

ULTRA-PRECISION 1:8 CML FANOUT BUFFER WITH INTERNAL I/O TERMINATION

Manufacturers	Microchip Technology, Inc
Package/Case	VQFN-32
Product Type	Clock & Timer ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for SY58031UMG or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The SY58031U is a 2.5V/3.3V precision, high-speed, fully differential CML 1:8 fanout buffer. The SY58031U is optimized to provide eight identical output copies with less than 20ps of skew and only 75fsRMS phase jitter. It can process clock signals as fast as 6GHz. The differential input includes Micrel's unique, 3-pin input termination architecture that allows the SY58031U to directly interface to CML, LVPECL, and LVDS differential signals (AC- or DC-coupled) without any level-shifting or termination resistor networks in the signal path. The result is a clean, stub-free, low-jitter interface solution. The CML outputs feature 400mV typical swing into 50Ω loads and provide an extremely fast rise/fall time guaranteed to be less than 60ps. The SY58031U operates from a 2.5V ±5% supply or 3.3V ±10% supply and is guaranteed over the full industrial temperature range (-40°C to +85°C). For applications that require high-speed 1:8 LVPECL fanout buffers, consider the SY58032U and SY58033U. The SY58031U is part of Micrel's high-speed, Precision Edge® product line.

Features

Precision 1:8, 400mV CML fanout buffer

Guaranteed AC performance over temperature and voltage:

Clock frequency range: DC to >6GHz

Low-jitter performance:

75fsRMS phase jitter (typ)

50Ω source-terminated CML outputs

400mV CML output swing into 50Ω load

Fully differential I/O

Accepts an input signal as low as 100mV

Unique, patent-pending input termination and VT pin accepts DC-coupled and AC-coupled differential inputs: (LVPECL, LVDS, and CML)

Power supply 2.5V ±5% or 3.3V ±10%

Industrial temperature range: -40°C to +85°C

Available in 32-pin (5mm x 5mm) MLF® package



Related Products



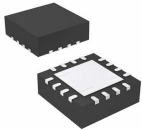
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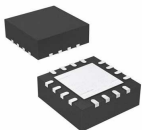
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