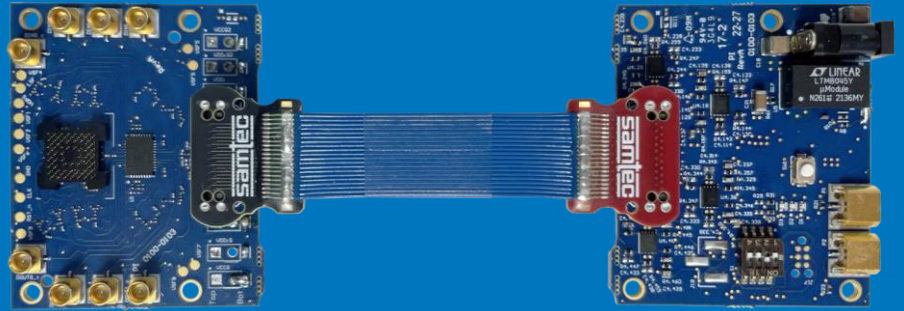


Eclipse™ MPHY HS-G5 Interposer



Key Features

- MIPI UniPro v2.0, Universal Flash Storage (UFS) v4.0, M-PHY v5.0
- High Speed Gear 5 (HS-G5)—enabling engineers to double the potential data rate per lane to 23.32 Gigabits per second (Gbps) on one lane and 93.28 Gbps over four lanes
- Supports GEAR4, GEAR3, signal rates
- Supports USF x2 Lanes
- Dual grypper socket for easy swapping of Devices or test board
- Status Lights
- Microcontroller Modes:
 - Channel Mode
 - Memory Mode
- Dimensions: 1.47x 1.84 in

The MPHY HS-G5 Interposer board allows developers to tap signals between the Host and DUT and send them to the Eclipse M52 UniPro/ UFS protocol analyzer using SMP-mini connectors. The UFS device is placed directly on the interposer board in a grypper socket. The interposer can be soldered directly into the customer system, or you can use a dual grypper socket connection.

The grypper board uses a 66 / 33 resistive divider and provides the “66” side to the Host / DUT. This provides an additional ~ 2 dB of signal for the Host / DUT, compared to a 50 / 50 resistive divider. The “33” side is then amplified and sent to the protocol analyzer. The amplification settings are adjustable.

The Interposer consists of two separate boards joined together, the power and interposer board as in Figure 1.

These boards can be separated and connected via a cable, shown in Figure 2.

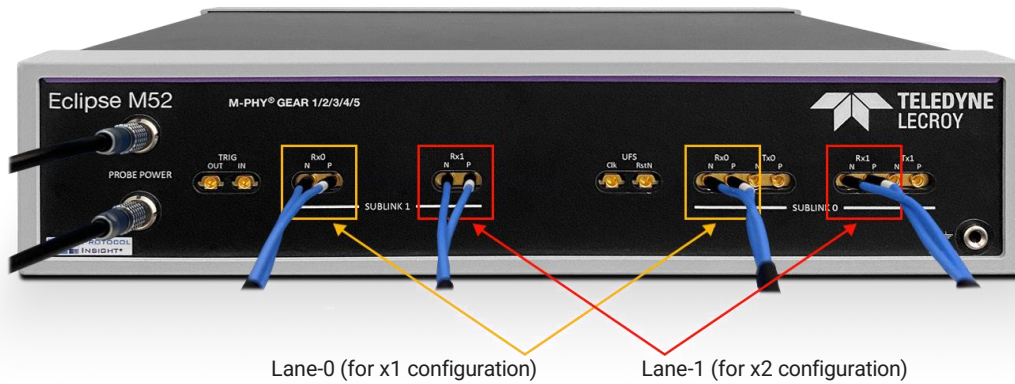


(Figure 1)



(Figure 2)

The power board provides power for the amplification circuitry and provides the control mechanism to adjust the amplification settings.



Eclipse M52
Protocol Analyzer

Setup for a x1 Configuration

In a x1 configuration we expect a host and device single lane configuration

Setup for a x2 Configuration

In a x2 configuration we expect a host and device dual lane configuration.

The diagram to the right shows a diagram illustrating the use of two grypper sockets attached to the interposer board. The target board is shown in green, the interposer board is blue and the grypper sockets are in black. In this configuration the grypper sockets are soldered directly to the interposer board. The grypper sockets then attach to the target board and the UFS device, gripping the solder balls of these two platforms.



Onboard Switch Settings

System Compatibility	
Eclipse M52	✓

Switch State	CONTROL (4 on switch is LSB)	CTLE Bandwidth	Mid-band Compensation	Output Differential Voltage Swing (dB)	CTLE Value (dB @ 8GHz)
0	0000	Low	Enabled	0	-0.8
1	0001	Low	Enabled	0	1.3
2	0010	Recommended	Enabled	0	-0.8
3	0011	Recommended	Enabled	0	1.3
4	0100	Recommended	Enabled	0	5.7
5	0101	Recommended	Enabled	0	7.1
6	0110	Recommended	Enabled	0	10.1
7	0111	Recommended	Enabled	0	14.4
8	1000	Recommended	Enabled	0	17.85
9	1001	Recommended	Disabled	0	1.3
10	1010	Recommended	Disabled	0	5.7
11	1011	Recommended	Disabled	0	7.1
12	1100	Recommended	Enabled	-1.6	-0.8
13	1101	Recommended	Enabled	-1.6	1.3
14	1110	Recommended	Enabled	-6	-0.8
15	1111	Recommended	Enabled	-6	1.3

Ordering Information

Base Hardware Platform

MPHY HS-G5 Interposer

Product Code

MPHY-M52-INTP-X



Local sales offices are located throughout the world.
Visit our website to find the most convenient location.

1-800-5-LeCroy • teledynelecroy.com



TELEDYNE LECROY
Everywhereyoulook™