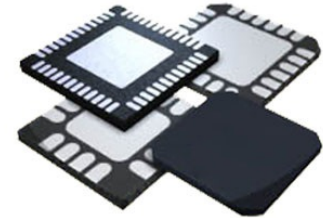


Digital Crosspoint Single 4x4 4Gbps 44-Pin QFN EP Tray



Images are for reference only

[Inquiry](#)

Manufacturer: [Microchip Technology, Inc](#)

Package/Case: QFN

Product Type: Switches

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active

General Description

The SY89540U is a low-jitter, low skew, high-speed 4x4 crosspoint switch optimized for precision telecom and enterprise server/storage distribution applications. The SY89540U guarantees data-rates up to 3.2Gbps over temperature and voltage. The SY89540U differential input includes Micrel's unique, 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. The LVDS compatible outputs maintain extremely fast rise/fall times guaranteed to be less than 120ps. The SY89540U features a patent-pending isolation design that significantly improves on channel-to-channel crosstalk performance. The SY89540U operates from a 2.5V $\pm 5\%$ supply and is guaranteed over the full industrial temperature range (-40°C to +85°C). The SY89540U is part of Micrel's high-speed, Precision Edge® product line.

Key Features

Provides crosspoint switching between any input pairs to any output pair

Patent pending, channel-to-channel isolation design provides superior crosstalk performance

Guaranteed AC performance over temperature and voltage:

DC-to-3.2Gbps throughput

Ultra-low jitter design:

95fs RMS phase jitter (typ.)

Patent-pending 50Ω input termination, extended CMVR, and VT pin accepts DC- and AC-coupled differential inputs

350mV LVDS output swing

Power supply 2.5V $\pm 5\%$

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

Pb-Free Green package

Recommended For You

SY58023UMG

Microchip Technology, Inc
QFN

SY58040UMY

Microchip Technology, Inc
QFN

SY55858UHG-TR

Microchip Technology, Inc
TQFP-32

SY58023UMI

Microchip Technology, Inc
QFN-16

SY55858UHG

Microchip Technology, Inc
TQFP32

SY56034ARMG

Microchip Technology, Inc
QFN

SY55854UYY

Microchip Technology, Inc
SSOP16

SY89540UMY-TR

Microchip Technology, Inc
VQFN44

SY58023UMG-TR

Microchip Technology, Inc
VQFN-16

SY55859LMI

Microchip Technology, Inc
QFN

SY58024UMG-TR

Microchip Technology, Inc
VQFN

SY55859LMG

Microchip Technology, Inc
QFN-32

SY55854UYI

Microchip Technology, Inc
TSSOP16

SY55858UHI

Microchip Technology, Inc
QFP32

SY56040ARMY

Microchip Technology, Inc
VQFN