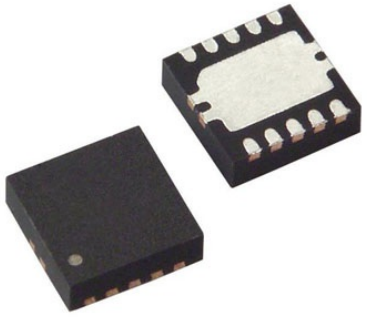
SY89112UMY

Data Sheet

Encoders, Decoders, Multiplexers & Demultiplexers 1:12 LVPECL Fanout w/ 2:1 MUX Input (I Temp, Green)

Manufacturers	Microchip Technology, Inc
Package/Case	VQFN-44
Product Type	Clock & Timer ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for SY89112UMY or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

The SY89112U is a low-jitter, low-skew, high-speed LVPECL 1:12 differential fanout buffer optimized for precision telecom and enterprise server distribution applications. The input includes a 2:1 MUX for clock switchover application. Unlike other multiplexers, this input includes a unique isolation design to minimize channel-to-channel crosstalk. The SY89112U distributes clock frequencies from DC to >2GHz guaranteed over temperature and voltage. The SY89112U incorporates a synchronous output enable (EN) so that the outputs will only be enabled/disabled when they are already in the LOW state. This reduces the chance of generating "runt" clock pulses.The SY89112U differential input includes Micrel's unique, patent-pending 3-pin input termination architecture that directly interfaces to any differential signal (AC- or DC-coupled) as small as 100mV (200mVpp) without any level shifting or termination resistor networks in the signal path. For AC-coupled input interface, an on-board output reference voltage (VREF-AC) is provided to bias the center-tap (VT) pin. The outputs are 800mV, 100K-compatible LVPECL with fast rise/fall times guaranteed to be less than 220ps.The SY89112U operates from a 2.5V ±5% or 3.3V ±10% supply and is guaranteed over the full industrial temperature range of -40°C to +85°C. The SY89112U is part of Micrel's high-speed, Precision Edge® product line.

Features

Selects between 1 of 2 inputs, and provides 12 precision, low skew LVPECL output copies

Guaranteed AC performance over temperature and voltage:

DC to >2GHz throughput

Ultra-low jitter design:

50fsRMS phase jitter (typ.)

Unique, patent-pending input termination and VT pin accepts DC-coupled and AC-coupled differential inputs

Unique, patent-pending 2:1 input MUX provides superior isolation to minimize channel-to-channel crosstalk

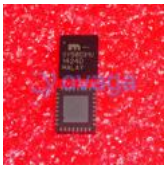
800mV, 100K LVPECL output swing

Power supply 2.5V +5% or 3.3V +10%

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

Available in 44-pin (7mm x 7mm) QFN package

Related Products



SY58031UMG

Microchip Technology, Inc

VQFN-32

SY89467UHY

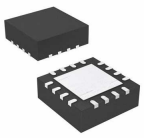
Microchip Technology, Inc

TQFP-64

SY58034UMG

Microchip Technology, Inc

VQFN-32



SY89833LMG

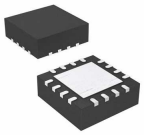
Microchip Technology, Inc

VQFN-16

SY89838UMG

Microchip Technology, Inc

VQFN-32



SY89872UMG

Microchip Technology, Inc

VQFN-16

SY89826LHY

Microchip Technology, Inc

TQFP-64

SY89468UHY

Microchip Technology, Inc

TQFP-64