LFLGA

# 5P49V5925B000NLG18

Renesas Technology Corp



Renesas Technology Corp QFN-16

5PB1108CMGI



5P49V6901A000NLGI Renesas Technology Corp



Renesas Technology Corp 24-VFQFN

5P49V6965A000NLGI

