

# CG3310M

## HomePNA® Modem for MDU Endpoints



The CG3310M is a single-chip HomePNA® solution for MDU Endpoints, supporting high data rates, multi-band operation, advanced synchronous MAC, and best of breed QoS.

Many MDU-specific features are included, such as advanced point-to-multipoint MAC operation, privacy between clients, remote configuration of clients according to their Service Level Agreement, user admission control, remote management and diagnostics, and more, making it very attractive to service providers worldwide.

The CG3310M enables service providers to deliver advanced services such as VOD, IPTV, broadband access, and VoIP to residents of MDUs in a speedy, and cost-effective way using the existing in-building coax. Based on HomePNA® v3.1 (ITU-T G.9954), the CG3310M delivers enhanced physical layer transmission for robust operation over the challenging noisy infrastructure typically found in MDUs.

### Benefits

- Enables service providers a fast and easy migration to bi-directional, digital broadband services
- Enables the cost-effective provisioning of advanced Triple-Play services such as IPTV, VOD, VoIP, and Broadband Internet Access
- Creates new revenue opportunities for service providers
- Huge cost savings compared to alternative solutions such as DOCSIS, DSL, and Ethernet cabling
- Speedy deployment - no new wires; uses existing coax wires and splitters, in parallel with existing RF video broadcast services
- Enables self-installation of in-home Endpoints by the consumer

### Chip Features

- Based on Fast EoC™ technology
- Single chip for Endpoint design
- Built-in MII PHY host interfaces
- Built-in 100 Base-T Ethernet MAC
- Internal packet processor and buffer, no need for external processor
- JTAG IEEE 1149.1 test port
- Industrial temperature range

### Powering the new digital home



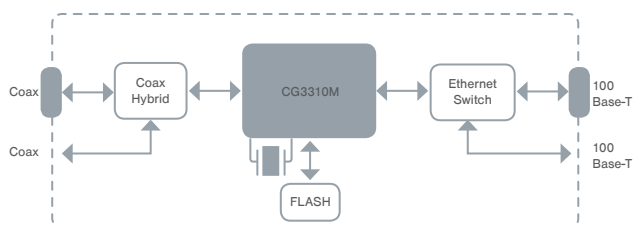
### Network Features

- Robust operation above 73 dB (over 1,000 meters) end-to-end attenuation (cable & splitters)
- 160 Mbps effective data rate per band
- Point-to-multipoint topology; up to 126 Endpoints per Master per band
- Advanced TDMA, CSMA/CA MAC protocol
- Low latency and jitter
- Advanced guaranteed and prioritized QoS
- Efficient support of broadcast, multicast, unicast, and VLAN routing schemes
- Supports CBR, VBR, and best effort data streams
- Supports IPv6 protocol
- Field-upgradeable firmware

### Security Features

- Absolute client to client privacy
- Support AES based encryption
- Advanced device admission & connection control
- Dynamic configuration of clients according to Service Level Agreement (SLA)
- Supports DSLF TR-69
- Local & remote network monitoring and logging tools
- Supports IGMP/MLD snooping and filtering

Typical MDU Endpoint Block Diagram



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