
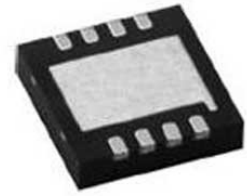


## Clock Buffer 1-OUT 1-IN 1:1 8-Pin DFN EP T/R

<b>Manufacturer:</b>	<a href="#">Microchip Technology, Inc</a>
<b>Package/Case:</b>	VDFN-8
<b>Product Type:</b>	Drivers
<b>RoHS:</b>	RoHS Compliant/Lead free 
<b>Lifecycle:</b>	Active



Images are for reference only

[Inquiry](#)

### General Description

The SY58604U is a 2.5/3.3V, high-speed, fully differential LVPECL buffer optimized to provide less than 10ps total jitter. The SY58604U can process clock signals as fast as 2.5GHz or data patterns up to 3.2Gbps. The differential input includes Micrel's unique, 3-pin input termination architecture that interfaces to LVPECL, LVDS or CML differential signals, (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 applications, an integrated voltage reference (VREF-AC) is provided to bias the VT pin. The output is 800mV LVPECL, with extremely fast rise/fall times guaranteed to be less than 110ps. The SY58604U 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 CML or LVDS outputs, consider the SY58603U and the SY58605U, buffers with 400mV and 325mV output swings respectively. The SY58604U is part of Micrel's high-speed, Precision Edge® product line.

### Key Features

- Precision 800mV LVPECL buffer
- Guaranteed AC performance over temperature and voltage:
- DC-to >3.2Gbps throughput
- Fail Safe Input
- Prevents output from oscillating when input is invalid
- Ultra-low jitter design
- High-speed LVPECL output
- 2.5V ±5% or 3.3V ±10% power supply operation
- Industrial temperature range: -40°C to +85°C
- Available in 8-pin (2mm x 2mm) DFN package

### Recommended For You

**SY58017UMG**

Microchip Technology, Inc  
QFN

**SY55855VKG**

Microchip Technology, Inc  
MSOP10

**SY58606UMG**

Microchip Technology, Inc  
MLF-16

**SY58608UMG**

Microchip Technology, Inc  
QFN16

**SY100EL16VZG**

Microchip Technology, Inc  
SOP8

**SY89547LMG**

Microchip Technology, Inc  
QFN-32

**SY100EP15VK4G**

Microchip Technology, Inc  
TSSOP-16

**SY100ELT22ZG**

Microchip Technology, Inc  
SOP8

**SY58020UMG**

Microchip Technology, Inc  
QFN

**SY100ELT22LZG**

Microchip Technology, Inc  
SOP-8

**SY89854UMG**

Microchip Technology, Inc  
QFN

**SY58012UMG**

Microchip Technology, Inc  
QFN

**SY89473UMG**

Microchip Technology, Inc  
QFN-24

**SY100ELT22LZG-TR**

Microchip Technology, Inc  
SOP8

**SY58011UMG**

Microchip Technology, Inc  
QFN