

Coax MDU HomePNA Driver Release Note

Version 2.7.8-4 2008/09/12

1. New Features

	Description
1	Improved Robustness through Multiple Retransmissions. To improve robustness and PER performance multiple retransmissions of packets are now supported. By default, a packet requiring retransmission will be sent several times (more than once).

2. Bugs Fixed

	Description
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3. Known Issues and Limitations

	Description
1	Minimum attenuation required between any two nodes is 8dB
2	v2.7.8 backward compatibility –Packet sent to host more than once Due to support for multiple retransmissions, when working with older versions of the CG3110M or older chip (CG3010M) the last packet in a stream may be sent to the host (by the receiver) more than once.

1. New Features

	Description
1	Downstream and Upstream Unicast PE is limited to be at least 16/2 This prevents the negotiated payload encoding (PE) or PHY rate from dropping to less than 32Mbps. This will protect the network from degraded performance in the presence of a device on a bad communication link. The packet errors will be corrected by the LARQ mechanism
2	The Device automatically recovers from a “two Masters in a network” situation, once one of the Masters is removed.

2. Bugs Fixed

	Description
1	Sometimes, the master could not manage the Rate Negotiation to all EPs, leading to the wrong PE decision.
2	Sometimes, there is a mistake in the PER calculation that lead to the wrong PE decision.
3	When the EP's HOST table overflowed, the EP did not pass Multicast data.
4	The link led does not blink on Tx packets, only on Rx packets.
5	Dynamic config - Master doesn't download configuration to all EPs This bug is more visible when loading a large number of EPs (e.g. 32 EPs).

Version 2.7.5-2 2007/09/25

1. New Features

Following is a list of new features introduced in **Version 2.7.5-2** of the Coax MDU HomePNA driver relative to **Version 2.7.5-0**.

	Description
1	CG3110 support. Coax MDU supports new chip CG3110.

2. Bugs Fixed

	Description
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Version 2.7.5-0 2007/06/11

1. New Features

Following is a list of new features introduced in **Version 2.7.5-0** of the Coax MDU HomePNA driver relative to **Version 2.7.4-0**.

	Description
1	31 EP support. Coax MDU supports up to 31 EPs connected to the Master.

2. Bugs Fixed

	Description
1	MASTER does not drop to minimum Multicast PE. Minimum PE on multicast transmission was not enforced correctly.

1. New Features

Following is a list of new features introduced in **Version 2.7.4-0** of the Coax MDU HomePNA driver relative to **Version 1.7.2**.

	Description
1	Improved EP to EP security. The EP-EP security is done in the physical layer.
2	Dynamic Configuration. The EP configuration can be dynamically managed via the master by the master or by external host. With this feature, you don't need to update EP's driver after modify configuration. This feature must works with CEM-336 system firmware V2.10. It will be available in near future.
3	Enhanced Priority-based QoS support. V2.7.4 supports identification and marking of customized traffic types based on configurable traffic classifier rules and support for priority-based queue management and media access. Priority support is provided for up to 8 priority levels.
4	Support LARQ.

2. Bugs Fixed

	Description
1	MASTER does not drop to minimum Multicast PE. Minimum PE on multicast transmission was not enforced correctly.
2	MxU application limitations. There are no limitations on EP to EP attenuation.

Version 1.7.2 2006/06/15

1. New Features

Following is a list of new features introduced in **Version 1.7.2** of the Coax MDU HomePNA driver relative to **Version 1.6.3**.

	Description
1	Support high band (12~28).

2. Bugs Fixed

	Description
1	Unexpected (self) PER in some multi stream scenarios. In some scenarios involving multiple data streams from multiple sources, PER results achieved were one order or magnitude worse than the expected result. The PER was self inflicted and had a statistical probability of occurring depending on the traffic mix, rates and packet sizes. This bug caused a PER result of approx. 1e-6 for a 12-hour traffic scenario where of PER of better than 1e-7 was expected.
2	Improved robustness in noisy environments. To reduce the number of potential packet errors/loss that may occur in such environments.
3	Handling of VLAN-tagged control messages. VLAN-tagged control messages were not handled correctly and were not forwarded onto the target device. This resulted in the failure of diagnostic in an environment containing a VLAN enabled switch.

