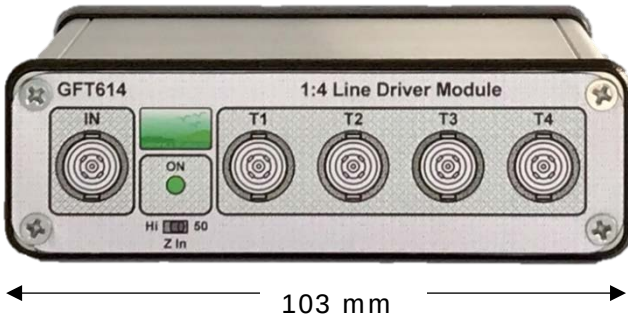
GFT614
1:4 Line 50 Ω Driver Module
(Preliminary)

Features

- Up to 250 MHz clock rate
- Drive 100 feet of cable at 200 MHz
- Four synchronized 50 Ω TTL output
- 1 ns typical Output rise & Fall time
- <1 ps input output RMS jitter
- TTL level 50 Ω or 1 KΩ input
- Active low Gate input
- Operate from DC +5 V
- All input & output are BNC connectors
- Compact module: 103 X 80 x 30 mm
- Option: Mounting flange



Applications

- Clock distribution
- 1 to 4 splitter
- Components Test
- Long Line Driver
- Tools for Lab
- OEM Application

Description

The GFT614 module is specially designed for distribution of high frequency clock and high-speed logic signal to multiple device via long cable. All outputs with 50 Ω load can drive 100 feet of cable at clock rate greater than 200 MHz with 2.5 V amplitude.

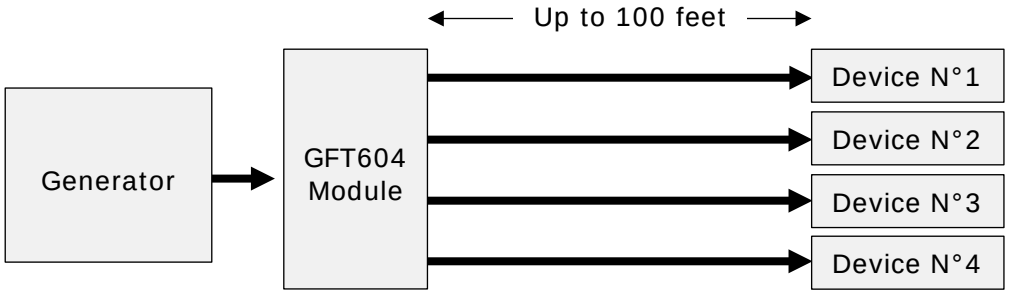
The input load can be selected from 50 Ω to 1 KΩ by a front panel switch.

The channel input can be driven directly by TTL logic levels. The output is compatible with DC or AC TTL input.

A gate input allows to disable the module by external signal.

The GFT614 is a compact module supplied with a +5V AC/DC adapter

Typical GFT614 application (see below) would be to distribute High speed signal to four devices via long cable (up to 100 feet).



Typical application

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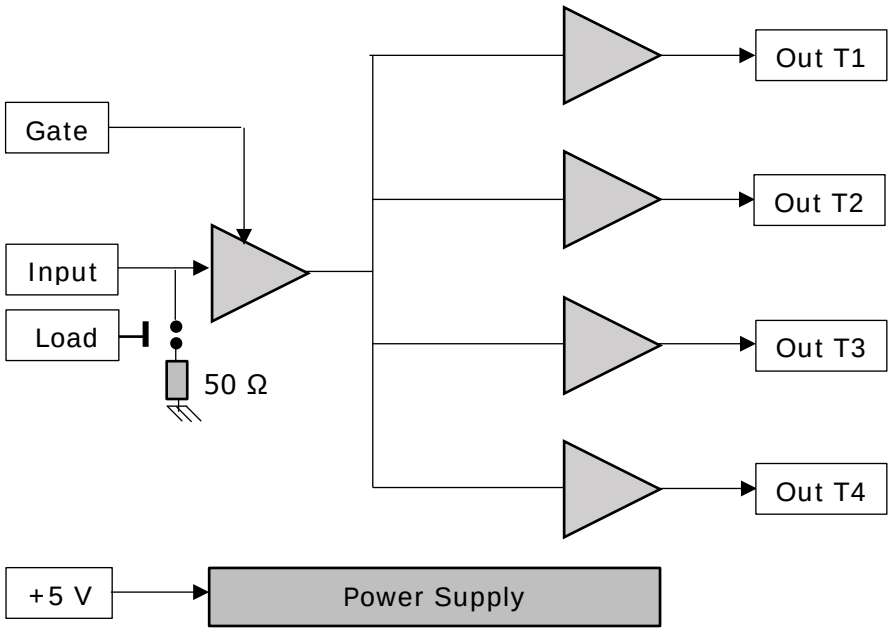

Block diagram

Specifications

Input	
Low level	<0.5 V
High level	2.4 V
High load	1 KΩ
Low load	50 Ω
Minimum pulse width	5 ns
Output	
Number	4
Low level	0.5 V
High level	2.5 V @ Load=50 Ω, 4 V @ Load > 10 KΩ
Jitter RMS	2 ps (input to output)
Rise /fall times	1 ns / 1ns @ 100 MHz square wave
Max clock frequency	250 MHz @ cable length = 3 feet
	200 MHz @ cable length = 100 feet
Skew	500 ps (TBC)
Gate	
Low Level	< 0.5 V
High level	2.4 V
Rate	50 MHz
General specifications	
Control	Front panel switch to select input load
Inputs & outputs	All are BNC connector
Size	W = 103, L = 80, H = 30 mm
Power V/A	+5 V / 200 mA max. External AC (90 - 240 V) to DC (+ 5 V) adapter furnished
Power connector	Jack 2.10 mm
Option: Mounting flange **(**TBD)	