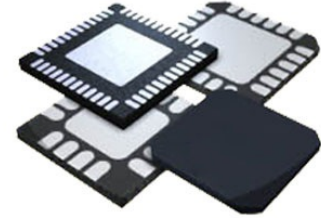


## Clock Fanout Buffer 4-OUT 1-IN 1:4 16-Pin QFN EP Tube



Images are for reference only

[Inquiry](#)

**Manufacturer:** [Microchip Technology, Inc](#)

**Package/Case:** QFN

**Product Type:** Drivers

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active

### General Description

The SY89831U is a high-speed, 2GHz differential LVPECL 1:4 fanout buffer optimized for ultra-low skew applications. Within-device skew is guaranteed to be less than 20ps (5ps typ.) over supply voltage and temperature. The differential input buffer has a unique internal termination design that allows access to the termination network through a VT pin. This feature allows the device to easily interface to different logic standards. A VREF-AC reference output is included for AC-coupled applications. The SY89831U is a part of Micrel's high-speed clock synchronization family. For applications that require a different I/O combination, consult Micrel's website and choose from a comprehensive product line of high-speed, low-skew fanout buffers, translators, and clock generators.

### Key Features

Guaranteed AC performance over temperature and voltage:

DC-to-2.5GHz throughput (typical)

350ps propagation delay (IN-to-Q) (typical)

5ps within-device skew (typical)

150ps rise/fall time (typical)

Ultra-low jitter design:

62fsRMS phase jitter (typical)

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

800mV, 100K LVPECL typical output swing

Power supply 2.5V  $\pm$ 5% or 3.3V  $\pm$ 10%

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

Available in 16-pin (3mm x 3mm) MLF® package

## Recommended For You

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### **SY87729LHY**

Microchip Technology, Inc  
QFP32

### **SY87701ALHG**

Microchip Technology, Inc  
TQFP32

### **SY89296UMG**

Microchip Technology, Inc  
VQFN

### **SY89297UMG**

Microchip Technology, Inc  
QFN24

### **SY89295UMG**

Microchip Technology, Inc  
QFN

### **SY89874UMG**

Microchip Technology, Inc  
QFN

### **SY87700ALHG**

Microchip Technology, Inc  
QFP32

### **SY87739LHY**

Microchip Technology, Inc  
TQFP32

### **SY100EL34ZG**

Microchip Technology, Inc  
SOP16

### **SY89202UMG**

Microchip Technology, Inc  
QFN

### **SY89876LMG**

Microchip Technology, Inc  
QFN

### **SY100EP196VTG**

Microchip Technology, Inc  
TQFP32

### **SY89833ALMG**

Microchip Technology, Inc  
16-VQFN

### **SY89297UMH**

Microchip Technology, Inc  
VQFN

### **SY87721LHG**

Microchip Technology, Inc  
64-TQFP