


Clock Generator 25MHz-IN 312.5MHz-OUT 72-Pin VFQFPN EP Tray



Images are for reference only

[Inquiry](#)

Manufacturer:	Renesas Technology Corp
Package/Case:	VFQFN-72
Product Type:	Discrete Semiconductor Modules
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active

General Description

The 8413S12BI is a PLL-based clock generator. This high performance device is optimized to generate the processor core reference clock, the PCI-Express, sRIO, XAUI, SerDes reference clocks and the clocks for both the Gigabit Ethernet MAC and PHY. The clock generator offers ultra low-jitter, low-skew clock outputs. The output frequencies are generated from a 25MHz external input source or an external 25MHz parallel resonant crystal. The industrial temperature range of the 8413S12BI supports telecommunication, networking, and storage requirements.

Key Features

Ten selectable 100MHz, 125MHz, 156.25MHz and 312.5MHz clocks for PCI Express, sRIO and GbE, HCSL interface levels

One single-ended QG LVC MOS/LVTTL clock output at 125MHz

One single-ended QF LVC MOS/LVTTL clock output at 50MHz, 15 output impedance

Two single-ended QREFx LVC MOS/LVTTL outputs at 25MHz, 15 output impedance

Selectable external crystal or differential (single-ended) input source

Crystal oscillator interface designed for 25MHz, parallel resonant crystal

Differential CLK, nCLK input pair that can accept: LVPECL, LVDS, LVHSTL, HCSL input levels

Internal resistor bias on nCLK pin allows the user to drive CLK input with external single-ended (LVC MOS/ LVTTL) input levels

Supply Modes, (125MHz QG output and 25MHz QREFx outputs):

Core / Output

3.3V / 3.3V

3.3V / 2.5V

Supply Modes, (HCSL outputs, and 50MHz QF output):

Core / Output

3.3V / 3.3V

-40°C to 85°C ambient operating temperature

Available in Lead-free (RoHS 6) package

Recommended For You

9DBV0841AKLF

Renesas Technology Corp

QFN

840S06AKILF

Renesas Technology Corp

QFN32

ICM7555CBA

Renesas Technology Corp

SOP-8

8535AGI-31LF

Renesas Technology Corp

TSSOP20

ICM7555CBAZ-T

Renesas Technology Corp

SOP

ICM7555IPAZ

Renesas Technology Corp

DIP8

ISL1208IB8Z-TK

Renesas Technology Corp

SOP8

ISL12026IBZ-T

Renesas Technology Corp

SOP8

LM555N

Renesas Technology Corp

DIP-8

9ZXL1231AKLFT

Renesas Technology Corp

QFN

9ZX21901BKLF

Renesas Technology Corp

QFN72

ISL1208IU8Z-TK

Renesas Technology Corp

MSOP8

ICM7555IPA

Renesas Technology Corp

DIP8

8SLVD1208NBGI

Renesas Technology Corp

QFN

9ZXL0831AKLFT

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QFN48