

VMG1312-B10D

Generic

Firmware Release Note

V5.13(AAXA.7)C0

Date: Dec 20, 2017
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Revision History

Date	Release	Author	Description
2015/01/05	1.0	David Su	V5.11(AAXA.0)b1 FW release
2015/02/03	1.1	David Su	V5.11(AAXA.0)b2 FW release
2015/03/23	1.2	David Su	V5.11(AAXA.0)b3 FW release
2015/04/28	1.3	David Su	V5.11(AAXA.0)b4 FW release
2015/04/29	1.4	David Su	V5.11(AAXA.0)b5 FW release
2015/05/22	1.5	David Su	V5.11(AAXA.0)b6 FW release
2015/06/12	1.6	David Su	V5.11(AAXA.0)b7 FW release
2015/08/03	1.7	David Su	V5.11(AAXA.0)b8 FW release
2015/08/07	1.8	David Su	V5.11(AAXA.0)C0 FW release
2015/08/12	1.9	David Su	V5.11(AAXA.1)b1 FW release
2015/11/13	1.10	David Su	V5.11(AAXA.1)b2 FW release
2015/12/02	1.11	David Su	V5.11(AAXA.1)b3 FW release
2015/12/14	1.12	David Su	V5.11(AAXA.1)b4 FW release
2015/12/24	1.13	David Su	V5.11(AAXA.1)b5 FW release
2016/01/05	1.14	David Su	V5.11(AAXA.1)C0 FW release
2016/03/14	1.15	Nick Lu	V5.11(AAXA.3)b1 FW release
2016/04/20	1.16	ChingWen.Huang	V5.11(AAXA.3)b2 FW release
2016/05/05	1.17	ChingWen Huang	V5.11(AAXA.3)b3 FW release
2016/05/30	1.18	ChingWen Huang	V5.11(AAXA.3)b4 FW release
2016/06/06	1.19	ChingWen Huang	V5.11(AAXA.3)b5 FW release
2016/06/08	1.20	ChingWen Huang	V5.11(AAXA.3)C0 FW release
2016/07/15	1.21	ChingWen Huang	V5.11(AAXA.4)b1 FW release
2016/08/17	1.22	Howard Chen	V5.11(AAXA.4)b2 FW release
2016/09/19	1.23	Howard Chen	V5.11(AAXA.4)b3 FW release

2016/09/23	1.24	Howard Chen	V5.11(AAXA.4)b4 FW release
2016/10/12	1.25	Howard Chen	V5.11(AAXA.4)b5 FW release
2016/10/19	1.26	Howard Chen	V5.11(AAXA.4)C0 FW release
2016/11/04	1.27	Howard Chen	V5.11(AAXA.5)b1 FW release
2016/12/16	1.28	D. Wolf Huang	V5.13(AAXA.5)b2 FW release
2016/12/22	1.29	D. Wolf Huang	V5.13(AAXA.5)b3 FW release
2017/01/25	1.30	D. Wolf Huang	V5.13(AAXA.5)b4 FW release
2017/03/10	1.31	Ryan Yeh	V5.13(AAXA.5)b5 FW release
2017/04/14	1.32	Ryan Yeh	V5.13(AAXA.5)b6 FW release
2017/04/20	1.33	Ryan Yeh	V5.13(AAXA.5)C0 FW release
2017/05/17	1.34	Ryan Yeh	V5.13(AAXA.5)H0 FW release
2017/06/23	1.35	Ryan Yeh	V5.13(AAXA.6)b1_H0 FW release
2017/08/10	1.36	Ryan Yeh	V5.13(AAXA.6)b2_G0 FW release
2017/09/08	2.1	Ryan Yeh	V5.13(AAXA.7)b1 FW release
2017/10/27	2.2	Ryan Yeh	V5.13(AAXA.7)b2 FW release
2017/11/24	2.3	Ryan Yeh	V5.13(AAXA.7)b3 FW release
2017/12/15	2.4	Ryan Yeh	V5.13(AAXA.7)b4 FW release
2017/12/20	2.5	Ryan Yeh	V5.13(AAXA.7)C0 FW release

VMG1312-B10D Generic V5.13(AAXA.7)C0 Release Note

Date: Dec 20, 2017

Supported Platforms:

Zyxel VMG1312-B10D

Versions:

Bootbase version: V1.60 | 09/08/2017 11:29:52

Firmware version : V5.13(AAXA.7)C0

Kernel version: 3.4.11

DSL modem code version: A2pvl042r

DSL driver version: d26r

WLAN code version: 7.14.164.303.cpe4.16L05.0-kdb

3G WWAN package version: 1.16

Notes:

Default Settings in Firmware

- Refer to the *.rom in the firmware release package.
- Refer to the *config and *predef for human readable default configuration.
- *config defines the default value of writable parameters, *predef defines the default value of read only parameters.
- Please use the website <http://jsoneditoronline.org/> to open the *.config and *predef files.

Public Domain Software Announcements

Open Source Used	Version	From (Source)	Licensing Term	Modified / Used
MIPS Linux Kernel	3.4.11	http://www.linux-mips.org	GPL	Modified
updatedd	2.6	http://www.philipp-benner.de/updatedd/	GPL	Used
Bridge-Utils	1.5	http://bridge.sourceforge.net	GPL	Used
BusyBox	1.20.1	http://www.busybox.net/	GPL	Modified
ebtables	2.0.10-4	http://ebtables.sourceforge.net	GPL	Modified
pure-ftpd	1.0.30	http://pureftpd.org	BSD	Modified
iproute2	2-2.6.33	http://repository.timesys.com/buildsources/i/iproute2/	GPL	Modified
iptables	1.4.16.3	http://www.netfilter.org	GPL	Modified
udhcp	0.9.8	http://udhcp.busybox.net/	GPL	Modified
zebra	0.93a	http://www.zebra.org/	GPL	Used
ppp	2.4.3	http://www.roaringpenguin.com/pppoe	GPL/BSD	Modified
dropbear	0.55	http://matt.ucc.asn.au/dropbear/dropbear.html	MIT	Modified
openssl	1.0.1r	http://www.openssl.org	Openssl (BSD-style)	Modified
radvd	1.8	http://www.litech.org/radvd/	BSD	Used
ntfs-3g	2013.1.13	http://ntfs-3g.org	GPL	Used
WIDE-DHCPv6	20080615	http://wide-dhcpv6.sourceforge.net/	BSD	Modified
usb-modeswitch	2.1.0	http://www.draisberghof.de/usb_modeswitch/	GPL	Used
libusb	1.0.9	http://www.libusb.org/	LGPL 2.1	Used
samba	3.0.37	http://www.samba.org/samba/	GPL	Modified
dnsmasq	2.67	http://www.thekelleys.org.uk/dnsmasq/doc.html	GPL	Modified
ez-ipupdate	3.0.11b8	http://ez-ipupdate.com/	GPL	Used
libpcap	1.1.1	www.tcpdump.org	BSD	Used
expat	1.95.8	http://expat.sourceforge.net/	OTHERS	Used
tcpdump	4.2.1	http://www.tcpdump.org/	BSD	Used
eventlog	0.2.10	<a href="http://git.balabit.hu/?p=bazsi/eventlog-1.0.git;a=su
mmary">http://git.balabit.hu/?p=bazsi/eventlog-1.0.git;a=su mary	BSD	Used
glib	2.37.7	http://www.gtk.org/	GPL	Used
gettext	0.16	http://www.gnu.org/software/gettext/	GPL	Used

libiconv	1.11.1	http://www.gnu.org/software/libiconv/	LGPL	Modified
libffi	3.0.11	http://pkgs.fedoraproject.org/repo/pkgs/libffi/libffi-3.0.11.tar.gz/	GPL	Used
libedit	20080712-2.11	http://pkgs.fedoraproject.org/repo/pkgs/libedit/libedit-20080712-2.11.tar.gz/	GPL	Modified
libnftnl	1.0.0	http://www.netfilter.org/projects/libnetfilter_queue/	GPL	Used
libusb	1.0.9	http://libusb.wiki.sourceforge.net/	LGPL 2.1	Used
libqmi	1.8.0	http://www.freedesktop.org/wiki/Software/libqmi	GPLv3	Used
readline	6.2	http://cnswww.cns.cwru.edu/php/chet/readline/rltop.html	GPL	Used
popt	1.7	http://rpm5.org/files/popt/	MIT	Modified
libnetfilter_queue	1.0.0	http://www.netfilter.org/projects/libnetfilter_queue/	GPL	Used
logrotate	3.7.1	https://launchpad.net/ubuntu/hardy/i386/logrotate/	GPL	Modified
ntpclient	2007_365	http://doolittle.icarus.com/ntpclient/	GPLv2	Modified
net-snmp	5.7.2	http://www.net-snmp.org/	GPL/BSD	Modified
syslog-ng	2.0.10	http://www.balabit.com/network-security/syslog-ng/	GPL/LGPL	Used
libtool	2.4	http://www.gnu.org/software/libtool/	GPL	Used
ncurses	5.7	http://ftp.gnu.org/pub/gnu/ncurses/	MIT	Modified
json-c	0.9	https://github.com/json-c/json-c/downloads	MIT	Modified
clinkc	2.4	http://sourceforge.net/projects/clinkc/	BSD	Modified
sqlite	3.6.23.1	http://www.sqlite.org/	Public Domain License	Used

External Information:

Known issues

1. If downgrade FW from V5.13 to V5.11, manually factory reset is necessary.

Modifications in V5.13(AAXA.7)C0

Based on V5.13(AAXA.7)b4 to release V5.13(AAXA.7)C0

Modifications in V5.13(AAXA.7)b4

[Bug Fix]

1. [System] Downgrade FW to previous FCS version will cause account password empty.

Modifications in V5.13(AAXA.7)b3

[Bug Fix]

1. [WAN] IPv6 only of IPoE mode, the status of wan information doesn't show normal.
2. [WAN] In IPv6 only mode, disconnect DHCPv6 server, internet's LED still display green and Status page still show WAN information.
3. [WAN] Change WAN from Static IPv6 DNS+Static IPv6 address to Dynamic IPv6 , WAN information on Status page would be empty.
4. [eITS #170900177] Missing DNSv6 when M/O flag is 1/0.
5. [GUI] Warm message display "ADD RDM_OID_WLAN_SCHEDULER FAIL" when create max wlan scheduler rule.
6. [LAN] After config IPv6 Link Local Address by Manual, check GUI status page still keep EUI64 address.
7. [WAN] Internet LED behavior is wrong when setting different mode.
8. [3G WAN] Plug in the 3G dongle and get IP, but Cellular Status information still be empty on Status page.
9. [DDNS] Result of DDNS is wrong.
10. [DDNS] Sometimes, Change DDNS provider to dtdns will occur hang on problem.
11. [eits#171000970][System] user backup and upload config several

- times then login failed.
12. [GUI][Interface Group] Cannot support two or more MAC Address in Filter criteria.
 13. [eits #171100463][TR-069] Wireless process issue.
 14. [Security] Busybox vulnerabilities.
 15. [GUI] Change cellular backup parameter Authentication from "Auto" to "PAP" cannot work.

Modifications in V5.13(AAXA.7)b2

[Feature Modification]

1. [eITS #170200525] Auto-sensing functionality required between PPPoE and IPoE for EtherWAN interface.
2. Support user defined service provider for DyDNS.
3. Security enhancement.
4. [eITS #170800789] Configurable to show/hide PPP Password unmask option.

[Bug Fix]

1. [Security] Dnsmasq multiple vulnerability.
2. [GUI] Under IE 11 browser, GUI will keep in loading in Remote MGMT page.
3. [GUI] In System Monitor> Log > Security Log, GUI display incorrect message for MAC filter.

Modifications in V5.13(AAXA.7)b1

[Feature Modification]

1. [eITS #170100670] allow port forwarding rule to be from any WAN
2. [eITS #170300570] Enhance OPAL Privilege feature
3. [eITS #170600099] Add FTP in the SP Domain management services
4. Support CLI interface
5. WiFi scheduler
6. [eITS #170600405] Support up to 32 static DHCP rules
7. Web UI speed improvement
 - 4 secs for Network Map page with 2 devices connected
 - 4 secs for Status page
8. SNMP disabled by default
9. Remove TKIP by default

10. Enable PPTP/IPSEC/RSTP ALG by default
11. Enhance the Account privileges
12. Enhance the encryption algorithm of password
 - Protect account password by hash algorithm sha512.

13. Security enhancement

[Bug Fix]

1. [eITS #170400151] Email Notification when using eth dongle
2. [eITS #170700970] Unable to Delete/Edit all NAT rules
3. [eITS #170700967] GUI inaccessible when using Microsoft Edge web browser
4. [eITS #170700842] PPPoE recovery issue

Modifications in V5.13(AAXA.6)b2_G0

Based on V5.13(AAXA.6)b1_H0 to release V5.13(AAXA.6)b2_G0

[Bug Fix]

1. [eITS #170500609] IPTV does not work.
2. [eITS #170500664] Default route is missing.
3. [eITS #170700434] The LAN client cannot have internet access.
4. [eITS #170800007] Webgui cannot be accessed.
5. [eITS #170800005] No PPP echo reply.
6. [eITS #170400309] IPTV and TR069 will be block if modem sends wrong PPPoE username/password for 1 hour.

Modifications in V5.13(AAXA.6)b1_H0

Based on V5.13(AAXA.5)H0 to release V5.13(AAXA.6)b1_H0

[Bug Fix]

1. [eITS #170500870] TR069_Mutual_SSL_Fail.
2. Incorrect LED behavior when multiple WAN ports connected.
3. Default setting change:
 - Network Setting -> Broadband -> Ethernet WAN --> Active: modified as "Disable".

Modifications in V5.13(AAXA.5)H0

Based on V5.13(AAXA.5)C0 to release V5.13(AAXA.5)H0

Modifications in V5.13(AAXA.5)C0

Based on V5.13(AAXA.5)b6 to release V5.13(AAXA.5)C0

Modifications in V5.13(AAXA.5)b6

Based on V5.13(AAXA.5)b5 to release V5.13(AAXA.5)b6

[Bug Fix]

1. [eITS #170400184] WAN interface of Interface grouping will be disappeared.

Modifications in V5.13(AAXA.5)b5

Based on V5.13(AAXA.5)b4 to release V5.13(AAXA.5)b5

[Feature Modification]

1. [Express tool] Express tool status LED behavior fine-tuning.
2. [Security] Enhance prevention of DDoS attack.

[Bug Fix]

1. [eITS #161000357][WWAN] WAH1004 issue.
2. [eITS #161100930] Due TR069 exploit the Zyxel reserved port 7547 should be included in the management services.
3. [eITS #170100545][GUI] Cannot set MTU to 1500 in routed PPPoE mode on AAXA5b3.
4. [eITS #170200231] WPS "Error" after abort process.
5. [eITS #170200338] remote DoS vulnerability.
6. [eITS #170200517][GUI] Visual issue when WWAN is UP when using any RNDIS dongle.

Modifications in V5.13(AAXA.5)b4

1. Based on V5.13(AAXA.5)b3 to release V5.13(AAXA.5)b4

[Feature Modification]

1. [eITS #161100930] Due TR069 exploit the Zyxel reserved port 7547 should be included in the management services.
2. Support DHCP Option43 to Upgrade Firmware.

[BUGFIX]

1. [eITS #160600888] VMG1312-B10D_Wireless clients won't be able to (re-)connect to SSIDs after some time when Guest SSID is enabled.

2. [eITS #161200714] [VMG1312B10D] PADI will be send immediately after PADT send before device starting to reboot.
3. [eITS #161100864] VMG1312-B10D_Unable to complete a SNMP Walk from LAN & WAN side.
4. [eITS #170100223] VMG1312-B10D_WWAN connection does not come UP after bootup when using RNDIS dongles.
5. [eITS #170100545] Cannot set MTU to 1500 in routed PPPoE mode on AAXA5b3.

Modifications in V5.13(AAXA.5)b3

1. Based on V5.13(AAXA.5)b2 to release V5.13(AAXA.5)b3
[Feature Modification]
 1. Enhance throughput
- [BUGFIX]
 1. [eITS #161200042] When using serial dongle, WAN traffic status Tx/Rx remains to zero bytes although WWAN connection is up with traffic.
 2. [eITS #161200037] ZTE K4505-Z dongle manufacturer name is not correctly displayed in GUI Cellular Statistics page.
 3. [eITS #161200087] Static DHCP rule created from Network Map Host Info doesn't work.
 4. [eITS #160601359] GUI not displayed correctly in different browsers

Modifications in V5.13(AAXA.5)b2

1. Based on V5.11(AAXA.5)b1 to release V5.13(AAXA.5)b2
[Feature Modification]
 1. [eITS #160400107] Add ETHWAN/DSL control priority parameter.
 2. [eITS #160800506] Traceroute should show the trace progress and inform when the trace is completed
 3. [eITS #160900219] Add WAN option in Quick Start Wizard.
 4. [eITS #161000487] Support uptime Linux command.
 5. [eITS #161000993] Support mpstat Linux command.
 6. [eITS #160900913] FDPS support.
 7. [eITS #160800375] Add SP Domain Page.
 8. [eITS #161100459] RIP availability with NAT interfaces.
 9. [eITS #161100373] Cannot setup Port Forwarding on port used by LAN side Remote MGMT

10. New Feature: Airtime Fairness
11. FW ID check mechanism: FCS FW only accept same FWID with suffix.
12. Special Characters mechanism enhancement: Add allow char list.
13. Update modem code to A2pvl042r.
14. Upgrade SDK from 416L02A to 416L05.
15. Update Bootloader to 1.57: Adjust partition layout sequence and support 416L02A upgrade to 416L04/05 smoothly(Downgrade will reset default).
16. TR-181 support configurable switch TR181/TR098

[Bug Fix]

1. [eITS #160601349] xDSL Statistics page not displayed correctly using Mozilla Firefox
2. [eITS #160601351] Unable to view Home Connectivity after enabling the privilege for Administrator account
3. [eITS #160601362] Admin account cannot edit and delete another admin account
4. [eITS #160700358] FTP Firmware V511AAXA Update Intermittent
5. [eITS #160700199] Setup and configure wireless - Not all settings are kept
6. [eITS #160601367] No indication that the CPE is busy to restart when enable/disable EtherWAN and browser is not auto-refreshed to show the login screen
7. [eITS #161000343] IP allowed in Trust Domain of Remote Management cannot reach the CPE by any services enabled when DMZ is enabled
8. [eITS #161000422] Vulnerability Report (129916):User can get password by curl `http://192.168.1.1/./etc/passwd`
9. [eITS #161100860] GUI is stuck on "Loading" screen after clicking on "Apply" button from "USB File Sharing" page

Modifications in V5.11(AAXA.5)b1

1. Based on V5.11(AAXA.4)C0 to release V5.11(AAXA.5)b1
[Feature Modification]

1. Support Ping6 and Trace Route 6.
2. When login to GUI with an administrator account, CPE allow to edit and delete any administrator and user accounts.
3. Port Forwarding Feature Request- Port forwarding showing originating IP
4. Support PPPoE MTU 1500 (RFC4638)
5. Web GUI supports WPA/WPA2-PSK + AES
(Original design: Only support "WPA/WPA2-PSK" + "TKIP+AES".)
6. The MAC filter rules only apply to all interfaces except WiFi and WiFi MAC authentication rules only are applied to WiFi interfaces
7. [eITS #160700187] Wi-fi PSK key parameter change by TR069



wireless_security_sert
_issue.pptx

Modifications in V5.11(AAXA.4)C0

1. Based on V5.11(AAXA.4)b5 to release V5.11(AAXA.4)C0

Modifications in V5.11(AAXA.4)b5

2. Based on V5.11(AAXA.4)b4 to release V5.11(AAXA.4)b5

[Bug Fix]

1. [TR-069] DUT no reply event code and tr69 demon will die , if upgrade firmware via tr69 ipv6 service

Modifications in V5.11(AAXA.4)b4

1. Based on V5.11(AAXA.4)b3 to release V5.11(AAXA.4)b4

[Bug Fix]

1. Brute Force ATO Attack issue

Modifications in V5.11(AAXA.4)b3

1. Based on V5.11(AAXA.4)b2 to release V5.11(AAXA.4)b3

[Feature Modification]

1. Brute Force ATO Attack issue

[Bug Fix]

1. [eITS #160800556] TR-069 XML namespace - same as 160300927
2. [eITS #160700901] VMG1312-B10D_Flash drive interoperability issue

3. [eITS #160800038] VMG1312-B10D_Major discrepancy between Traffic statistics on router and Radius statistics
4. [eITS #160700510] Inconsistency Between GPN and GPV - V511AAXA3C0
5. [eITS #160701009] VMG1312-B10D_Incorrect grammar at Cellular Statistics page
6. [eITS #160700621] VMG1312-B10D_CPU usage remains at 100%
7. [eITS #160700779] 3G connection using Huawei E3131s-2 with Telkom SA SIM drops after a random time and does not come back up again

Modifications in V5.11(AAXA.4)b2

Based on V5.11(AAXA.4)b1 to release V5.11(AAXA.4)b2

[Feature Modification]

1. Samba User Account Design Change

[Bug Fix]

1. [eITS #160400875] DNS server not changing.
2. [eITS #160601356] Unable to change the device icon of a host connected to the CPE without changing the device name.
3. [eITS # 160601379] GUI pages in Mozilla Firefox & Google Chrome differs from IE11 & Microsoft Edge
4. [eITS #160700046] When DSL is UP, the Internet LED turns to red after connecting a serial dongle.
5. [eITS #160700048] When DSL is UP, the Internet LED turns off after connecting/disconnecting a serial dongle
6. [eITS #160700302] Incorrect grammar when adding a duplicate DNS Route entry.
7. [eITS #160700292] Changing LAN IP - Entered settings not kept and jumps to 3rd octet
8. [eITS #160700290] Changing LAN IP - Each octet needs to be highlighted automatically
9. [eITS #160700331] Unable to receive email notification when connection falls back to ADSL from 3G, issue randomly occurs.
10. [eITS #160700189] VMG starts to connect in 3G with PAP auth but VMG changes to CHAP after a while

Modifications in V5.11(AAXA.4)b1

Based on V5.11(AAXA.3)C0 to release V5.11(AAXA.4)b1
[Feature Enhance]

1. [FR15][GUI]Brand 2.0 logo and font implement
2. [eITS #160300109]SNMP support - xDSL diagnostic data
3. [eITS #160300224]TR-069 support Static DHCP
4. [eITS #160400112][eITS #160700241]Support login account can access USB folders via FTP when USB flash is plugged on CPE.
5. [eITS #160400123]Support TCP/UDP protocol on port triggering page
6. [eITS #160400579]TR-069 parameter issue: support InternetGatewayDevice.WANDevice.2.WANDSLInterfaceConfig.Stats.Total.FECErrors
7. [eITS #160400127]Availability of TR-069 Client tab for admin account
8. [eITS #160601013]LandingPage redirection feature
9. [eITS #160600287][eITS #160501181]Support PPP disconnect/connect button and IPoE renew/release button on GUI status page.
10. [eITS #160501972]Fixed ManufacturerOUI
11. [eITS #160600147][eITS #160601310][eITS #160700226]TR-69 parameter for login account.
12. [eITS #160601376]"Enter" key works when changing the Password at the first login
13. [eITS #160700176][eITS #160400103] Support CLI command to modify user account.
14. [eITS #160400396] romfile control to support TR181 and TR098.
Please modify default configuration file to set TR69 data model as TR181 or TR098.
"X_ZYXEL_DataModelSpec":**"TR-098"**,
Or
"X_ZYXEL_DataModelSpec":**"TR-181"**,

- 15.support TMS module, support 8021ah and 8021ag.

[Bug Fix]

1. [eITS #160301442]DefaultConnectionService response is TR-181
2. [eITS #160400221]IGMP snooping does not work within Interface group
3. [eITS #160400876]TR-069 Digest authentication not working
4. [eITS #160501201]supervisor password in OPAL romfile
5. [eITS #160601298]TR069_Unable to set GUI Username and Password
6. [eITS #160601388]Wrong password accepted at telnet and FTP
7. [eITS #160601363]Unable to display the GUI at the first login using certain web browsers
8. [eITS #160601361]Incorrect wording when performing a Reset to Factory Default Settings from web GUI
9. [eITS #160601298]Unable to change the “admin” and “user” passwords by TR-069
10. [eITS #160700240]Unable to import the local certificate file “client.pem” usually used by Nology for TR-069
11. [eITS #160700044]Unable to display the “Status” page informations when an ether dongle is connected to the device USB port
12. ~~[eITS #160700302]Grammar error in message when adding twice the same DNS route~~

Modifications in V5.11(AAXA.3)C0

Based on V5.11(AAXA.3)b5 to release V5.11(AAXA.3)C0

Modifications in V5.11(AAXA.3)b5

Based on V5.11(AAXA.3)b4 to release V5.11(AAXA.3)b5

[Bug Fix]

1. [SVD#16236] After enable all log function then reboot, log page will add out an option.
2. [SVD#19374] PPPoE + DualStack + On Demand_CPE happen repeat call trace then reboot issue.

Modifications in V5.11(AAXA.3)b4

Based on V5.11(AAXA.3)b3 to release V5.11(AAXA.3)b4

[Feature Modification]

1. CPE will reboot when switch Ether WAN Enable/Disable.

[Bug Fix]

1. [eITS #160500114] DHCP server lease time=60 seconds, DHCP Discover retry will cause CPE happen call trace and "udhcpd" daemon will disappear.
2. [eITS #160501247] Admin can not see the TR69 page after enable privilege by supervisor account.

Modifications in V5.11(AAXA.3)b3

Based on V5.11(AAXA.3)b2 to release V5.11(AAXA.3)b3

[Feature Enhancement]

1. [SVD#16470] Using V511AAXA3b3_ExpressBoot tool to upgrade rom-d but it don't need reset to default that after reboot the configure will be changed.

[Bug Fix]

1. [eITS #160100481] Device will not send PADT packet.
2. [SVD #181] [TR-069] SetParameterAttributes - Passive Notifications - Partial Path.
3. [SVD #454] CPE using domain name connect to TR-069 server, check CPE TR-069 packets, but the "HOST" show IP Address.
4. [#146] Changing LAN IP – Each octet needs to be highlighted.
5. [#152] FileSharing - exFAT formatted devices not recognized.

Modifications in V5.11(AAXA.3)b2

Based on V5.11(AAXA.3)b1 to release V5.11(AAXA.3)b2

[Feature Enhancement]

1. [eITS#160101261] WiFi/WPS buttons disable
2. [SEC-001] [SEC-002] [Security]"DROWN" CVE-2016-0800 security issue. upgrade openssl from 1.0.1c to 1.0.1r.

[Bug Fix]

1. [eITS#151100484] Add IPv6 support for TR-069
2. [eITS#160300927] JB - VMG1312-B10D - TR069 GPV failing on JB's ACS

3. [eITS#160300928]VMG1312-B10D - Edit WAN interface - Page reload issue
4. [eITS#160100482]DynDNS providers
5. [eITS#160100483]Default Route
6. [eITS#160100484]Interface Grouping
7. [eITS#160100486]Ignore the option 121 default route value when this interface do not apply default gateway.
8. [eITS#160100728]Static route table will be increased when option 121 is changed
9. [eITS#160100732]Need to do the same PADT behavior as VMG1312-B10A
10. [eITS#160101094]Default route will be lost when PPP connection is recovered.
11. [eITS#160400026]Multiple WANs cannot all be default gateway - Add one more ETH WAN default gateways error. In current behavior, only one default gateway exist in each PVC type.
12. [SVD #134][Security] User can get plaintext password by trace packet in certain pages.
13. [SVD #135][Security] Cookie need to set to HttpOnly.
14. [SVD #313] DUT should not pop-up error message under PPPoA mode.
15. [#19]Randomly gets Logged out of GUI when performing certain configurations.
16. [#99] Ethernet WAN setup in factory default state – EWAN is UP – PC connected to VMG1312-B10D receives incorrect IP Address.
17. [#136] DHCP Stops Working
18. [#137] No warning message displayed when a server address is entered in an invalid subnet – Port Forwarding
19. [#138] Incorrect warning message displayed when invalid IP Address is used when configuring a static DHCP rule
20. [#143] Setup and configure DHCP Relay – Afterwards unable to Enable NAT on any WAN interface
21. [#151] Logs - Removal of old log entries to allow for new entries.
22. [#153] Wording / Grammar
23. [#154] Created NAT rules displayed incorrectly
24. [#155] Incorrect wording on error message when creating a NAT port

- forwarding rule for a port used by the VMG1312-B10D
25. [#156] Error message not descriptive when creating more than 20 DNS routes
 26. [#157] Setting up Parental Control Profile with 15 entries – Click on Apply – Gets logged out of GUI and all PCP data is lost
 27. [#158] Incorrect wording on error message when creating more than 20 Parental Control profiles
 28. [#159] Incorrect wording on error message when creating more than 8 QoS Queue rules
 29. [#160] Creating more than 14 MAC Authentication rules – Automatically gets logged out of GUI
 30. [#161] IE11 and Edge web browsers does not correctly display configured settings on the MAC Authentication page
 31. [#163] Unable to access GUI remotely when Service Control is set to MultiWAN
 32. [#164] Wi-Fi Throughput is much lower than expected/acceptable
 33. [#165] UPnP Enabled – Status at UPnP page not updated
 34. [#172] Change Current 3G Connection from Keep to Drop – Microsoft Edge web browser displays Keep
 35. [#173] Randomly 3G will selected as default route (ADSL is up)
 36. [#177] TR-069 disconnect issue.
 37. [TE-002] Generate RMA firmware
 38. [FR-011] EOC registry
 39. [SVD #390][3G Backup] In 3G backup page, configure username/password then GUI will keep in loading.
 40. [SVD #391][TR-069]Symptom: [Tr69] only enable ADSL dhcp option 60, but GUI will create strange word on option 60 vendor ID.
 41. [SVD #393][3G Backup] After plug-out DSL line and let 3G up, DUT can get IP and surf Internet but Internet LED show RED light.
 42. [SVD #397][3G Backup] After save ""3G Backup"", WebGUI always keep ""Load..."" status.
 43. [SVD #398][3G Backup] Can't enable and saved ""E-mail Notification"" settings on ""3G Backup"" page.
 44. [SVD #400][Certificate] Create certificate successful, but it cannot display content of subject and Issuer fields.
 45. [SVD #401][Wireless LAN] WLAN Channel Status display error.

46. [SVD #402][Wireless LAN] Wireless channel show Repeat after doing ""Scan Wireless LAN Channels""
47. [SVD #403][WebGUI] The Interface Name in Static Route rule/ System Monitor ARP Table/ System Monitor Routing Table should consistency with the other webpage.
48. [SVD #404][Firewall]It does not prevent IPv6 DDoS attacks.
49. [SVD #408][WebGUI] Configure LAN link local address like:""::1/64"", but connection status show on IPv6 address field not IPv6 link local address field.
50. [SVD #409][UPnP] DUT information doesn't changed via UPnP after modify Remote Management HTTP Port.
51. [SVD #410][WAN] DUT shouldn't let user save the same VLAN ID with different WAN mode.
52. [SVD #411][Routing] [RIP] DUT does not receive RIP packet from WAN and update to routing table. (RIP1/RIP2/Both, Operation: Active)
53. [SVD #413][TR-069]Get parameters ""InternetGatewayDevice.WANDevice."" fail.
54. [SVD #416][WAN] After change WAN mode from PPPoE to PPPoA, then GUI pop up error warning message.
55. [SVD #417][WAN] [IPoA]The IPoA mode can't connect to the internet
56. [SVD #418][UPnP] Enable UPnP, but LAN PC should have setting page for configure when application start(like Skype)
57. [SVD #419][Interface Grouping] Cannot play multicast stream when use interface grouping, need to enable ""IGMP Snooping"" then can work.
58. [SVD #421][LED] First let DUT get VDSL PPPoE WAN IP, then from DSLAM plug out WAN Server line, DUT GUI show no WAN IP status but Internet LED still show Green light.
59. [SVD #422][NAT] Nat session number doesn't match NAT traffic status.
60. [SVD #423][QoS] Duplicate queue rule.
61. [SVD #424][QoS] Shaper rule should delete auto when wan rule deleted by user.
62. [SVD #425][WAN] Duplicate VDSL rule,CPE can get the same network segment
63. [SVD #426][WAN] PPP doesn't retry after 5 times retry cycle

64. [SVD #428][Home Networking] Change Lan Global Identifier Type is manual and blank, then GUI pop up warning message but it should be showed ""Lan Global Identifier is empty!"" not ""Link Global Identifier is empty!"".
65. [SVD #429][Wireless LAN]More AP can't enable ""Hide SSID"", even DUT disable WPS.
66. [SVD #430] In connection status page, click client icon to add device into Static DHCP, then static dhcp page can see this rule but it can't disable.
67. [SVD #434][QoS] Only enable ""TCP ACK"" option of Classification rule doesn't work.
68. [SVD #436][WebGUI] Base on PS, DUT don't support VDSL 30a profile but GUI have this option.
69. [SVD #440][WAN] Configure WAN mode only enable on T.1413, then DSLAM(IES-1000) configure on auto mode, DUT can't link up.
70. [SVD #441][WAN] Configure WAN mode only enable on Annex L, then DSLAM(VES1724-56) configure on auto mode, DUT can't link up.
71. [SVD #443][Log] In IE8 browser, enable E-mail Log Settings and configure incorrect format on ""Send Log to"" option, then GUI pop up warning message but after refresh page, E-mail Log Settings option show error status.
72. [SVD #445][TR-069] First add object ""InternetGatewayDevice.Layer2Bridging.Bridge."" , then delete but it's fail to delete.
73. [SVD #446][TR-069]""InternetGatewayDevice.Layer2Bridging.Bridge.2.X_ZYXEL_BridgeClear"" can't work.
74. [SVD #451] [TR-069] TR-069 connection with IPv6 fail.
75. [SVD #452] Let 3G dongle enable(E3372) and get IP successfully, but Internet LED shouldn't "Red" light and then 3G will down.
76. [SVD #453] Let 3G dongle enable(ZTE MF823) and get IP successfully, but Internet LED shouldn't "Red" light.

Modifications in V5.11(AAXA.3)b1

[BUG FIX]

1. [SVD #26][Remote Management] Remote MGMT configure

- Multi_WAN fail.
2. [SVD #50][WebGUI] Page is randomly redirected to "403 forbidden" page when apply setting.
 3. [SVD #89][WebGUI] DUT can allow empty WEP password.
 4. [SVD #130][QoS] QoS queue/classification is generally not working(VDSL)
 5. [SVD #157][TR-069] can't enable TR-069 again after disabled by ACS server
 6. [SVD #192][Account]Username/Password fields does not support all special characters
 7. [SVD #193][LAN] Warning message needs to pop up when changing the LAN IP Address of the VMG3926
 8. [SVD #195] [TR-069] Can't SetParameterValues DHCP Option via TR-069.
 9. [SVD #214][TR-069]DUT set parameter value failed.
'IGD.LANDevice.{i}.WLANConfiguration.{i}.RadioEnabled
 10. [SVD #215][TR-069]DUT set parameter value failed.
'IGD.LANDevice.{i}.WLANConfiguration.{i}.AutoRateFallBackEnabled
Note: ZyXEL don't support this parameter.
 11. [SVD #216][TR-069]DUT set parameter value failed.
'IGD.WANDevice.{i}.WANDSLInterfaceConfig.Enable'
 12. [SVD #229][TR-069] Sometimes DUT will pop-up error message when configure TR-069 settings.
 13. [SVD #241][Remote Management] Remote Management doesn't support ICMP service.
 14. [SVD #243][TR-069] DUT connect ACS by HTTPS. After upload firmware.DUT can not connect ACS server.
 15. [SVD #259][Wireless LAN] GUI allow blank password when setting up WEP
 16. [SVD #270][WebGui] Add Interface Group, WAN interface will add an ","
 17. [SVD #272][WAN] EtherWAN option will show when using IE browser.
 18. [SVD #273][WAN] The WAN type ATM/ PPPoA & IPoA will classify to PTM and ATM in Interface Grouping.
 19. [SVD #274][NAT] Address mapping function doesn't work.
 20. [SVD #287][WebGUI] Account "supervisor" will be kicked out when

- WAN account "admin" or "user" login.
21. [SVD #294][Wireless LAN] Wireless can't link when bandwidth = 40MHz on openside.
 22. [SVD #329][WAN] After playing MOD, the DUT could not create WAN connection.
 23. [SVD #334][QoS] IPv6 address length of QoS classification setup is not enough.
 24. [SVD #352][System] Sometimes can't access WebGUI when performing certain configurations.
 25. [SVD #359][WAN] Con-current WAN can't work.
 26. [SVD #361][TR-069] Download FW fail and make TR-069 die
 27. [SVD #365][System] By default settings, after admin user close "Quick Start", it will cause admin account access CPE "SSH", "Telnet" or "FTP" service happen password issue.
 28. [SVD #374][IPv6] Set LAN all IPv6 DNS as "User defined", DNS field display incorrectly.
 29. [SVD #375][IPv6] LAN PC cannot get IPv6 IP after disable & enable DUT LAN IPv6.
 30. [SVD #377] Set "LAN IPv6 Address Assign Setup" to "Stateful", but LAN PC still gets "Stateless" IP.
 31. [SVD #379][WAN]Modify WAN interfcae, the value of Statict Gateway address will disappear.
 32. [SVD #389][TR-069] When Trust domain with IPv6, Remote MGMT will unworkable after modify Any_WAN to Multi_WAN
 33. [eITs #151200015] [eITs #151100424] TR-069 client doesn't work when GPV
 34. [eITs #151200017] [eITs #151100422] IPv6 Remote access does not work
 35. [eITs #160200464] Management interfaces not working correctly ([Login Privilege] admin telnet login w/o pw)
 36. [eITs #160200610] Supervisor login does not prompt for password [Quick Start Wizard]
 37. [eITs #160100770] Daylight saving
 38. [eITs #151100442] Cannot get IPv6 address from DHCP
 39. [eITs #160101216] WPS cannot working
 40. [eITs #151100442] Cannot get IPv6 address from DHCP

41. [eITs #160101216] WPS cannot working
42. [SVD #9] DUT WAN can't get IP address when MTU size is 100. It's not a problem.
43. [eITs #151000566] Factory default state - Network Map displays connected Host as Unknown
44. [eITs #151000900] Unable to perform a Ping from GUI when Firewall is Enabled on the ADSL WAN interface
45. [#106] Deleting an Interface Group
46. [#141] Configuring WEP – Security displays connection as Open

[FEATURE CHANGE]

1. Support VcAutohunt
2. Support EOC registry read config
3. Remove single login feature
4. Support zycfgfilter
5. [eITs #151100903] complete romfile FTP upload as admin in OPAL
6. [eITs #151100904] delete rom-d by CLI in OPAL
7. [eITs #150700017] 3G backup with Huawei E3372 does not work
8. [eITs # 150700716] 3G backup with ZTE MF823 does not work

Modifications in V5.11(AAXA.1)C0

Change to FCS version based on V5.11(AAXA.1)b5.

Modifications in V5.11(AAXA.1)b5

[BUG FIX]

1. [SVD #378] WAN host access Remote MGMT via IPv6 Trust domain fail.
2. [SVD #382] Can't modify interface Group.
3. Can't pass manufacture RF testing time criteria (40s).

Modifications in V5.11(AAXA.1)b4

[BUG FIX]

1. [SVD #367] On "Ethernet WAN" page, the "retore" word was

incorrect, please change it to "restore".

2. [SVD #366] Trust domain input IPv6 address and DUT will crash.
3. [SVD #368] From WebGUI or TR-069 to do firmware upgrade often happen "upgrade firmware fail: out of memory!!!" issue.
(V5.11(AAXA.1)b3 to V5.11(AAXA.1)b3 version.)

[FEATURE CHANGE]

1. Update 3G package from v1.11 to v1.15.
2. [GUI] Change NAT address mapping "Set" to Rule Name.
3. EOC registry read config.
4. [GUI] Update Turkish multi-language.

Modifications in V5.11(AAXA.1)b3

[BUG FIX]

1. [SVD #257] Change Security Level from No Security to More Secure
- Password is removed and unable to click on the More button.
2. [SVD #354] Add interface Group fail.
3. [SVD #355] [GUI] Ethernet WAN page describe incorrect.
4. [SVD #356] [GUI] Incorrect trigger and open port column name in port trigger table.
5. [SVD #360] [GUI] Typo in "Back to Factory Defaults" description.
6. [SVD #361] [TR-069] Download FW fail and make TR-069 die.
7. When General Wireless setup no security mode, WLAN client could not associate to More AP.

[FEATURE CHANGE]

1. Admin account should be denied to access default configuration settings; e.g. "vi /data/zcfg_config.json" or "cat /data/zcfg_config.json" should not display configuration settings.
2. Support special characters for below parameters.
PPP Username and Password
TR-069 ConnectionRequestUsername and
ConnectionRequestPassword
WiFi PreSharedKey
3. Disable WPS PIN and AP PIN methods by default.

4. [GUI] Support DtdNS dynamic DNS service provider.
5. [GUI] Hide WAN IP field of NAT Port Forwarding.
6. [GUI] Rename ICMP to PING of Remote Management.
7. Support unique CA and SSH key.



ES-Unique
Certificates and SSH Key

8. Support device information HTML page for manufacture. (No need to login to access this page.)

<http://<LAN IP address>/deviceInfo.page>

e.g.

FW Version	V5.11(AAXA.1)b3
MAC address	00:13:49:FE:DC:BA
Wi-Fi country code	EU/13
2.4GHz SSID	ZyXEL_DCBB
5GHz SSID	
2.4GHz Security Mode	WPA2-PSK
5GHz Security Mode	
Serial Number	S090Y11112222

Modifications in V5.11(AAXA.1)b2

[BUG FIX]

1. [SVD #309] Remote access from WAN via IPv6 fail.
2. [SVD #310] MAC Filter address key in "00-aa-bb-11-22-33" and apply. No one can access the DUT. Need reset the DUT.
3. [SVD #311] Diagnostic trace route would keep IPv6 address of first time.
4. [SVD #312] Diagnostic nslookup would keep by using IPv6 address.
5. [SVD #313] When add Interface Group name "abcdefghijklmnopqrstuvwxy123456", access WebGUI failed.
6. [SVD #314] Port trigger does not work.
7. [SVD #315] Cannot add NAT application rule after adding a port trigger rule.
8. [SVD #316] On IE browser, should not have GPON option since this model doesn't support.
9. [SVD #317] "500 Internal Server Error" error message appears randomly when performing certain configurations.

10. [SVD #318] Ethernet WAN page doesn't describe which LAN port can be Ethernet WAN port.
11. [SVD #320] Configure Remote MGMT setting takes some time and loading sign is not spinning.
12. [SVD #324] By default, there is no ETHWAN rule in Broadband webpage.
13. [SVD #326] Does not support any port any service in Interface Grouping.
14. [SVD #328] Firewall ACL set with Scheduler Rule is not working.
15. [SVD #330] 2Tx+2Rx wireless throughput about 120Mbps in shielding room.
16. [SVD #331] LAN PC cannot get IPv6 IP after disable and enable DUT LAN IPv6.
17. [SVD #332] Sometimes after stress testing, can't login WebGUI.
18. [SVD #333] GUI setting/display error after disable and enable DUT LAN IPv6.
19. [SVD #335] QoS "WAN Managed Upstream Bandwidth" always keeps at 20Mbps.
20. [SVD #336] Unclear description in QoS general page.
21. [SVD #337] Set QoS "LAN Managed Downstream Bandwidth" makes DUT LAN access fail.
22. [SVD #347] QoS Shaper Setup rate limit does not follow user setting.
23. [SVD #348] QoS Shaper Setup cannot be disabled.
24. [SVD #350] Set "WAN Managed Upstream Bandwidth" makes QoS generally fail.
25. [SVD #351] QoS classification "Step4: Class Routing" does not show other WAN.
26. LAN PC can't get IP address, when the LAN port is not in interface group.
27. [Traffic Status] Traffic status LAN "Byte sent" between 2 LAN ports are the same.
28. [TR-069] GetParameter "InternetGatewayDevice.", but not show InternetGatewayDevice.WANDevice parameter.
29. [UPNP] Windows XP can't search the DUT when UPnP enable.
30. [Multicast] IGMP Status and MLD Status Member display incorrect.
31. [Firewall] Firewall ACL set with TCP ACK flag/flag mask display

- failed.
32. [Firewall] Unknown field at Firewall ACL TCP flag/flag mask.
 33. [DDNS] Dynamic DNS Status incorrect when plug out VDSL line and then plug in.
 34. [Remote MGMT] Remote MGMT ICMP does not control IPv6 access.
 35. [WebGUI] "System Monitor -> Traffic Status -> NAT -> Total" display "1e+1% 2130/20480".
 36. [System] When click save ROM-D, can't login WebGUI.
 37. [TR-069] Disable PeriodicInform should not disable TR-069.
 38. [Quick Start] When plug in VDSL line, use quick start wizard to configure static IP, it will disable VDSL and ETH default gateway.
 39. [TR-069] After use TR-069 Firmware Upgrade 10 times, can't login WebGUI and console show "Invalid memory segment access".
 40. [Ethernet WAN] After plugin and plug out Ethernet WAN twice, can't login WebGUI.
 41. [TR-069] CPE TR-069 will always repeat "turn on --> turn off".
 42. [TR-069] GetParameterAttributes
InternetGatewayDevice.WANDevice.3.WANConnectionDevice.1.
WANPPPConnection.1.ExternalIPAddress Notification=0.
 43. [Remote MGMT] DoS "Deny Ping Response" option & Remote mgmt ICMP WAN should not exist at the same time. And Deny Ping Response default setting is Disable, not match default setting document.
 44. [NAT] Cannot disable NAT ALG.
 45. [NAT] Configure Port trigger fail.
 46. [NAT] DMZ field shows empty after configuring IP.
 47. [Diagnostic] OAM ping fail.
 48. [GUI] MAC Filter address did not block "-".Key in "00-aa-bb-11-22-33" could apply.
 49. [TR-069] Select Multi_WAN of "WAN Interface used by TR-069 client", while change ACS URL, CPE doesn't send "0 BOOTSTRAP".
 50. [IPV6] WAN can't get IPv6 IP address.
 51. [Wireless] According PM definition, change WLAN on/off from 5 Sec. to 2 Sec.
 52. [Parental Control] Add Blocked Site/URL Keyword is not working.
 53. [Diagnostic] Diagnostic with TraceRoute function, it always keep

- previous result.
54. [Diagnostic] Diagnostic ping test must enable remote management ICMP service on wan side first.
 55. [TR-069] ztr69 daemon crashes often.
 56. [System] From TR-069 to reboot CPE many times, CPE console show "Invalid memory segment access" and can't access WebGUI.
 57. [GUI] Daylight Saving select option "Last Week" is blank on WebGUI.
 58. [GUI] Broadband setting can set same VLAN or ATM PVC.
 59. [NAT] Address mapping Many-to-One and Many-to-Many malfunction.
 60. [Firewall] Firewall ACL IPv4 should not be able to select ICMPv6 protocol.
 61. [TR-069] ztr69 wouldn't reply correct added object instance number.
 62. After playing MOD, the DUT could not create WAN connection.

[FEATURE CHANGE]

1. Support syscmd comand
usage: syscmd <command>
atsh dump manufacturer related data from NVRAM
atwz write (a)MAC addr, (b)Country code,
(c)EngDbgFlag, (d)FeatureBit, (e)MAC Number to NVRAM
atsn set serial number to NVRAM
restoredefault restore default configuration, 0: without system
reboot
2. [GUI] [DDNS] Support www.no-ip.com.
Remove myzyxel.in.th.
3. [GUI] Hide Virtual Device Web page.
4. [GUI] Hide deny ping function in Web GUI.
5. Support random supervisor password.
6. Support "sys" command for producing test
 - a. sys atsh
 - b. sys atcr
 - c. sys atsn <SeriesNumber>
 - d. sys atwz <MAC> <CountryCode> <EngDbgFlag> <FeatureBit>
<MacNumber>



SOP
產線生產指令.docx

7. [TR-069] Set writable attribute for the objects which can add/delete sub-objects.

Modifications in V5.11(AAXA.1)b1

[FEATURE CHANGE]

1. Base on VMG1312-B10D 4.16L02A common product trunk (GIT revision SHA-1: ce095c4025331648c5f96f5940553315a3550b8d).
2. [GUI] Support Network Setting -> Broadband -> Ethernet WAN.
3. [GUI] Support Network Setting -> IGMP/MLD and System Monitor -> Multicast Status.

Modifications in V5.11(AAXA.0)C0

Change to FCS version based on V5.11(AAXA.0)b8.

Modifications in V5.11(AAXA.0)b8

[BUG FIX]

1. [SVD #291] Port forwarding/port triggering of wan interface default show error.
2. [SVD #293] User account can't open some page.
3. [SVD #304] [ADSL Stress] ADSL overnight stress test failed.
4. Incorrect time zone (GMT-01:00 ~ GMT-08:00) configuration.
5. Remove "EthernetWAN:1" in InternetGatewayDevice.DeviceSummary.
6. Low throughput performance with TP-Link 1T1R wireless adaptor.
7. Incorrect nat/igmp/gw settings when edit wan interface.
8. TR-069 DNS always queries DNS server of default gateway.
9. All DHCP server services are disabled when create first WAN interface as bridge mode and second WAN as routing mode.

[FEATURE CHANGE]

1. Upgrade modem code to A2pvl042c.
2. Support flashes ESMT F59L1G81MA and Zentel A5U1GA31ATS.
Update bootloader.
3. Enable Auto Channel Skip by default; Channels 12/13 scan will be skipped by default.

Modifications in V5.11(AAXA.0)b7

[BUG FIX]

1. [SVD #38] Delete the share folder, LAN client still can access the folder.
2. [SVD #250] Port forwarding of wan interface define error.
3. [SVD #251] Port trigger of wan interface define error.
4. [SVD #252] Access control of protocol define error.
Default protocol will be "ALL" instead of blank.
5. [SVD #253] SNMP of system location define error.
6. [SVD #254] Add new wan interface rule some config define error.
7. [SVD #256] 802.11b Only, 802.11g Only and 802.11b/g Mixed have support for 40MHz.
8. [SVD #266] Wrong display MAC address format in Interface Group.
9. [SVD #267] Description break in Interface Group > DHCP option 60.
10. [SVD #269] Unplug USB will cause USB naming error.
11. [SVD #271] [Default Setting] Too many Default setting incorrect.
12. [SVD #275] Modify address mapping rule, the wan interface is not match.
13. [SVD #280] Using supervisor account to create new account for admin group, the new account privilege is error.
14. [SVD #282] User account can't open some pages.

[FEATURE CHANGE]

1. Flexible SSID and PSK length.
Config SSID suffix length by WiFi.SSID.X_ZYXEL_SuffixLength, range:4-6, default:4.
Config auto generated WPS PSK length by WiFi.AccessPoint.Security.X_ZYXEL_Auto_PSK_Length, range:8-16, default:10.

2. Rename Romfile to Rom-D in atsh.
3. Apply WLAN SROM patch provided from HW vendor for calibration. Command "wl srdump" to dump SROM information which should be the same as HW vendor provided SROM values.

Modifications in V5.11(AAXA.0)b6

[BUG FIX]

1. [SVD #149] Need to modify pop-up message for wireless Max Clients on no security mode.
2. [SVD #152] Enable con-current WAN and then add a bridge WAN interface, it can't modify/delete.
3. [SVD #172] USB read/write will cause DUT hang on.
4. [SVD #187] Spelling and Grammar mistakes.
5. [SVD #191] Unable to log into the GUI using the default User account.
6. [SVD #205] WAN interface will show 9 rules of special step.
7. [SVD #208] Trust CA should support pkcs7 format certificate.
8. [SVD #209] The DUT name can't match with Connection Status and System Monitor/ Traffic Status.
9. [SVD #228] Wrong description in 3G setup page.
10. [SVD #243] [TR-069] DUT connect ACS by HTTPS. After upload firmware.DUT can not connect ACS server.
(SVD can't duplicate the issue.)
11. [SVD #244] Warning message in MAC Filter page is too short.
12. [SVD #247] DUT can save TR-069 settings if leave the ACS URL, username and password blank.
(The modification is that ACS URL, Connection Request User Name and Connection Request Password will be checked and can't be empty.)
13. [SVD #218] [TR-069]DUT sets parameter value failed.
IGD.IPPingDiagnostics.DiagnosticsState.
(Not a problem.)

[FEATURE CHANGE]

1. [GUI] Remove Remote MGMT, Firmware Upgrade and Backup

- Restore GUI pages access for "User" account.
2. [GUI] The maximum WAN interfaces to be added is 7 (plus WWAN as 8 WAN interfaces). If user adds the 7th interface, the CCWAN will be disabled in the 7th interface. If there are 7 interfaces, the "Add New WAN Interface" button will be disabled.
 3. [GUI] Enable USB file sharing service.

Modifications in V5.11(AAXA.0)b5

[FEATURE CHANGE]

1. Remove Web redirection feature.

Modifications in V5.11(AAXA.0)b4

[BUG FIX]

1. [SVD #145] [TR-069] Upload certificate to trusted CA fail.
2. [SVD #147] Disable Firewall "Deny Ping Response" function doesn't work.
3. [SVD #150] Wan interface will pop out error message when create over 7 rules.
4. [SVD #155] Remote MGMT display wrong wording "Mode" should be "Trust Domain".
5. [SVD #161] CPE will get more IP address in one PPPoE WAN interface.
6. [SVD #162] CPE will reject LCP configuration Request: Authentication Protocol.
7. [SVD #163] Save Rom-D and reset configuration, CPE crashes.
8. [SVD #167] Restore config function will lose some config setting.
9. [SVD #169] Downgrade and upgrade FW will fail.
10. [SVD #170] Input *.pem CA to Trust CA will make all of account can't login.
11. [SVD #173] Static route of "use gateway ip address" function will auto enable after refresh WebGUI.
12. [SVD #174] Static route rule shouldn't let user to set gateway or interface at the same time.
13. [SVD #175] Input BinaryX.509 and PKCS7 CA to trust CA will make

WebGUI crash.

14. [SVD #176] CPE accepts invalid CA file and some file will make WebGUI crash.
15. [SVD #177] [TR-069] Should support VLAN parameter for VDSL WAN interface.
16. [SVD #178] [TR-069] Configure CA setting fail.
17. [SVD #183] [TR-069] CPE return DownloadResponse contains wrong time.
(Should be not a problem.)
18. [SVD #184] WPA-PSK (TKIP) and WPA-PSK/WPA2-PSK (TKIP/AES mixed mode) not supported.
(Should be not a problem due to pass WiFi logo authentication.)
19. [SVD #186] Possible to still access blocked URL's when using Parental Control.
(Should be not a problem.)
20. [SVD #187] Spelling and Grammar mistakes.
21. [SVD #188] Unable to receive 3G Budget Email notifications.
22. [SVD #189] E-mail notification page; cannot change the port to port, for example, 587. Only supports port 25.
23. [SVD #190] Unable to click on the Advanced button at the 3G Backup page when using IE11.
24. [SVD #194] [TR-069] Need to remove "VoiceService:1" profile.
25. [SVD #195] [TR-069] Can't SetParameterValues DHCP Option via TR-069.
26. [SVD #196] [TR-069] DUT doesn't support parameters for each WPS method.
27. [SVD #202] MAC Filter accepts blank MAC Address configuration.
28. [SVD #203] WPS hardware button doesn't work.
29. [SVD #204] The internet LED always light "Red" when unplug DSL line.

[EATURE CHANGE]

1. Support Web redirection for below conditions.
 - a. No physical cable is plugged in
 - b. No WAN IP
 - c. Lack of gateway addressWhen parameter X_ZYXEL_FEATTRUE_FLAG.WebRedirect =0, redirect

to 192.168.1.1.

When parameter X_ZYXEL_FEATTRUE_FLAG.WebRedirect =999, don't redirect to any URL.

2. Remove USB file sharing service.

Modifications in V5.11(AAXA.0)b3

[BUG FIX]

1. [SVD #12] Bridge mode can't work.
2. [SVD #14] Remote MGMT can't apply to trust domain.
3. [SVD #17] WebGUI sometimes pop warning message and redirect to login page.
4. [SVD #27] Login WebGUI by Chrome browser usually need login twice.
5. [SVD #43] WebGUI will hang on when setting refresh interval time.
6. [SVD #44] UPnP description display abnormal.
(Should be not a problem.)
7. [SVD #45] WebGUI will hang up when disable DHCP static IP function.
8. [SVD #46] Delete or add concurrent wan interface but the WebGUI didn't display, need to refresh and the status will normal.
9. [SVD #47] Unknown wan interface didn't show on TR-069 page.
10. [SVD #48] Should remove channel status about 5G description.
11. [SVD #55] WebGUI will hang up when special step.
12. [SVD #56] DUT WebGUI crash when DynDNS Host Name/Username/Password contains blank.
13. [SVD #57] DDNS function doesn't work.
14. [SVD #61] Traffic status only shows one WAN interface.
15. [SVD #63] Using "copy from USB" script causing "write to USB" fail.
16. [SVD #65] Disable Firewall "Deny Ping Response" but WAN host still cannot ping to DUT WAN.
17. [SVD #66] Remote MGMT "HTTPS" access from WAN fail.
18. [SVD #67] Stress over night crash.
19. [SVD #70] DHCP setting will enable automatically after reboot.
20. [SVD #73] Below webgui can't select 3G wan interface when DUT connect with 3G dongle.

21. [SVD #74] 3G backup function can't surf internet via. LAN side.
22. [SVD #75] When delete static route, routing table still exist.
23. [SVD #76] DUT will add a static route automatically when configure WAN interface as IPv4/Pv6 dual stack.
24. [SVD #77] USB Media server does not work.
25. [SVD #78] Network map of info display abnormal when too many client on the map.
26. [SVD #79] Configure static IPv6 IP on DUT WAN fail (IPv6 only or dual stack).
27. [SVD #83] Wrong typo in Diagnostic webpage.
28. [SVD #88] Incorrect display of WAN Static IPv6 DNS Address
29. [SVD #90] Need to modify pop-up message for wireless Max Clients.
30. [SVD #91] Wake on LAN function doesn't work.
31. [SVD #92] Cannot write file to USB flash disk(NTFS).
32. [SVD #95] IGMP Snooping of Blocking Mode issue (LAN set multicast server)>> PC can't play multicast.
33. [SVD #96] IGMP Snooping of Standard Mode issue (LAN set multicast server)>> One PC play multicast, but the other pc still can receive UDP packet.
34. [SVD #98] Wan interface only can create five rules.
35. [SVD #99] Email send log function doesn't work.
36. [SVD #100] Upgrade WWAN package should pop out warning message when loading invalid file.
37. [SVD #104] WDS function doesn't work.
38. [SVD #105] Multicast play failed under any port any service.
39. [SVD #106] Internet LED does not blink when there is traffic pass through. The blinking will be controlled by SW at frequency 2Hz.
40. [SVD #108] WPS countdown four second for once is abnormal.
41. [SVD #109] Wireless throughput doesn't pass criteria.
(The throughput is not worse than BRCM 63381 reference board.)
42. [SVD #110] WiFi scan function doesn't show channel 12 and 13.
43. [SVD #111] MAC filter restrict mode didn't match with title.
44. [SVD #114] [TR-069] GetParameterNames of "InternetGatewayDevice." fail.
45. [SVD #115] LAN PC login to GUI fail after "[TR-069] GetParameterNames of "InternetGatewayDevice." fail".

46. [SVD #116] Internet LED is off when there is VDSL connection but no IP yet.
47. [SVD #117] The icon display error when release WPS method 3 configuration.
48. [SVD #119] W2L traffic is not blocked after L2W traffic is sent by using same src/dest port.
(Should be not a problem.)
49. [SVD #123] Network map icon display error when setting parental control rule.
50. [SVD #124] Should not set duplicate configuration on schedule rule.
51. [SVD #125] DHCP Relay can't be enabled.
52. [SVD #127] Configure QoS "LAN Managed Downstream Bandwidth" makes DUT unaccessible.
53. [SVD #131] Wrong word in description of WebGUI page Network Setting -> Vlan Group.
54. [SVD #132] NAT session doesn't show why reason will fail.
55. [SVD #134] Port trigger function doesn't work.
(Should be not a problem.)
56. [SVD #137] IPSEC pass through with multiple LAN clients using same VPN server. (This function is not supported.)
57. [SVD #141] WAN side does not switch to new gateway after renumber.
58. [SVD #143] Enable WAN DHCP option 120 but pop up warning message.
59. [SVD #144] [TR-069] DUT can connection to ACS via HTTPS without certificate in trust CA.
60. [SVD #145] [TR-069] Upload certificate to trusted CA fail.

[EATURE CHANGE]

1. Modify the Ethernet virtual ports and logical ports mapping to fit the HW layout.
original port mapping:
switch port 1 <-> eth0 (LAN1)
switch port 2 <-> eth1 (LAN2)
switch port 3 <-> eth2 (LAN3)
switch port 4 <-> eth3 (LAN4)

modified port mapping:

switch port 1 <-> eth3 (LAN4)

switch port 2 <-> eth2 (LAN3)

switch port 3 <-> eth1 (LAN2)

switch port 4 <-> eth0 (LAN1)

2. [TR-069] Support WANConnectionDevice, WANIPConnection, WANPPPConnection add/delete.

Modifications in V5.11(AAXA.0)b2

[CONFIGURATION MODIFICATION]

1. Set one VDSL WAN interface of PPPoE.
2. Disable TR-069 with empty ACS URL and any WAN interface by default.
3. Set default time server to pool.ntp.org.
4. Set maximum NAT sessions per host to 2048.
5. Enable deny ping response by default.
6. Enable SNMP by default.
7. Enable DHCP server system log by default.
8. Update modem code to A2pvl041d2.

[FEATURE ENHANCEMENT]

1. Modify GPIO for LAN and WPS LEDs on new HW.
2. Remove ethernet WAN type.
3. Remove TR-064.
4. Add 802.1x (Network Setting -> Broadband -> 802.1x).
5. Support Wake on LAN (Home Networking -> Wake on Lan).
6. Add WDS (Wireless -> WDS).
7. Remove 5G/802.11ac.

[BUG FIX]

1. [SVD #1] The wording "Welcome" and "Change Password" at first line in login page should be bigger size font.
2. [SVD #2] CPE picture is wrong in Connection Status and Virtual Device page.
3. [SVD #3] Can't upgrade FW .bin.

4. [SVD #4] Take long time for wait LAN client physical up and get IP address.
5. [SVD #5] EthWAN doesn't work. Remove ethernet WAN type.
6. [SVD #6] Add or configure default WAN interface will auto add con-current interface.
7. [SVD #7] Sometimes modify the default WAN interface will add an unknown interface.
8. [SVD #8] Sometimes Configure WAN interface will crash.
9. [SVD #9] "UNKNOWN" interface in Remote MGMT page.
10. [SVD #10] Con-current WAN interface should not be used for Remote MGMT service.
11. [SVD #11] Can't modify the exist WAN interface from routing to bridge.
12. [SVD #13] Can't modify Bridge WAN interface.
13. [SVD #15] Stress test for overnight, system may crash.
14. [SVD #16] Wireless doesn't support 5GHz. Remove 5G/802.11ac.
15. [SVD #19] WebGUI Interface Group still routing to Default GW.
16. [SVD #20] Con-current WAN interface should not be used for NAT rule.
17. [SVD #21] Port Forwarding rule can't add if "WAN IP" is blank.
18. [SVD #22] The DoS and Deny Ping should not be setup when firewall is disabled. Remove DoS note description to prevent confusion.
19. [SVD #23] End-user couldn't ping the DUT from LAN side when "Deny Ping Response" is enabled.
20. [SVD #30] Time doesn't work.
21. [SVD #33] TR-064 doesn't work. Remove TR-064.
22. [SVD #35] By default, can't configure VDSL WAN via Wizard (Quick Start).
23. [SVD #36] [TR-069] Default ACS URL should not sunrise.
24. [SVD #37] Policy Route doesn't work.
25. [SVD #39] Diagnostic should support URL of domain name.
26. [SVD #40] No "Email Log Setting" in Log Setting page.

Modifications in V5.11(AAXA.0)b1

1. Base on VMG1312-B10D 4.16L02A common product trunk (GIT

- revision SHA-1: f723d9cda567f85307ec3bb7aaf0bf82a7c50ca7).
2. First firmware release.