Amazon SE

Release Notes for ADSL Annex B Firmware

Firmware 3.1.1.1.0.2

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1   General notes

This document describes features and known issues of the Amazon SE firmware release 3.1.1.1.0.2 for ADSL Annex B functionality. Tests were performed with SW ECOS V2.2.1

1.1   High level ADSL feature overview

- ADSL, ADSL2 and ADSL2+ framing
- L2 power mode
- EOC support
- DELT support
- Annex M
- Annex J
- Enhanced framing allowing INP values that are not a power of 2
- Auto SRA

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1.2 New features/changes (with respect to Danube FW version 2.1.1.13.0.2, FS1 release)

Features

- Enable DEC-adaptation in showtime
- Work with DPBO cabinet application profiles

Performance related

- RX windowing is used by default to mitigate the effect of RFI disturbers

Interoperability fixes

- Enhanced US performance against Broadcom based Ericsson DSLAM
- Enhanced US performance against ADI930 based DSLAMs
- Enhanced US performance against Geminax based DSLAMs (Geminax FW 7.12 or older)
- Enhanced DS performance against Geminax on short loops
- Improved mode selection in G:HS against Conexant based DSLAMs
- Improved DS bitswaps in BIS and 2+ mode against Centillium based DSLAMs
- Improved DS bitswaps in BIS and 2+ mode against Conexant based DSLAMs
- Improved CRC immunity against Conexant based DSLAMs on short loops in ADSl2+
- Workaround G.HS multimode bug in Broadcom based DSLAMs

Bug fixes

- Improved bitloading to allow 32/32kbps fixed rate configurations
- Corrected 1s counter
- Occasional HEC errors which appeared under certain framing constellations are fixed
- Bug which caused the RS-decoder to work suboptimal under certain conditions is fixed

Further changes

- no changes with respect to Danube FW 2.1.1.13.0.2

1.3 Not implemented or known issues

- Auto SRAs do not respect INP and latency constraints. They do respect Min/Max rates and MSGmin constraints, meaning that an Auto SRA will not be requested if it would cause these constraints to be violated.

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- To meet a MAXNOMATPds constraint issued by the CO, CPE will only reduce NOMATP by a maximum of 2.5dB (ADSL2/2+ only).
- ACTATPus reported to CO in HDLC response is not updated during showtime.
- ADSL1 bitswap is enabled only for following CO vendor IDs: Alcatel, Broadcom, Infineon, TI, Globespan.
- ATTNDR calculation does not reflect up-to-date formula in standard (minor difference).
- Rx HDLC message segmentation is not supported.
- MAXNOMATPds requested by the CO is exceeded by up to 0,05dBm in rare cases.

2 Add-on information

2.1 Version numbering

Table 1 **Version information**

Field	Contents
VER_Major	3
VER_Minor	1
VER_Build	1.1
REL	0
VER_Applic	2 (Annex B)