

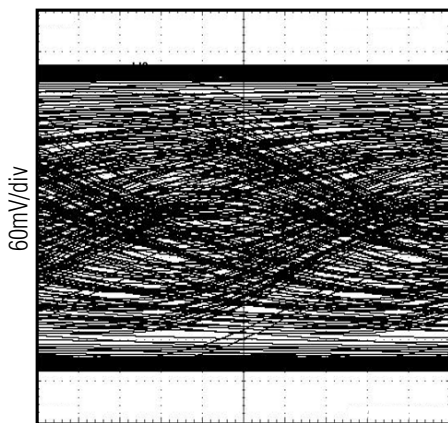
# FIRST 12.5Gbps EQUALIZER EXTENDS REACH TO 30in OF FR-4

## Interface Down to 1.8V in a Small 3mm x 3mm Footprint

The MAX3804 selectable receive equalizer/transmit buffer provides up to 20dB of adjustable receive equalization at 10Gbps (5GHz) for PCB signal integrity applications up to 12.5Gbps. The device extends the practical transmission distance for 10Gbps NRZ serial data up to 30in (0.75m) on FR-4, enabling low-cost, chip-to-chip interconnections over FR-4 printed circuit board material. Eight discrete levels of input equalization may be selected (2dB to 20dB at 5GHz) through a digital control input. The MAX3804 operates from a 3.3V supply and allows both inputs and outputs to interface to 1.8V, 2.5V, or 3.3V ICs. This tiny 3mm x 3mm chip achieves <math><30\text{ps}\_{\text{p-p}}</math> jitter performance with only 115mW of power consumption at 3.3V. Prices start at \$10.95<sup>†</sup>.

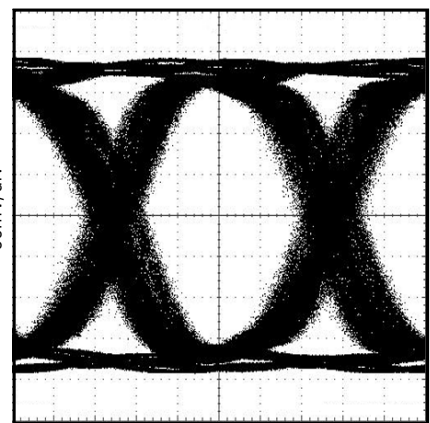
## EXCELLENT OUTPUT JITTER PERFORMANCE AT 12.5Gbps!

12.5Gbps EQUALIZER INPUT  
FROM 30in OF FR-4 OUTPUT



16ps/div

12.5Gbps MAX3804  
OUTPUT



16ps/div



ACTUAL SCOPE DATA

<sup>†</sup>1k price recommended resale. FOB USA. International prices will differ due to local duties, taxes, and exchange rates. Prices are subject to change.

# MAXIM

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