

MOST150
PHYSICAL LAYER *STRESS TEST TOOL*

For Development and Production



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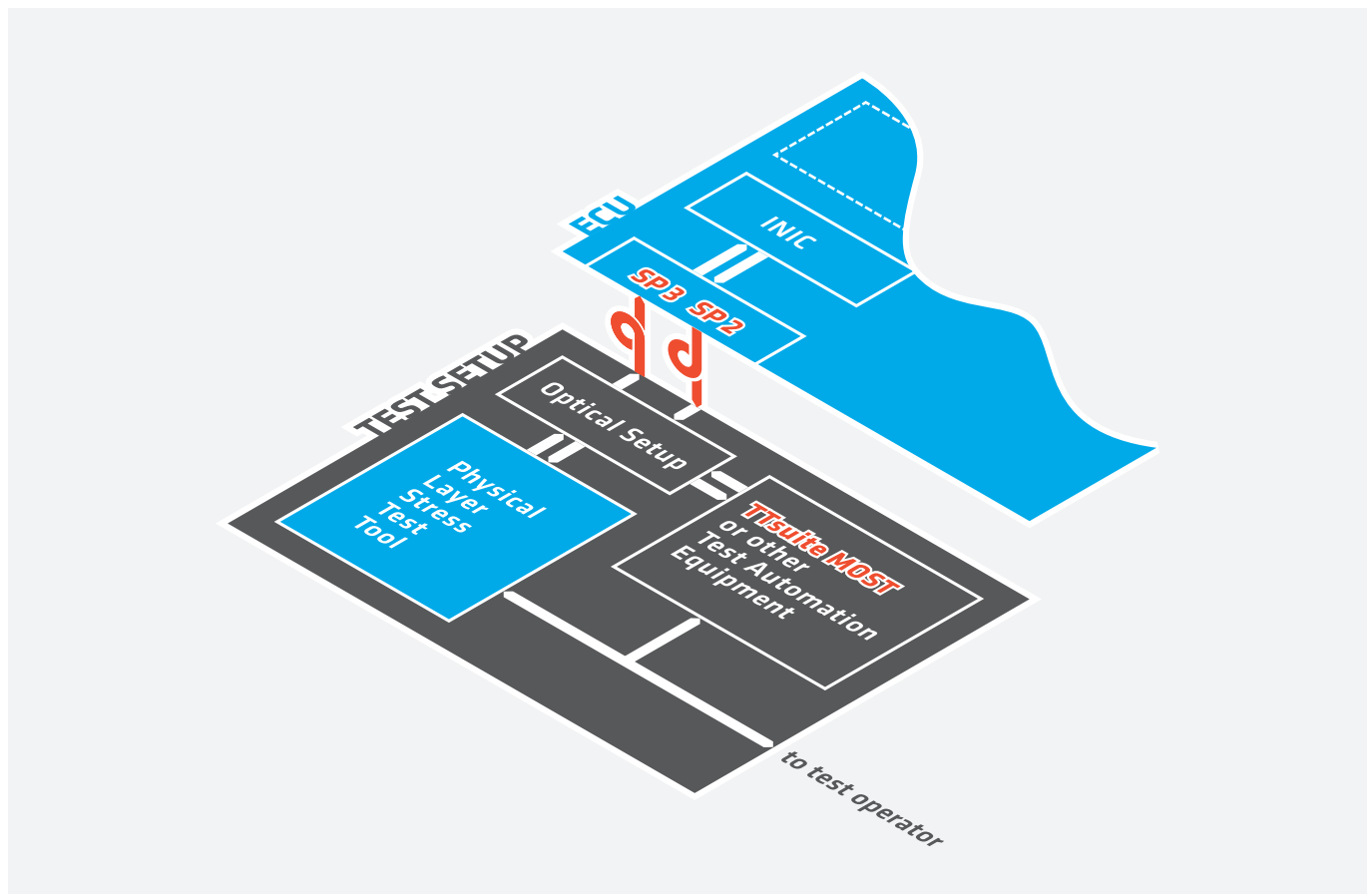
For MOST150 Compliance Testing the Limited Physical Layer Compliance Specification defines several setups (Figure) for measuring specific parameters as defined in MOST150 oPhy Automotive Physical Layer Sub- Specification.

The main purpose of the stress test tool is to feed a MOST ECU with a stress test pattern and to check the signal of the responding ECUs for errors (e.g. Bit Error Rate).

The professional edition of the stress test tool with a high end EOC will be primarily used in the Physical Layer Compliance Test Process by the certified Compliance Test House, but also at an OEM or supplier site as a pre-compliance check and development support tool.

The standard edition has a standard FOT unit instead of a high end EOC and is designed to be a part of end-of-line control applications.

Generalized Test Setup



Benefits:

- ➔ Standardized Test Tool for MOST150 ECU testing
- ➔ The tool is part of the MOST Compliance Physical Layer Test Setup
- ➔ Available with a high end EOC for use in laboratories and a standard FOT unit for end-of-line control applications
- ➔ Interface for test automation equipment like TTSuite MOST

Test tool Details

MOST Test Specification

- MOST150 oPhy Compliance Verification Procedure – Physical Layer

Features

- Starts Test Mode in DUT over FBlock ET 3.0
- Applies Worst case Pattern to DUT
- Compares received Pattern and counts bit and phase lock errors
- Reads out DUTs error counters and compares to measured values

Additional Functions

- Interface for TTSuite MOST
 - Open API to interface other test automation systems
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TECHNICAL DATA

Electrical specifications		Optical specifications	
Line voltage	12V	SP2 compliant signal with duty cycle adjustment possibility	20 steps -1/+1ns
Line Current	TBD	Optical output power	up to +1dBm
Electrical Signal Compliant with Specification of SP1 and SP4		Network Frame Rate	48/44.1kHz
Electrical measurement		Stimulation and Verification	
Pattern Comparator		Free programmable worst case pattern	MASTER/SLAVE
Bit Error indication output	SMA 50 Ω	Check of the Lock capability	
Phase Lock Error indication output	SMA 50 Ω	Compare of input output Pattern	
Electrical Trigger Output	SMA 50 Ω	Read back error counter and Lock Log	FB ET Function
Rx input for External OEC	SMA 50 Ω	Test On/Off Behavior	
		Possibility of Low frequency Stimulicy	<1Msps