


## Clock Fanout Buffer 2-OUT 1-IN 1:2 16-Pin QFN EP Tube

<b>Manufacturer:</b>	<a href="#">Microchip Technology, Inc</a>
<b>Package/Case:</b>	MLF-16
<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 SY58606U is a 2.5/3.3V, high-speed, fully differential 1:2 CML fanout buffer optimized to provide two identical output copies with less than 15ps of skew and less than 10pspp total jitter. The SY58606U can process clock signals as fast as 3GHz or data patterns up to 4.25Gbps. 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 outputs are 400mV CML, with extremely fast rise/fall times guaranteed to be less than 85ps. The SY58606U operates from a 2.5V  $\pm$ 5% supply or 3.3V  $\pm$ 10% supply and is guaranteed over the full industrial temperature range (-40°C to +85°C). For applications that require LVPECL or LVDS outputs, consider Micrel's SY58607U and SY58608U, 1:2 fanout buffers with 800mV and 325mV output swings respectively. The SY58606U is part of Micrel's highspeed, Precision Edge® product line.

### Key Features

Precision 1:2, 400mV CML fanout buffer

Guaranteed AC performance over temperature and voltage:

DC-to >4.25Gbps throughput

Fail Safe Input

Prevents outputs from oscillating when input is invalid

Ultra-low jitter design

100fsRMS typical additive jitter

High-speed CML outputs

2.5V  $\pm$ 5% or 3.3V  $\pm$ 10% power supply operation

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

Available in 16-pin (3mm x 3mm) QFN package



## Recommended For You

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### **SY58017UMG**

Microchip Technology, Inc

QFN

### **SY55855VKG**

Microchip Technology, Inc

MSOP10

### **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

### **SY58604UMG-TR**

Microchip Technology, Inc

VDFN-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