

GFT1004

4 Independent delay channel

- Four Independent Delay Channels
- <1 ps delay resolution
- <15 ps rms jitter
- 10 seconds delay range
- Rack 19", 1U, 300 mm
- Controlled via Ethernet and front panel



Applications

- Components Test
- ATE Application
- Laser Timing System
- Precision Pulse Application
- Synchronous Multi-channel
- Triggering

Description

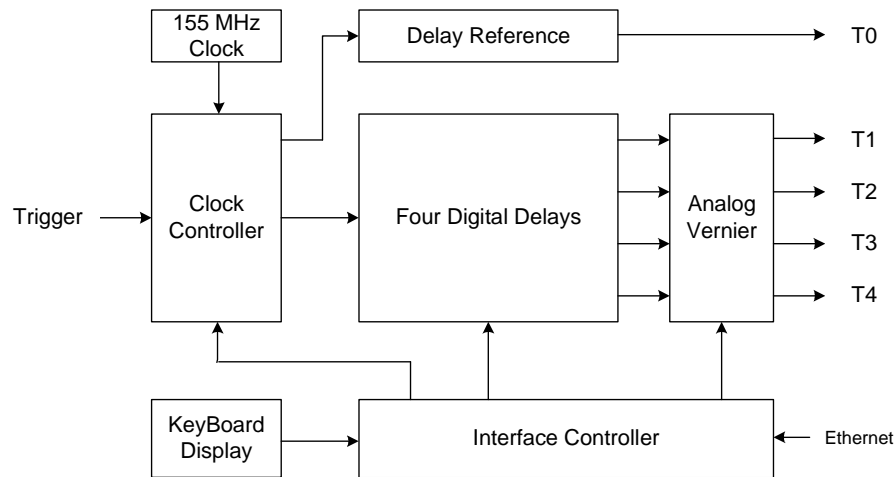
The GFT1004 module provides four independent delay channels. The delay resolution on all channels is <1ps and channel to channel jitter is less than 25ps.

BNC outputs deliver 10V level under 50Ω. One T0 channel (zero delay) is used to reference the four output channel in different operation modes.

One input channel is used to trigger off all output channels.

In system mode, the module could be optical triggered by a generator on an optical network. Delay parameters may be local controlled over front panel keys and LCD display and remote controlled over Ethernet and Internet (Internal web server) interface (10 / 100 Mb/s).

GFT1004, 4 Independent delay channel



Specifications

Delays

Channels	4 independent delay outputs
Range	0 to 10 s
Resolution	1 ps
RMS jitter	15 ps (T0 to any output) < 50 ps + 10^{-7} x delay (External trigger to any output)
Trigger Delay	< 100 ns (insertion delay)
Accuracy	< 250 ps + delay x 10^{-7}
Time base	155.52 MHz internal clock 0.05 ppm

External Trigger

Rate	Up to 10 kHz
Input	Threshold +1V, positive slope, 50Ω impedance

Internal Trigger

Frequency	2 independents
Rate	1 Hz to 50 kHz

Outputs

Amplitude	2.5 V to 10 V
Load	50 Ω
Rise time, fall time	< 2 ns, < 5 ns
Width	100 ns to 10 μs
Connector	BNC

General

Size	Rack 19'', 1U, P= 300 mm
Interface	Local PAV, Ethernet / Internet (Web page)
Power	90 to 220V / 1A

Software

Free Drivers for Win2000/XP

Options

Option 1	Optical input for timing system
Option 2	Extension to 8 channels
Option 3	Clock output