# GX76470-DNT Datasheet

| | |
|---|---|
| DiGi Electronics Part Number | GX76470-DNT-DG |
| Manufacturer | Renesas Electronics Corporation |
| Manufacturer Product Number | GX76470-DNT |
| Description | IC DRIVER 4/4 |
| Detailed Description | 4/4 Driver |

https://www.DiGi-Electronics.com

# Purchase and inquiry

| | |
|---|---|
| Manufacturer Product Number: | Manufacturer: |
| GX76470-DNT | Renesas Electronics Corporation |
| Series: | Product Status: |
| - | Active |
| Type: | Protocol: |
| Driver | - |
| Number of Drivers/Receivers: | Duplex: |
| 4/4 | - |
| Data Rate: | Voltage - Supply: |
| 64Gps | - |
| Operating Temperature: | Base Product Number: |
| - | GX76470 |

# Environmental & Export classification

| | |
|---|---|
| RoHS Status: | REACH Status: |
| ROHS3 Compliant | REACH Unaffected |

# RENESAS

Short-Form Datasheet

## GX76470

4x64Gbit/s Linear Differential I/O Driver

The GX76470 is a low-power, high-performance, quad-channel linear driver chip. It is designed for 400G/600G optical integrated transmitter small form factor (SFF) modules for metro and long-haul applications. The GX76470 integrated quad lanes of driver with SPI circuitry for DC controls on a single die. Each channel of driver has 100Ω differential AC-coupled input and 55Ω differential DC-coupled output, and linear output voltage of 2.8Vppd suitable for InP and SiP multi-level modulations.

## Applications

- 400/600Gbps 16QAM/64QAM advanced multi-level modulation systems
- High bandwidth SFF optical integrated modules

## Features

- Data rate up to 64Gbps per channel for 400G/600G DP-mQAM applications
- > 40GHz Bandwidth
- > 10dB dynamic range of gain control
- 0.55W (typical) per channel at linear 2.8 $V_{ppd}$
- AC-coupled 100Ω differential input/DC-coupled 55Ω differential output
- Ultra-low inter-channel cross-talk
- Peaking adjustment functionality
- Analog control for gain and output voltage setting, and analog monitor for peak detector and gain control monitor
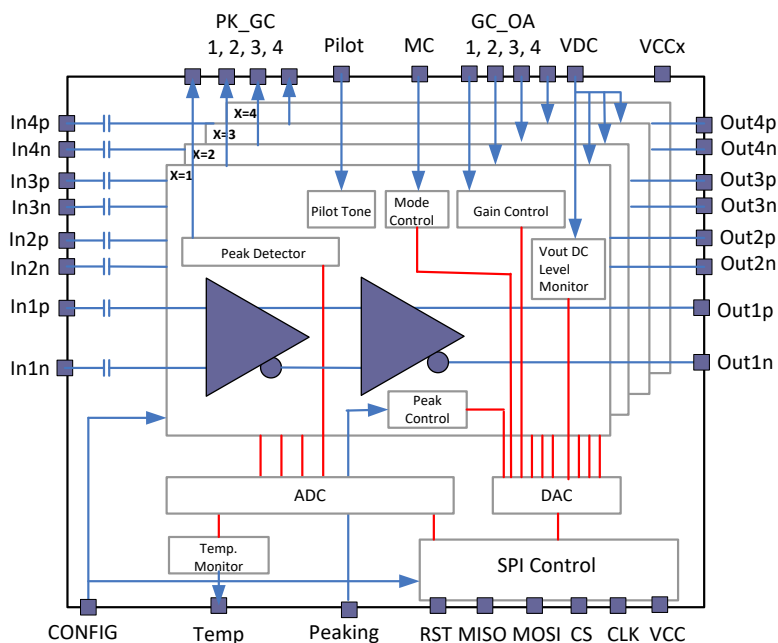- OIF compliant SPI digital interface integration



**Figure 1. Block Diagram**

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