

Ultra High Speed G.hn Powerline to Ethernet Wall-Plug Bridges



G.hn to Ethernet bridges, the next generation home network for distribution of 4K videos, IPTV, multimedia and data across AC power wires in the home.

FEATURES

- Every in-home power outlet is part of the home network
- Optimized for IPTV and multicast systems for video and audio traffic
- Ultra high rate in real environment
- Plug & Play solution - self-install
- Support ITU-T G.hn standards (G.9960/1/2/3/4)
- Coexistence with HomePlug® AV/2
- G.hn MIMO over Powerline - enables usage of Powerline as a multiple input multiple output (MIMO) channel, thus extending coverage, improving the network's immunity to noise and delivering higher throughput

APPLICATIONS

- 4K video, 3D, high definition (HD) and standard definition (SD) in-home video distribution, multi-room DVR
- IPTV applications
- Voice over IP (VoIP)
- Shared broadband internet access
- PC file and application sharing
- Security and surveillance (home monitoring)
- Home health care
- Gaming
- WiFi and Z-Wave® coverage extender

The Sigma Designs G.hn CG5300HEP series includes the CG5321HEPM and the CG5331HEPS G.hn Powerline to Ethernet reference designs. The CG5300HEP bridges are standalone, installable adaptors for tests and evaluation of Sigma's CG5300-G.hn features and performance in real-life environment. The CG5300HEP turnkey reference designs are provided with a full development package to enable fast time-to-market.

The CG5321HEPM and CG5331HEPS support MIMO (multiple input, multiple output) and SISO (single input, single output) G.hn modes respectively. The CG5300HEP can operate over 85 - 265 VAC, 50/60 Hz and are available with different AC plugs and sockets to enable operation in different regions.

POWERING THE NEW DIGITAL HOME:

SET-TOP BOXES

CONSUMER
ELECTRONICS

AV NETWORKS

HOME CONTROL

COMMERCIAL
SYSTEMS

CG5300HEP Series

Ultra High Speed G.hn Powerline to Ethernet Wall-Plug Bridges

BENEFITS OF G.HN

- Self installable even by a novice user, no need for professional installation
- Guaranteed reliable whole home coverage even in homes with thick walls and multiple floors
- Consistent user experience and improved immunity to interference for reliable 4K video
- Enables all consumer electronics products in a home can be part of the same mesh network
- Fast integration and time-to-market enabled by full development package and turnkey reference

CG5300HEP CONTENT

The reference designs include design files and documentation for fast product integration, quick production, and short time to market. The hardware development kit includes design and production files for the CG5300 chipsets platform. The package includes schematics, layout, assembly, bill of materials and design guidelines documentation.

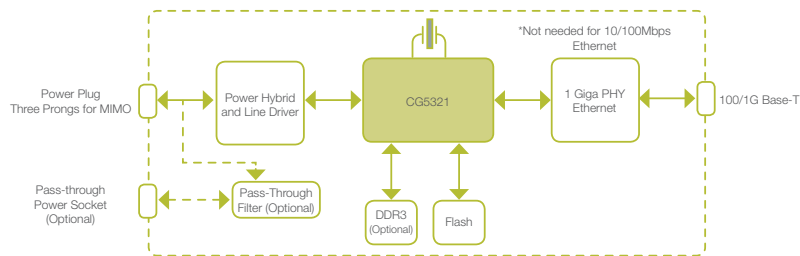
The software development kit enables rapid integration of Sigma Designs's development and diagnostic software into equipment vendor designs.

ORDERING INFORMATION

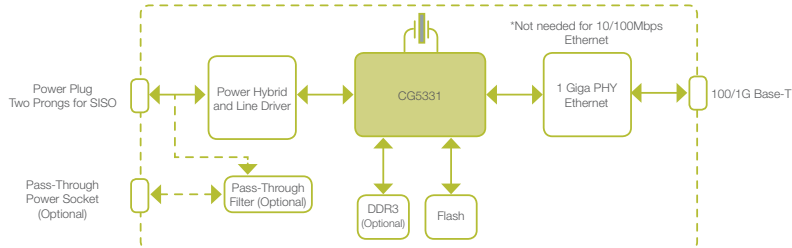
- Reference designs
 - CG5321HEPM Ethernet-over-Power Line MIMO Bridge
 - CG5331HEPS Ethernet-over-Power Line SISO Bridge
 - The bridges are available with AC plugs and sockets for US, Europe Types E and F and ISR regions
- Development package
 - CG5300-HDK Hardware Development Kits
 - CG5300-SDK Software Development Kits
 - G.hn-PTS Production Test Setup

CG5300HEP BLOCK DIAGRAMS

Ethernet Over G.hn Powerline MIMO (CG5321 Based)



Ethernet Over G.hn Powerline SISO Bridge (CG5331 Based)



ABOUT SIGMA DESIGNS

Sigma Designs is a leading provider of system-on-chip (SoC) solutions used to deliver entertainment and control throughout the home:

Media Processing, Smart TV, Video Encoding, Home AV Networking, Video Processing, Home Control

These SoCs are supported with board-level reference designs, sophisticated system software, and technical documentation to form a complete solution for a variety of set-top boxes, smart TVs, consumer electronics, AV network devices, and home control systems.

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