43.5 Gbit/s BERT SYSTEM
ME7760A/B
25 to 43.5 Gbit/s

CE GPIB ME7760B

Measurement Solution for 40 Gbit/s SONET/SDH System and Modules

The ME7760A/B is bit error rate measurement system that measures the bit error rate of transmission signals from 25 to 43.5 Gbit/s. This system is composed of a pulse pattern generator, multiplexer, demultiplexer, error detector and synthesizer.
The ME7760A/B is used in the electrical or optical market to perform component evaluations on communication equipment.
MX177601A SDH/SONET Pattern Editor Software is provided and can be used to edit a SDH/SONET frame.

Features

• High quality waveform
A re-timing circuit using a D-type Flip-Flop produces a high quality waveform (small jitter and low wave distortion) and high output amplitude (2 Vp-p).

• Measurement with pure PRBS
The MP1775A Pulse Pattern Generator can generate PRBS on 43.5 Gbit/s (selectable pattern length = $2^n - 1$: n= 7, 9, 11, 15, 20, 23, 31). The phase of each channel is shifted by 1/4 cycle and the multiplexed signal can be treated as pure PRBS.

• Wide operation frequency
The ME7760A has the capability to treat FEC signals uo to 40 Gbit/s. A four channel pulse pattern generator (MP1775A) and the four channel error detector (MP1776A) can support 100 Mbit/s to 12.5 Gbit/s signals.
The multiplexer (MP1801A/1803A) and the de-multiplexer (MP1802A/1804A) can support 25 to 43.5 Gbit/s signals.

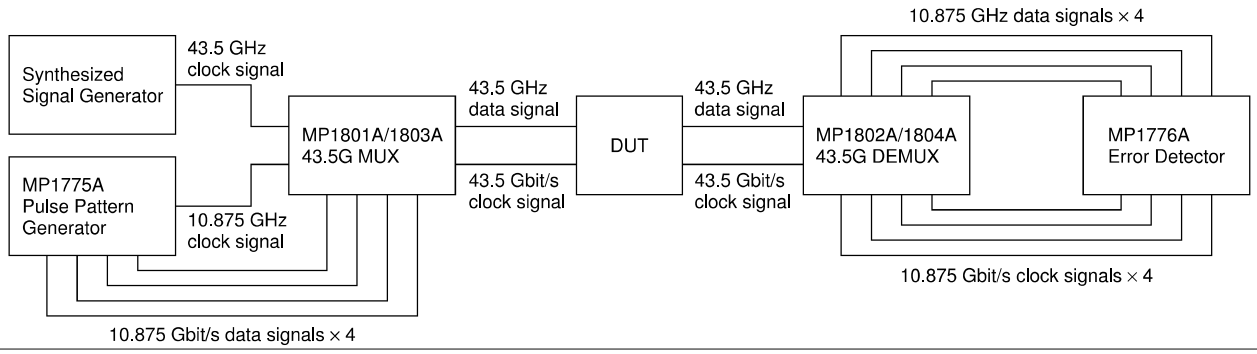
• 32 Mbits pattern memory for OC-768/STM-256
Both the MP1775A and the MP1776A have 32 Mbits pattern memory and are suitable for 40 Gbit/s SDH/SONET frames (OC-768/STM-256). Its pattern can be edited using the MX177601A SDH/ SONET Pattern Editor via GPIB interface.

• High flexibility
The MP1775A Pulse Pattern Generator and the MP1776A Error Detector can be used as single measurement systems and provide high flexibility in many combinations.

Selection guide

	ME7760A	ME7760B
MP1801A	√	
MP1802A	√	
MP1803A*		√
MP1804A*		√
MP1775A	√	√
MP1776A	√	√

* Custom-made product



System configurations