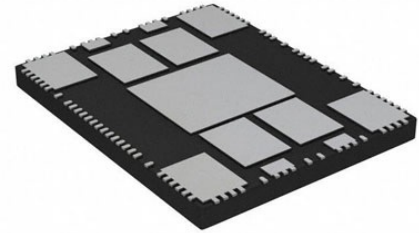


FREQUENCY TRANSLATOR, -40 TO 85DEG C

Manufacturers	Renesas Technology Corp
Package/Case	VFQFPN-40
Product Type	Integrated Circuits (ICs)
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for 8T49N241-998NLGI or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The 8T49N241 has one fractional-feedback PLL that can be used as a frequency translator with jitter attenuation or a frequency synthesizer. It is equipped with one integer and three fractional output dividers, allowing the generation of up to four different and unrelated output frequencies, ranging from 8 kHz to 1 GHz. Output frequencies can be completely independent of the input frequencies, and all four of these frequencies can be completely independent of each other. The four outputs may select among LVPECL, LVDS, HCSL or LVCMOS output levels.

The 8T49N241 is ideal for use in a wide range of equipment, including 10G/40G/100G SONET/SDH and Ethernet network line cards, wireless base station baseband units, broadcast video, carrier Ethernet switches, OTN, or in test and measurement applications. For example, the 8T49N241 can be used in GbE/10GbE/100GbE Synchronous Ethernet line card applications in order to preserve the G.8262 compliance from the Synchronous Equipment Timing Source (SETS) on the timing card.

IDT's third generation Universal Frequency Translator family also includes the(2-in / 1-PLL / 4-out), the(2-in / 1-PLL / 8-out), the(4-in / 2-PLL / 8-out) and the(2-in / 2-PLL / 8-out). These devices are complemented by the asynchronous equipment timing source (SETS) for Synchronous Ethernet (SyncE) and 10G-40G SyncE, respectively.

Features

Compliant with the requirements outlined in Telcordia GR-253-CORE (SONET) & ITU-T G.813/G.8262 (SDH/SONET & SyncE) when paired with a Synchronous Equipment Timing Source (SETS) device

Generates up to 4 LVPECL / LVDS/HCSL or 16 LVCMOS output clocks ranging from 8 kHz up to 1.0 GHz (diff), 8 kHz to 250 MHz (LVCMOS), that meet jitter limits for 10G up to 25G Ethernet applications

0.35ps RMS (including spurs), 12 kHz to 20 MHz

Accepts up to two LVPECL, LVDS, LVHSTL, HCSL or LVCMOS input clocks ranging from 8 kHz up to 875 MHz

Auto and manual input clock selection with hitless switching

Clock input monitoring, including support for gapped clocks

Phase-Slope Limiting and Fully Hitless Switching options to control output phase transients

Operates from a 10 MHz to 50 MHz

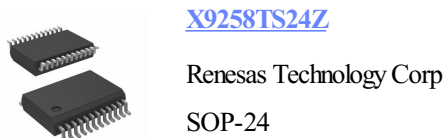
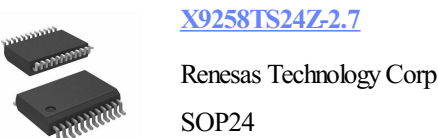
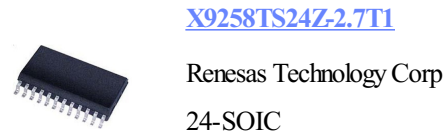
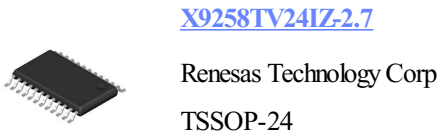
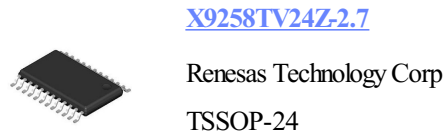
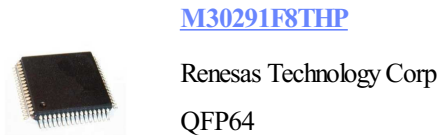
Register programmable through I2C or via external I2C EEPROM

8T49N241-998 “Boot from EEPROM”

8T49N241-999 “powers up disabled”

Supported by IDT Timing Commander Software™

Related Products





[X9258TS24IZT1](#)

Renesas Technology Corp

24-SOIC



[X9258TS24IZ](#)

Renesas Technology Corp

SOP24