# Clock Source Module
PN L-6001-CLK6-2

DESCRIPTION

CLK6-2 is a clock source module that plugs into the *XBERT* and *ParalleX*™ Chassis. With a frequency range 50 – 900MHz, the module provides 7 selectable frequency presets factory installed, covering the main bit-rates of interest. Additionally, preset 8 allows set-up of any frequency within the above range, which can be changed via an easy to use GUI or front-panel push-button switch. Front panel indicators give immediate status of selected preset frequency. Although intended for use with the EBERT pattern generator/error detector, the CLK6-2 finds a variety of other applications as a low-cost synthesized signal source.

KEY FEATURES

- 7 selectable frequency presets factory installed (figure in brackets gives the corresponding EBERT bit-rate)
    - 531.2500MHz (8.5Gbps)
    - 622.0800MHz (9.9Gbps)
    - 644.5313MHz (10.3Gbps)
    - 657.4219MHz (10.5Gbps)
    - 666.5143MHz (10.7Gbps)
    - 693.4830MHz (11.1Gbps)
    - 707.3527MHz (11.3Gbps)
- Additionally the user can set any frequency in the range 50 – 900MHz
- Differential clock output with single-ended capability (SMA Connector)
- Front panel switch for clock selection
- LabView™ drivers available
- GPIB Interface via XBERT Chassis.
- Small size: width 25.4mm (1")

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APPLICATION DIAGRAM

clock synthesizer 50Mhz - 900Mhz
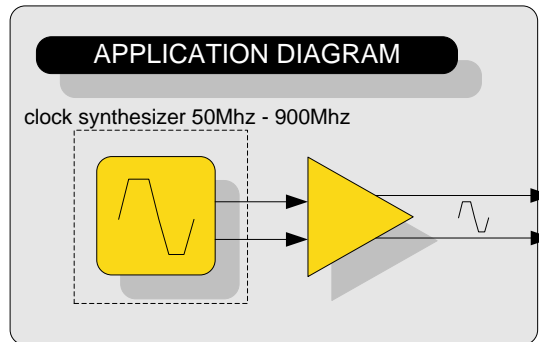
XBERT PLATFORM: LETS YOU START SMALL AND GROW BIG

XBERT is a low-cost, modular Bit Error Rate Test Platform used for verification and test of 10Gb/s and above optical and electrical chip, sub assembly and system designs. *ParalleX*™ allows users to perform several BER tests at once using a single clock source. The system is ideal for developers desiring to run simultaneous BER tests on parallel interfaces or multiple independent interfaces. *XBERT* and *ParalleX*™ are 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 *XBERT* and *ParalleX*™ system's scalability to perform parallel testing in volume production environments.

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KEY PERFORMANCE PARAMETERS

PARAMETER	SYMBOL	Min	Max	UNIT	NOTE
Clock Rate in 7 steps	CR	531	707	MHz	1
Clock Rate Continuous	CR	50	900	MHz	
Clock Output Level Channel P or N Single-ended	$D_{outP/N}$	550	950	mV_{pp}	Others available on request
Differential Clock Output Signal ($D_{outDiff}=D_{outP}-D_{outN}$)	$D_{outDiff}$	1100	1900	mV_{pp}	
Differential Output Impedance	$Z_{outDiff}$	90	110	Ω	
Operating Temperature	T_{OP}	0	40	°C	Ambient temp.

Note:
1   The following 7 frequency presets are factory installed: 531.25MHz, 622.080MHz, 644.5313MHz, 657.4219MHz, 666.5143MHz, 693.4830MHz, and 707.3527MHz
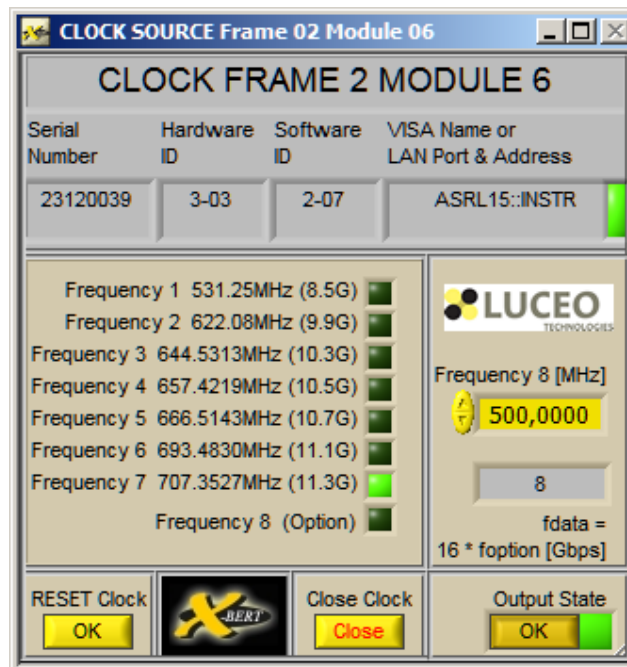
GUI: allows selection of preset frequencies, or any frequency within the range 50 – 900MHz