

DESCRIPTION

Clock source

CLK20 is a clock source module that plugs into the PARALLEX® chassis. The clock works over a continuous range from 78.125 MHz to 20 GHz. Functionally it is not bound to the EBERT modules hence it can be used for driving any other devices, too. It has a divided clock output to offer a substrate trigger for oscilloscopes that have limited trigger bandwidth.

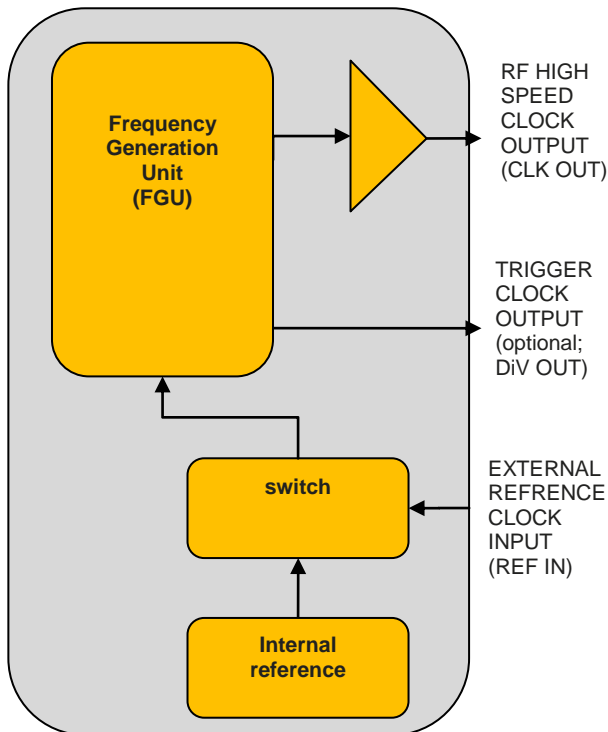
KEY FEATURES

- internal or external reference clock
- output voltage 200...600 mV
- clock output 78.125MHz to 20GHz
- trigger clock output 78.125MHz to 5GHz
- single ended output
- substrate output
- GPIB/LAN/USB Interface via PARALLEX® chassis
- Small size: width 25.4mm (1")



CLOCK SOURCE MODULE
p/n L-6001-CLK20-2

FUNCTIONAL BLOCK DIAGRAM



PARALLEX® PLATFORM: LETS YOU
START SMALL AND GROW



PARALLEX® is a low-cost, modular Bit Error Rate Test Platform used for verification and test of optical and electrical components, sub-assemblies and systems at 1 to 14 Gbps. PARALLEX® allows users to perform several BER tests simultaneously using a single clock source. The system is ideal for parallel interfaces or multiple independent interfaces. PARALLEX® is scalable so users can start off with a single channel and add modules to grow the system. Manufacturers can realize great savings by taking advantage of the PARALLEX® system's scalability to perform parallel testing in volume production environments.

All specifications are subject to change without notice
Product Brochure CLK20-2 February 2013

Clk20

Product

Overview

Clock Source Module p/n L-6001-CLK20-2

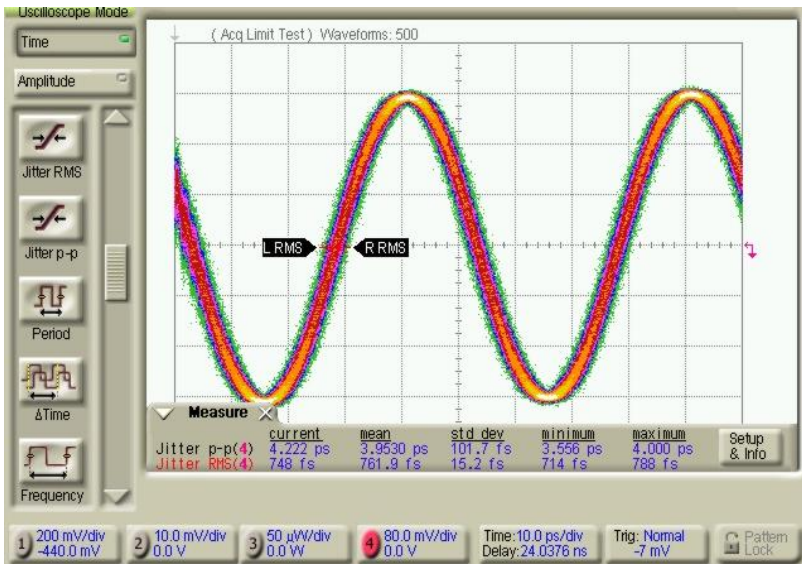
KEY PERFORMANCE PARAMETERS

RF HIGH SPEED CLOCK OUTPUT

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT	NOTE
RF-clock frequency full range	$f_{RFoutUncal}$	0.078125		20	GHz	
RF-clock frequency calibrate power range	$f_{RFoutCal}$	0.078125		15	GHz	
RF-clock frequency step	$f_{RFoutStep}$		10		Hz	
RF-clock output voltage ^(10GHz-15GHz)	V_{RFout}	200		600	mV	±300mV
RF-clock output power ^(10GHz-15GHz)	P_{RFout}	-10		0	dBm	±3dBm
RF-clock output voltage ^(78.125MHz-10GHz)	V_{RFout}	200		1200	mV	±300mV
RF-clock output power ^(78.125MHz-10GHz)	P_{RFout}	-10		6	dBm	±3dBm
RF-clock output power step	$P_{RFoutStep}$		1		dB	±2dB
RF-clock output termination		AC - coupled				
RF-clock output duty cycle	$t_{RFoutDC}$	45		55	%	
RF-clock output impedance	$Z_{RFoutRef}$	45		55	Ω	
RF-clock rise and fall time	t_r / t_f	15		35	ps	20% - 80%
RF-clock phase jitter rms	RJ_{RFout}			400	fs_{rms}	50KHz – 80MHz Fehler! Verweisquelle konnte nicht gefunden werden. 10Hz – 100Hz

F-clock output phase noise	PN_{RFout}		
		10Hz	
		-44dBc	100Hz
		-76dBc	1KHz
		-90dBc	10KHz
		-84dBc	100KH
		-96dBc	z
		-99dBc	1MHz
		-126dBc	10MHz
		-144dBc	100MH

At 12.5GHz operating frequency



CLKout at 20.0GHz



PARALLEX® is a registered trade mark of LUCEO Technologies GmbH



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