

Transforms Existing Wiring into a High-Speed Networking System

OVERVIEW

Evaluation Kit

DMI920	Muti-Medium, Multi-Interface IIoT EVK
--------	---------------------------------------

Supporting ICs

88LX5153A	DBB
88LX2741	AFE

FEATURES

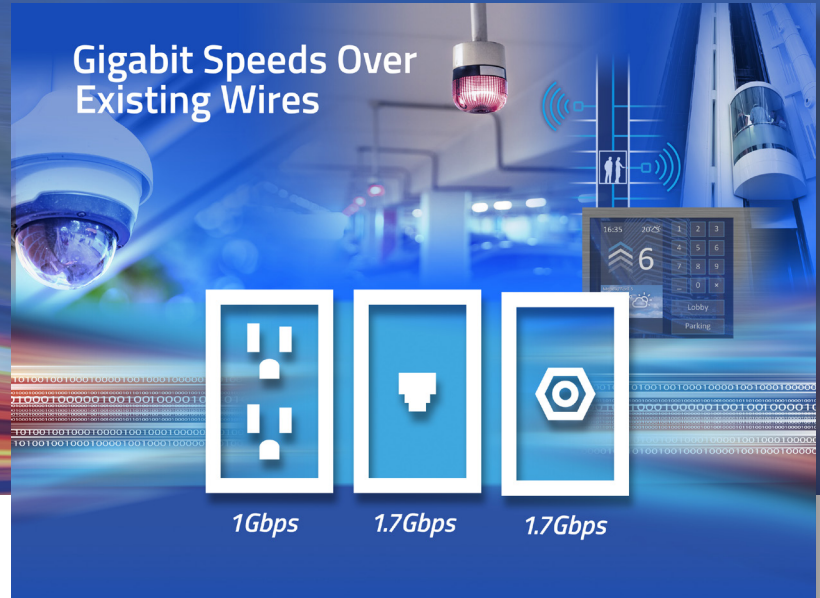
- Evaluation Kit Contents:
 - Two G.hn adapters and accessories
- Multi-medium EVK transmits data over:
 - AC or DC powerlines
 - Twisted pair
 - Coax cable

BENEFITS

- Transports high-speed IP data over new or existing Powerlines, Twisted Pair, or Coax
- G.hn network backbone delivers IP data to local network of Industrial IoT endpoint devices through Ethernet, USB, RS-485, RS-232, etc.

APPLICATIONS

- Smart Buildings
 - Smart Elevator Control, Building Entry/Access Control, Building Security and Surveillance, Smart Parking System Control, Data Backbone
- Smart Cities
 - Security Cameras, Intelligent Street Lights, Smart Fuel Dispenser Systems, Fire Alarm Control Panels, Smart parking
- Broadband Home Networking & Access
 - Gateways, Routers, STBs
- Factory Automation
- Smart Grid and Smart Metering



The MaxLinear G.hn Industrial IoT Networking System provides high-speed networking capabilities over any wired medium, including AC or DC powerlines, phonelines/twisted pair and coax cables. The MaxLinear G.hn Wave-2 platform is the fastest G.hn solution in the industry with gigabit+ network throughput

Performance Summary

Physical Medium	Supported G.hn Profiles	Max Net Throughput (Gbps)	Data Interfaces
Powerline	MIMO 100MHz, SISO 100MHz	1	RGMI (1G), SGMII (1G/2.5G)
Twisted Pair	SISO 200MHz, MIMO 100MHz	1.7	
Coaxial	Coaxial 200MHz	1.7	

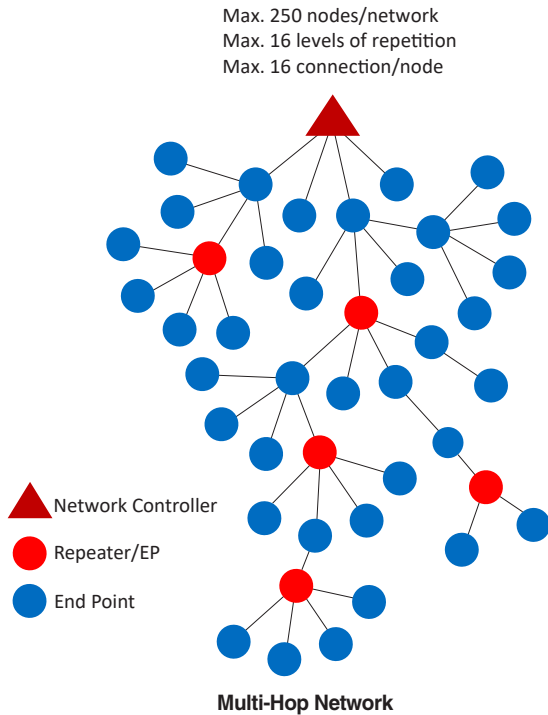


Visit www.maxlinear.com and register for a myMxL account to access G.hn documentation and design tools

G.hn Industrial IoT Networking System

G.hn Spirit Grid Software

G.hn Spirit Grid software supports a large-scale, multi-hop network of up to 250 nodes in a single network domain. Spirit Grid's self-organize-network (SON) feature enables autonomous device installation and configuration, optimal signal path selection, and network self-healing capabilities. It can also auto-configure the client to simultaneously perform the repeating function, which eliminates the need for a dedicated repeater that is typically needed by other broadband powerline technologies.



DMI920 G.hn Industrial IoT EVK

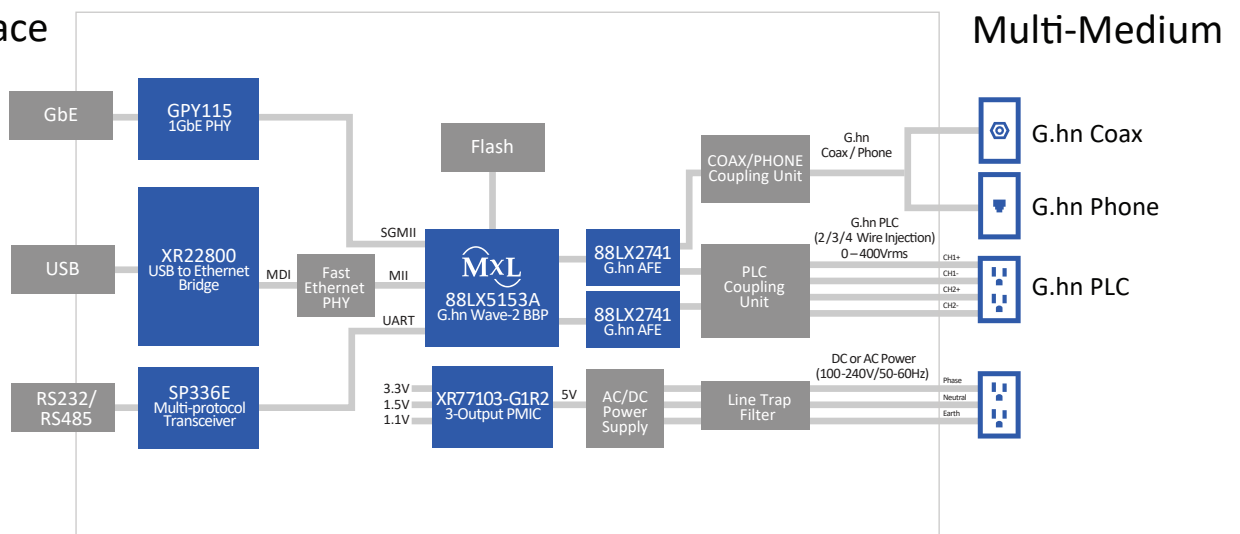
The DMI920 Evaluation Kit is MaxLinear's G.hn industrial IoT multi-medium, multi-interface EVK. It combines the G.hn transceiver solution with MaxLinear's pre-programmed 3-Output PMIC (XR77103-GR12), 1G Ethernet PHY (GPY115), USB to Ethernet Bridge (XR22800), and SP336E multi-protocol transceiver.

This turnkey EVK allows customers to quickly evaluate G.hn over coax, twisted pair, or powerline with various interfaces including Gigabit Ethernet, RS-485, RS232 and USB.



G.hn Industrial IoT EVK Evaluation Kit #DMI920

Multi-Interface



G.hn Industrial IoT Networking System

G.hn Wave-2 Industrial IoT Networking Products

Part Number	Function	Ch.	Physical Medium	Supported G.hn Profiles	Max Net Throughput (Gbps)	Data Interfaces	Ordering Part Number ⁽¹⁾	Temp Range ⁽²⁾ (°C)	Package ⁽¹⁾ (mm)
88LX5153A	Baseband	2	Powerline	MIMO 100MHz, SISO 100MHz	1	RGMI (1G), SGMII (1G/2.5G)	88LX5153A0-BUU2I000	-40 to 85	10 x 10 BGA-186
			Twisted Pair	SISO 200MHz, MIMO 100MHz	1.7				
			Coaxial	Coaxial 200MHz	1.7				
88LX2741	Analog Front End	1	Powerline	MIMO 100MHz, SISO 100MHz	N/A	N/A	88LX2741A0-NYC2I000	-40 to 85	4 x 4 QFN-28
			Twisted Pair	SISO 200MHz MIMO 100MHz	N/A				
			Coaxial	SISO 200MHz	N/A				

1. Visit www.maxlinear.com/88lx5153a or www.maxlinear.com/88lx2741 for most up-to-date Ordering and Environmental Information.

2. Ambient temperature range.

3. Visit www.maxlinear.com/products/connectivity/wired/g-hn for information on additional G.hn products for Home Networking and Broadband applications.

G.hn Wave-2 Industrial IoT Networking Evaluation Kit

Eval Kit	Physical Medium	Baseband Chip Used	Analog Front-End Used	Max Net Throughput	Supported G.hn Profiles	Data Interfaces	Kit Ordering Number ⁽¹⁾	# of Boards in Kit	Temp Range ⁽²⁾ (°C)
DMI920	Powerline (0-400Vrms), Twisted Pair, Coax	88LX5153A	88LX2741 (2x)	1000Mbps	Powerline MIMO 100MHz / SISO 100MHz; Twisted-Pair 200MHz SISO / 100MHz MIMO	1000Base-T	RD-GRID-2DMI920KIT-01	2	0-40

1. Visit www.maxlinear.com/dmi920 for most up-to-date Ordering and Environmental Information.

2. Ambient temperature range.

3. Visit www.maxlinear.com/products/connectivity/wired/g-hn for information on additional G.hn products for Home Networking and Broadband applications.



Login/Register

Visit www.maxlinear.com and register for a myMxL account to access G.hn documentation and design tools



Corporate Headquarters:
 5966 La Place Court
 Suite 100
 Carlsbad, CA 92008
 Tel.: +1 (760) 692-0711
 Fax: +1 (760) 444-8598
www.maxlinear.com

The content and information contained in this document is furnished for informational or general marketing purposes only, is subject to change without notice, and should not be construed as a commitment by MaxLinear, Inc. MaxLinear, Inc. assumes no responsibility or liability for any errors, inaccuracies, or incompleteness that may appear in the informational content contained in this guide.

Reproduction, in part or whole, without the prior written consent of MaxLinear, Inc. is prohibited. MaxLinear, the MaxLinear logo, any MaxLinear trademarks (MxL, Full-Spectrum Capture, FSC, G.now, AirPHY, Puma, and AnyWAN), and the MaxLinear logo on the products sold are all property of MaxLinear, Inc. or one of MaxLinear's subsidiaries in the U.S.A. and other countries. All rights reserved. Other company trademarks and product names appearing herein are the property of their respective owners.

© 2021 MaxLinear, Inc. All rights reserved.