This product is not released and the specifications here in are subject to change

AMCC®

FEATURES

- Supports 2.5 Gbit/sec Data Rates
- Fully differential for minimum jitter accumulation
- TTL Select
- High speed 50Ω source terminated outputs
- 0.84 W Typical power dissipation
- 3.3 V power supply
- 52 Pin TQFP/TEP

GENERAL DESCRIPTION

The S3053 is a high performance quad mux with fan out buffers. It is designed to minimize jitter accumulation by providing a high bandwidth fully differential signal path. It can be used to switch OC-48 data signals in Wavelength Division Multiplexor designs and other high speed serial switch designs.

The chip is designed using four 2:1 multiplexors. It can be used to fan out and/or multiplex high speed clock and data signals. The S3053 is compatible with the AMCC OC-48 clock recovery, MUX/DEMUX and Crosspoint Switch products. This allows signal integrity to be maintained throughout the system design.

The primary AC parameter of importance is the deterministic jitter or data eye degradation inserted by the crosspoint. The design minimizes jitter accumulation by using high bandwidth, low skew fully differential circuits. This provides for symmetric rise and fall delays as well as noise rejection.

Figure 1. S3053 Block Diagram