

Zhone Firmware/Software/Hardware Release Notes

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Release Number: 02.05.26	Date: May 15, 2011			
Release Type: GA Release	Country Type: N/A			
Release History	Affected Product Models			
Release	Type	Date	Model	Priority
BS2600_ALL_020526	Released	May 15, 2011	26xx / 42xx	Minor
BS2600_ALL_020522	Released	April 30, 2010	26xx / 42xx	Minor
BS2600_ALL_020521	Released	January 27, 2010	26xx / 42xx	Minor
BS2600_ALL_020520	Released	August 14, 2009	26xx / 42xx	Minor
BS2600_ALL_020517	Released	April 30, 2009	26xx / 42xx	Minor
BS2600_ALL_020516	Released	March 16, 2009	26xx / 42xx	Minor
BS2600_ALL_020515	Released	July 15, 2008	26xx / 42xx	Major
BS2600_ALL_020513	Released	June 12, 2008	26xx / 42xx	Minor
BS2600_ALL_020511	Released	November 12, 2007	26xx / 42xx	Minor
BS2600_ALL_020507	Released	July 25, 2007	26xx / 42xx	Minor
BS2600_ALL_020505	Released	May 17, 2007	26xx / 42xx	Minor
BS2600_ALL_020501	Released	January 23, 2007	26xx / 42xx	Minor

The 02.05.26 load contains as part of the build a new Infineon driver. This load resolves many open issues and concerns regarding the operational stability of SHDSL circuits.

Resolved Customer Issues in 02.05.26:

Issue Identifier	Issue Description
DSLAM-13965	Add warning on firmware switch: “Don’t power cycle unit.” When switching to the other firmware bank, the unit will now advise the customer to not power cycle the unit.
DSLAM-13968	IGMP default value different then help menu. Make the help menu and the default value match.
DSLAM-13989 DSLAM-13996 DSLAM-14261 DSLAM-15522 TR 56621 TR 86164	Fix Attainable rate display. The attainable rate display did not accurately reflect the actual values.
DSLAM-13992	Config / Multicast help refers to 2.3.7 as current release. Update the current release.
DSLAM-14044 TR 66290 DSLAM-14089	Prevent VLAN creation if it already exists When the user creates a new VLAN, ensure that the same VLAN ID is already created on the DSLAM.
DSLAM-14109	Modify comment display after "show igmp-snooping" command
DSLAM-15520	Line Probing default "Enabled" when Create New Profile Now a new profile will have line probing default set to enable.
DSLAM-15523	Ports 9-12 and 21-24 "Disabled" after reset to factory and restart DSLAM After a set to default, at times ports 9-12 and 21-24 were permanently disabled.
DSLAM-15524	SHDSL related "Help" updates Fix various help screen verbiage.
DSLAM-15525	VLAN screen should indicate which eth port is uplink Make the VLAN screen display the active ethernet port.
TR 80293 TR 59400 DSLAM-15523 DSLAM-13981 DSLAM-14059	Factory default issues When setting the 1U DSLAM to default, not all values were appropriately cleared.
TR 63126 DSLAM-14051	Reboot unit if the IP address is changed. If the IP address of the 1U DSLAM is changed, reboot the unit.
TR 84687 TR78481	SHDSL ports lose sync after 49 days, 17 hours and change. SHDSL ports lose sync at 49 days and 17 hours of uptime and then resync on their own.

Model to Software Level Support – 26xx/42xx.

The following table lists the models and associated loads for the 2600 and 4200 family. All but the ReachDSL units have been Manufacturer Discontinued.

Model	Software		Model	Software		Model	Software	
2611 – ReachDSL GigE uplink								
2611-A2-420	2.05.26		2611-A2-420-0HY	2.05.23		2611-A2-420-0JP	2.05.15	
2611-A2-424	2.05.26		2611-A2-425	2.05.26		2611-A2-430	2.05.26	
2611-A2-430-0HY	2.05.23		2611-A2-433	2.05.26		2611-A2-434	2.05.26	
2611-A2-435	2.05.26							
2621 – ADSL2+ GigE uplink								
2621-A3-420	2.05.26		2621-A3-423	2.05.26		2621-A3-423-0HY	2.05.23	
2621-A3-424	2.05.26		2621-A3-425	2.05.26		2621-A3-430	2.05.26	
2621-A3-433	2.05.26		2621-A3-433-0HY	2.05.23		2621-A3-434	2.05.26	
2621-A3-435	2.05.26		2621-A3-430-0MT	2.04.25				
2631 – ADSL2+ Annex B GigE uplink								
2631-A3-425	2.05.26		2631-A3-435	2.05.26				
Model	Software		Model	Software		Model	Software	
2671 – SHDSL GigE uplink								
2671-A2-420	2.05.26		2671-A2-420-0HY	2.05.23		2671-A2-424	2.05.26	
2671-A2-425	2.05.26							
2674 – SHDSL T1/E1 MLPPP								
2674-A1-420	2.05.26							
Model	Software		Model	Software		Model	Software	
4211 – ReachDSL ATM T1								
4211-A1-530	2.03.06							
4213 – ReachDSL T1/E1 IMA								
4213-A1-522	2.03.06		4213-A1-530	2.03.06		4213-A1-532	2.03.06	
4214 – ReachDSL T1/E1 MLPPP								
4214-A1-530	2.05.26		4214-A1-531	2.05.26				
4219 – ReachDSL GigE uplink								
4219-A2-520	2.05.26		4219-A2-530	2.05.26		4219-A2-531	2.05.26	
4223 – ADSL T1/E1 IMA								
4223-A1-530	2.03.06		4223-A1-530-0VC	2.03.06		4223-A1-532	2.03.06	
4224 – ADSL2+ T1/E1 MLPPP								
4224-A1-522	2.05.26		4224-A1-530	2.05.26		4224-A1-531	2.05.26	
4229 – ADSL2+ GigE uplink								
4229-A3-520	2.05.26		4229-A3-520-0HY	2.05.23		4229-A3-530	2.05.26	
4229-A3-530-0MT	2.04.25		4229-A3-531	2.05.26				
4239 – ADSL2+ Annex B GigE uplink								
4239-A3-520	2.05.26		4239-A3-532	2.05.26				
4279 – SHDSL GigE uplink								
4279-A2-520	2.05.26		4279-A2-520-0HY	2.05.23				

Release Structure and Identification

Filename	Target Destination
BS2600_REVA_020526.bin	Binary for units with Wintegra Revision A
BS2600_ALL_020526bin	Management Download – combined boot and application load.

Note: DSLAMs running firmware versions **prior to 2.1.0** will need to be upgraded with file **BS2600_REVA_020526bin** first before upgrading to later builds. Otherwise the Download will fail.

DSLAMs with firmware **2.1.0 or later** use file **BS2600_ALL_020526bin**

This build may upgrade the unit's bootrom. Customers should not power cycle the unit while a firmware switch is in progress. The bootrom update may take 5-10 minutes.

Unresolved Customer Issues

None.

System Co-Requirements in 02.05.26

Model	Description	Incorporated Code Base
4214-A1-xxx 4219-A2-xxx	24 Port ReachDSL	Reach DSP Release code 02040
2674-A1-xxx 4279-A2-xxx	24 Port SHDSLbis Annex A	Infineon DSP Release 0.9.3.1
4224-A1-xxx 4229-A3-xxx	24 Port ADSLS2+ Annex A	Broadcom DSP Release 06.04.08
4239-A3-xxx	24 Port ADSLS2+ Annex B	Broadcom DSP Release 06.04.08

Operational Considerations

Filtering: The 1U DSLAM supports Filtering, but this feature was compromised in the 2.5.0 release. The most common consumer filtering requirement has been for preventing up-bound DHCP offers. This feature (DHCP filtering) was added to the 1U DSLAM on a per-port basis in release 2.5.22. Should filtering be required, DHCP filtering is the only supported option. Zhone currently has no plans to revive the filtering option other than this per-port DHCP filtering. See the figure on the next page for details, and refer to the 2.5.22 release notes for feature information.

The screenshot shows the Zhone 4200IP web interface. The left sidebar contains a navigation menu with categories: Diagnostics, Status, System, and Configuration. Under Configuration, there are links for Bridge, Filters, Protocol, Rules, DHCP Snooping Rules, IGMP Rules, Profiles, Bind, Priority Matrix, EtherType, Rule, Filter, Binding, Interface, Console, DSL, General, Port, Line Profile, Alarm Profile, Traffic Profile, PSD Profile, SELT Options, Bonding Groups, Bonding Alarm, Profile, Ethernet, IP, Proxy ARP, Management, and Access List. The main content area is titled 'Configuration / Interface / DSL' and contains the text 'Enter the port number or name.' Below this is a 'Port' field with the value '24' and a 'Select' button. To the right of the 'Port' field is a 'Related' link. The main configuration area lists various settings for the DSL interface. The 'DHCP Filtering' setting is highlighted with a red rectangle and is set to 'Enabled'. Other settings include Line Circuit Name, Line Code (MultiMode), DSL Line Profile Name (DEFVAL), DSL Alarm Profile Name (DEFVAL), ADSL2 PSD Profile Name (DEFVAL_ADSL2), ADSL2+ PSD Profile Name (DEFVAL_ADSL2PLUS), Power Management (Disabled), Power Management State Enabling (Both), L0 Time (seconds) (255), L2 Time (seconds) (60), L2 ATPR (dB) (1), L2 ATPRT (dB) (6), Cabinet Mode TX Filter ID (0), Link Up Down Trap (Enabled), and Port Status (Enabled). An 'Apply' button is at the bottom.

Setting	Value	Range
Line Circuit Name		
Line Code	MultiMode	
DSL Line Profile Name	DEFVAL	
DSL Alarm Profile Name	DEFVAL	
ADSL2 PSD Profile Name	DEFVAL_ADSL2	
ADSL2+ PSD Profile Name	DEFVAL_ADSL2PLUS	
Power Management	Disabled	
Power Management State Enabling	Both	
L0 Time (seconds)	255	0 - 255
L2 Time (seconds)	60	0 - 255
L2 ATPR (dB)	1	0 - 15
L2 ATPRT (dB)	6	0 - 15
Cabinet Mode TX Filter ID	0	0 - 15
DHCP Filtering	Enabled	
Link Up Down Trap	Enabled	
Port Status	Enabled	

Figure 1: DHCP line filtering

6-Wire SHDSL:

Currently the 1U DSLAM supports 2, 4, 6 and 8 wire SHDSL. Although all of these settings are supported, the 6-wire SHDSL requires that the configured bandwidth must be one of the 6-Wire rates that is 7128 Kbps or greater from the “Valid SHDSL Rates” chart in the “Configuration - Line Profiles” help (See below). The modem will not sync to the DSLAM when 6-wire values less than 7128 Kbps are configured. The 2, 4 and 8-wire settings work correctly at all values listed in the “Valid SHDSL Rates” chart.

Valid SHDSL Rates

For Annex A or B:

2-Wire: 200 - 2312 in increments of 64 kbps
4-Wire: 400 - 4624 in increments of 128 kbps
6-Wire: 600 - 6936 in increments of 192 kbps
8-Wire: 800 - 9248 in increments of 256 kbps

For Annex F or G and Extended Rate Mode = 4104:

2-Wire: 200 - 4104 in increments of 64 kbps
4-Wire: 400 - 8208 in increments of 128 kbps
6-Wire: 600 - 12312 in increments of 192 kbps
8-Wire: 800 - 16416 in increments of 256 kbps

For Annex F or G and Extended Rate Mode = 5704:

2-Wire: 200 - 5704 in increments of 64 kbps
4-Wire: 400 - 11408 in increments of 128 kbps
6-Wire: 600 - 17112 in increments of 192 kbps
8-Wire: 800 - 22816 in increments of 256 kbps