



BitPhyer System: Ethernet Testing Platform

BitPhyer is a family of hardware platforms used to test the IEEE 802.3™ MAC, Flow Control, PCS and RS layers for Ethernet devices, including Automotive Ethernet. This platform is based on Xilinx FPGAs and custom-built hardware which are used to create a flexible bit-level based test system. BitPhyer can be used to generate arbitrary bit patterns and frames and enables users to define their own test scripts in addition to the UNH-IOL generated test plans included with the system. The BitPhyer family of hardware platforms supports various speeds and duplexes over several port types from 10Mb/s to 10Gb/s.

Key Benefits:

- Decrease costs and testing time by implementing a common set of test cases for easy compliance comparison
- Create automation of UNH-IOL Test Plans
- Access to industry recognized test practices
- Ability to add customizable test cases
- Increase consistency of testing between teams using the same platform
- Faster root cause analysis of conformance issues

BitPhyer Options:

	BitPhyer STA
Supported Speeds	1x10/100/1000BASE-T 1xSFP (1G only) 1x100BASE-T1(BroadR-Reach)

Contact:

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Supported Test Plans:

	BitPhyer STA
Clause 4 MAC	✓
Clause 31 Flow Control	✓
Clause 36 PCS	✓
Clause 37 Auto-Negotiation	✓
Automotive Clause 96 PCS	✓
Automotive Clause 96 PHY Control	✓
Clause 99 Preemption	✓

Support and Maintenance:

	Details	Annual Fee
•	Training and debugging sessions (on-site is available for an additional cost)	
•	Learn about the latest release features	
•	Installation and set-up guidance	\$10,000 USD
•	Assistance with device automation	
•	Detailed result analysis and IEEE Standards review	
•	Support is recommended with purchase of license(s). Multiple test	
	packages and licenses are covered. Support is included in testing	
	service memberships, please inquire for more details.	

Visit our website to request a quote today!

www.iol.unh.edu

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