



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	BitPhyer S4TA
Supported Speeds	1x10/100/1000BASE-T 1xSFP (1G only) 1x100BASE-T1 (BroadR-Reach)	4x10/100/1000/2.5G/5G/ 10GBASE-T 1x100BASE-T1 (BroadR-Reach) 1xSFP (1G&10G)



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Supported Test Plans:

	BitPhyer STA	BitPhyer S4TA
Clause 4 MAC	✓	✓
Clause 24 PCS		
Clause 28 State Machine		✓
Clause 28 Next Page		✓
Clause 28 Management Register		✓
Clause 28 Management System		✓
Clause 31 Flow Control	✓	✓
Clause 36 PCS	✓	✓
Clause 37 Auto-Negotiation	✓	✓
Clause 40 Auto-Crossover		✓
Clause 45 MDIO for Auto-Negotiation		✓
Clause 46 RS		✓
Clause 49 PCS		✓
Automotive Clause 96 PCS	✓	✓
Automotive Clause 96 PHY Control	✓	✓
Clause 99 Preemption	✓	✓

Support and Maintenance:

Details	Annual Fee
<ul style="list-style-type: none"> • Training and debugging sessions (on-site is available for an additional cost) • Learn about the latest release features • Installation and set-up guidance • 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. 	\$10,000 USD

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Visit our website to request a quote today!

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