

# **EX5501-B0/B1 Generic**

Firmware Release Note

V5.17(ABRY.5)C0

Date: March 29, 2024

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## Revision History

Date	Release	Author	Description
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2019/05/31	1.0	GuanHong Chen	FW release for V5.15(ABRY.0)b1
2019/07/08	1.1	GuanHong Chen	FW release for V5.15(ABRY.0)b2
2019/08/07	1.2	Justin Lin	FW release for V5.15(ABRY.0)b3
2019/09/11	1.3	ChaoChengDo	FW release for V5.15(ABRY.0)b4
2019/11/15	1.4	Zhongde Lai	FW release for V5.15(ABRY.0)b5
2019/12/04	1.5	Zhongde Lai	FW release for V5.15(ABRY.0)b6
2019/12/06	1.6	Zhongde Lai	FW release for V5.15(ABRY.0)C0
2020/03/13	2.0	Zhongde Lai	FW release for V5.15(ABRY.1)b1
2020/04/30	2.1	Zhongde Lai	FW release for V5.15(ABRY.1)b2
2020/06/10	2.2	Zhongde Lai	FW release for V5.15(ABRY.1)b3
2020/07/17	2.3	Zhongde Lai	FW release for V5.15(ABRY.1)b4
2020/08/11	2.4	Zhongde Lai	FW release for V5.15(ABRY.1)b5
2020/09/11	2.5	PeiPing Chen	FW release for V5.15(ABRY.1)b6
2021/01/29	2.6	PeiPing Chen	FW release for V5.15(ABRY.1)b7
2021/01/29	2.7	PeiPing Chen	FW release for V5.15(ABRY.1)C0
2021/02/26	3.1	PeiPing Chen	FW release for V5.17(ABRY.2)b1
2021/04/23	3.2	PeiPing Chen	FW release for V5.17(ABRY.2)b2
2021/05/21	3.3	PeiPing Chen	FW release for V5.17(ABRY.2)b3
2021/06/25	3.4	PeiPing Chen	FW release for V5.17(ABRY.2)b4
2021/08/06	3.5	PeiPing Chen	FW release for V5.17(ABRY.2)b5
2021/10/19	3.6	PeiPing Chen	FW release for V5.17(ABRY.2)b6
2021/11/09	3.7	PeiPing Chen	FW release for V5.17(ABRY.2)b7
2021/11/24	3.8	PeiPing Chen	FW release for V5.17(ABRY.2)b8
2021/11/24	3.9	PeiPing Chen	FW release for V5.17(ABRY.2)C0
2021/10/15	4.0	PeiPing Chen	FW release for V5.17(ABRY.3)b1
2021/12/29	4.1	PeiPing Chen	FW release for V5.17(ABRY.3)b2
2022/03/10	4.2	ChaoCheng Do	FW release for V5.17(ABRY.3)b3
2022/04/22	4.3	PeiPing Chen	FW release for V5.17(ABRY.3)b4
2022/05/13	4.4	Isaac Tarn	FW release for V5.17(ABRY.3)b5
2022/09/15	4.5	Isaac Tarn	FW release for V5.17(ABRY.4)b1
2022/11/29	4.6	Isaac Tarn	FW release for V5.17(ABRY.3.2)b1

2022/11/29	4.7	Isaac Tarn	FW release for V5.17(ABRY.3.2)C0
2023/01/09	4.8	Isaac Tarn	FW release for V5.17(ABRY.4)b2
2023/01/13	4.9	Isaac Tarn	FW release for V5.17(ABRY.3.3)b1
2023/01/16	5.0	Isaac Tarn	FW release for V5.17(ABRY.3.3)C0
2023/03/16	5.1	Isaac Tarn	FW release for V5.17(ABRY.4)b3
2023/03/31	5.2	Isaac Tarn	FW release for V5.17(ABRY.4)C0
2023/08/14	5.3	Isaac Tarn	FW release for V5.17(ABRY.5)b1
2024/03/15	5.4	Isaac Tarn	FW release for V5.17(ABRY.5)b2
2024/03/29	5.5	Isaac Tarn	FW release for V5.17(ABRY.5)b3
2024/03/29	5.6	Isaac Tarn	FW release for V5.17(ABRY.5)C0

## EX5501-B0/B1 Generic V5.17(ABRY.5)C0 Release Note

Date: March 29, 2024

### Supported Platforms:

Zyxel EX5501-B0

Zyxel EX5501-B1

### Versions:

Bootbase version : V1.65 | 08/11/2023 15:42:24

Firmware version : V5.17(ABRY.5)C0

Kernel version: 4.1.52

BSP version: 502L07p2

WLAN code version: 17.10.188.75

3G WWAN package version: 1.24

### Notes:

### Public Domain Software Announcements

Open Source Used In Product	Version	From (Source)	License Terms	Modified / Used
atftp	0.7.1	<a href="https://sourceforge.net/projects/atftp/">https://sourceforge.net/projects/atftp/</a>	GPLv2	Modified
bridge-Utils	1.5	<a href="https://git.kernel.org/pub/scm/linux/kernel/git/she-mminger/bridge-utils.git/">https://git.kernel.org/pub/scm/linux/kernel/git/she-mminger/bridge-utils.git/</a>	GPLv2	Modified
busybox	1.20.1	<a href="https://busybox.net/">https://busybox.net/</a>	GPLv2	Modified

clinkc	2.4	<a href="https://sourceforge.net/projects/clinkc/">https://sourceforge.net/projects/clinkc/</a>	BSD	Modified
conntrack-tools	1.4.3	<a href="https://git.netfilter.org/conntrack-tools/">https://git.netfilter.org/conntrack-tools/</a>	GPLv2	Used
dnsmasq	2.78	<a href="http://www.thekelleys.org.uk/dnsmasq/doc.html">http://www.thekelleys.org.uk/dnsmasq/doc.html</a>	GPLv2	Modified
dropbear	2018.76	<a href="https://github.com/mkj/dropbear">https://github.com/mkj/dropbear</a>	MIT	Modified
ebtables	2.0.10-4	<a href="https://git.netfilter.org/ebtables/">https://git.netfilter.org/ebtables/</a>	GPLv2	Modified
eventlog	0.2.10	<a href="https://github.com/balabit/eventlog">https://github.com/balabit/eventlog</a>	BSD	Used
expat	1.95.8	<a href="https://github.com/libexpat/libexpat">https://github.com/libexpat/libexpat</a>	MIT	Used
ez-ipupdate	3.0.11b8	<a href="http://ez-ipupdate.com/">http://ez-ipupdate.com/</a>	GPLv2	Modified
gettext	0.16	<a href="http://www.gnu.org/software/gettext/">http://www.gnu.org/software/gettext/</a>	GPLv2	Used
glib	2.37.7	<a href="http://www.gtk.org/">http://www.gtk.org/</a>	LGPLv2	Used
iproute2	2.6.33	<a href="https://github.com/shemminger/iproute2">https://github.com/shemminger/iproute2</a>	GPLv2	Modified
iptables	1.4.21	<a href="https://git.netfilter.org/iptables/">https://git.netfilter.org/iptables/</a>	GPLv2	Modified
jpegsrsrc	v9a	<a href="http://www.iijg.org/">http://www.iijg.org/</a>	IJG	Used
json-c	0.13.1	<a href="https://github.com/json-c/json-c/downloads">https://github.com/json-c/json-c/downloads</a>	MIT	Modified
libedit	20080712-2.11	<a href="http://pkgs.fedoraproject.org/repo/pkgs/libedit/libedit-20080712-2.11.tar.gz/">http://pkgs.fedoraproject.org/repo/pkgs/libedit/libedit-20080712-2.11.tar.gz/</a>	BSD	Modified
libffi	3.0.11	<a href="http://pkgs.fedoraproject.org/repo/pkgs/libffi/libffi-3.0.11.tar.gz/">http://pkgs.fedoraproject.org/repo/pkgs/libffi/libffi-3.0.11.tar.gz/</a>	MIT	Used
libiconv	1.11.1	<a href="http://www.gnu.org/software/libiconv/">http://www.gnu.org/software/libiconv/</a>	LGPLv2	Modified
libnetfilter_conntrack	1.0.4	<a href="https://git.netfilter.org/libnetfilter_conntrack/">https://git.netfilter.org/libnetfilter_conntrack/</a>	GPLv2	Used
libnetfilter_queue	1.0.2	<a href="https://git.netfilter.org/libnetfilter_queue/">https://git.netfilter.org/libnetfilter_queue/</a>	GPLv2	Used
libnfnetwork	1.0.1	<a href="https://git.netfilter.org/libnfnetwork/">https://git.netfilter.org/libnfnetwork/</a>	GPLv2	Used
libnl-tiny	0.1	<a href="https://github.com/openwrt/openwrt/tree/master/package/libs/libnl-tiny">https://github.com/openwrt/openwrt/tree/master/package/libs/libnl-tiny</a>	GPLv2/LGPLv2.1	Used
libpcap	1.1.1	<a href="http://www.tcpdump.org">www.tcpdump.org</a>	BSD	Used
libtool	2.4	<a href="http://www.gnu.org/software/libtool/">http://www.gnu.org/software/libtool/</a>	GPLv2	Used
libusb	1.0.9	<a href="https://sourceforge.net/projects/libusb/">https://sourceforge.net/projects/libusb/</a>	LGPL 2.1	Used
Linux/Arm Kernel	4.1.52			Modified
logrotate	3.7.1	<a href="https://launchpad.net/ubuntu/hardy/i386/logrotate/">https://launchpad.net/ubuntu/hardy/i386/logrotate/</a>	GPLv2	Modified

mailsend	1.17b15	<a href="https://github.com/muquit/mailsend/">https://github.com/muquit/mailsend/</a>	BSD	Modified
ncurses	5.7	<a href="http://ftp.gnu.org/pub/gnu/ncurses/">http://ftp.gnu.org/pub/gnu/ncurses/</a>	MIT	Modified
net-snmp	5.8	<a href="http://www.net-snmp.org/">http://www.net-snmp.org/</a>	ISC/BSD	Modified
ntfs-3g	2013.1.13	<a href="http://ntfs-3g.org">http://ntfs-3g.org</a>	GPLv2/LGPLv2	Used
ntpclient	2007_365	<a href="http://doolittle.icarus.com/ntpclient/">http://doolittle.icarus.com/ntpclient/</a>	GPLv2	Modified
openssl	1.1.1t	<a href="http://www.openssl.org">http://www.openssl.org</a>	OpenSSL	Modified
popt	1.16	<a href="http://rpm5.org/files/popt/">http://rpm5.org/files/popt/</a>	MIT	Modified
ppp	2.4.3	<a href="http://www.roaringpenguin.com/pppoe">http://www.roaringpenguin.com/pppoe</a>	GPLv2/BSD	Modified
pure-ftpd	1.0.30	<a href="http://pureftpd.org">http://pureftpd.org</a>	ISC/BSD	Modified
radvd	1.8	<a href="http://www.litech.org/radvd/">http://www.litech.org/radvd/</a>	BSD	Used
readline	5.2	<a href="http://cnswww.cns.cwru.edu/php/chet/readline/rtop.html">http://cnswww.cns.cwru.edu/php/chet/readline/rtop.html</a>	GPLv2	Used
samba	3.6.25	<a href="http://www.samba.org/samba/">http://www.samba.org/samba/</a>	GPLv3	Modified
sqlite	3.6.23.1	<a href="http://www.sqlite.org/">http://www.sqlite.org/</a>	Public Domain License	Used
syslog-ng	2.0.10	<a href="https://github.com/balabit/syslog-ng">https://github.com/balabit/syslog-ng</a>	GPLv2	Used
tcpdump	4.2.1	<a href="http://www.tcpdump.org/">http://www.tcpdump.org/</a>	BSD	Used
udhcp	0.9.8	<a href="http://udhcp.busybox.net/">http://udhcp.busybox.net/</a>	GPLv2	Modified
usb-modeswitch	2.1.0	<a href="http://www.draisberghof.de/usb_modeswitch/">http://www.draisberghof.de/usb_modeswitch/</a>	GPLv2	Used
util-linux	2.21.2	<a href="https://github.com/karelzak/util-linux/">https://github.com/karelzak/util-linux/</a>	GPLv2	Used
wide-dhcpv6	20080615	<a href="https://sourceforge.net/projects/wide-dhcpv6/">https://sourceforge.net/projects/wide-dhcpv6/</a>	BSD	Modified
zebra	0.93a	<a href="http://www.zebra.org/">http://www.zebra.org/</a>	GPLv2/LGPLv2	Used
zlib	1.2.7	<a href="https://github.com/madler/zlib">https://github.com/madler/zlib</a>	zlib	Used



## Known issues

Modules	Issue	Risk Impact Information
WLAN	[#144426] [Wireless] Using Android phone and iPhone can't connect DUT via wireless 2.4G/5G QR code. (Security mode=WPA3)	
MESH	MESH function haven't been validated on latest firmware.	
MESH	[#158263] [MPro Mesh] Shielding room E Multy Pro stress test environment, RP_Agent disconnect and cannot connect back to controller.(Controller 5G crash)	
MESH	[#161282] [MPro Mesh_Agent] The connection type is show wrong when client connected at second layer	
MESH	[#161302] [MPro Mesh_Agent] When client connected to guest WiFi , that client should not access APP	

## Modifications in 5.17(ABRY.5)C0

### ● Feature Enhancement

Modified Modules	Features Enhancement List
FCS	FCS firmware released

## Modifications in 5.17(ABRY.5)b3

### ● Bug Fixed

Modified Modules	Bug Fixed List
TR069	[#208632] [TR-069] CPE does not reboot after Firmware upgrade from ACS server.

## Modifications in 5.17(ABRY.5)b2

### ● Feature Enhancement

Modified Modules	Features Enhancement List
WAN	[#204105][eITS#231200465][Eye Networks] EX5501 + OPAL family, Feature improvement request - WAN ip lease time

### ● Bug Fixed

Modified Modules	Bug Fixed List
Security	[#195899][Vulnerability] Zyxel-SI-1506 [Vulnerability] Post-authentication buffer overflow in VMG3625-T50B
System	[#202739] [eITS#231200812] EX5501, User account Remote Privilege config disregarded when uploading a configfile
System	[#204068] [eITS#231100965] EX5501, Unbalanced memory consumption
Security	[#204916] [Vulnerability] Zyxel-SI-1536 [Vulnerability] Buffer overflow vulnerability in the "traceroute" command of DX3300-T1 CPE
Syslog	[#205745] [eITS#240200310] EX5501, syslog error message when doing some GPVs
System	[#207433] [eITS#240300435] EX5501, Upgrade with factory reset does not trigger BOOTSTRAP event
System	[#207807] [eITS#240300804] EX5501, Add solution to fix reporting of CurrentTime and UTC handling of PeriodicInformTime

## Modifications in 5.17(ABRY.5)b1

### ● Feature Enhancement

Modified Modules	Features Enhancement List
DNS	[#181612][#eITS221102029]EX5501 Proxy DNS - Primary to Secondary fallback method
WAN	[#186321][eITS#230300970]EX5501, Display remaining lease time of WAN IP lease in CLI, see ticket 230101253
Mesh	[#192625][eITS#230600831]EX5501, SSID naming logic when

	disabling mesh and allowing separate SSIDs
Mesh	[#195155][eITS#230600830]EX5501, Disabling Mesh does not bring down the backhaul, which is still broadcasted as a hidden SSID
GUI	[#195808][OPAL Generic] GUI translation_ES_NL.
Mesh	[#195809][#eITS221000063]change the wording in SteerStatus.
GUI	[#195810][#eITS220901659]Translation error WIFI password strength at DX3301.
GUI	[#195811][#eITS220901550]Translation error WIFI password strength.
System	[#195813]Support Web http redirect to https.
System	[#195814]Console redirect/Zconsole monitor.
System	[#195815][ETSI EN 303 645] The consumer IoT device shall protect the confidentiality of critical security parameters that are communicated via remotely accessible network interfaces.
Syslog	[#195816][ETSI EN 303 645] 5.8-2: The confidentiality of sensitive personal data communicated between the device and associated services shall be protected, with cryptography appropriate to the properties of the technology and usage.
Interface Group	[#195818][#eITS230100744][EX5601-T0]EX5601, bridge config improvement.
IPv6	[#195819][#eITS221200506]Configuration of the AFTR should be possible with URL.
DHCP	[#195821][#eITS220900410]DHCP option providing CPE firmware version.
WIFI	[#195823][eITS#230200423]WX5600-T0 TR-098 support for WiFi X_ZYXEL_CountryCode.
SIP	[#195824][#eITS221101135][EX5601-T0] Grain IT - TLS encrypt the SIP signaling.

## ● Bug Fixed

Modified Modules	Bug Fixed List
Security	[#195825][eITS#230500907]Possible security flaw that allows to retrieve root password.

System	[#195662][eITS#230600128]EX5401-Bootloop Issue
Security	[#195901]Zyxel-SI-1498 [Vulnerability] WPS vulnerability on DX3301-T0 CPE in WLAN - remove WPS pin mode method 2 and method 3

## Modifications in 5.17(ABRY.4)C0

### ● Feature Enhancement

Modified Modules	Features Enhancement List
FCS	Based on 5.17(ABRY.4)b3, Change to FCS version.

## Modifications in 5.17(ABRY.4)b3

### ● Feature Enhancement

Modified Modules	Features Enhancement List

### ● Bug Fixed

Modified Modules	Bug Fixed List
Security	[#185448][CVE-2022-4203,4304,4450][CVE-2023-0215~0217,0286,0401][Zyxel-SI-1464] [Vulnerability] OpenSSL multiple vulnerabilities
WLAN	[#174862][WLAN][Time: 4 day][Occur: 3 time] CPE happen Invalid memory segment access during config WLAN setting

## Modifications in 5.17(ABRY.4)b2

### ● Feature Enhancement

Modified Modules	Features Enhancement List

## ● Bug Fixed

Modified Modules	Bug Fixed List
Security	[#177521][Security] Zyxel-SI-1433 [Vulnerability] Buffer overflow vulnerabilities and command injection vulnerability in NR7101
Security	[#179465][Security] Zyxel-SI-1441 [Vulnerability] Hidden SSID and symbolic Links in ftpd of EX5501
Security	[#178845][Security] [Security report 4.2.9] Unsafe User-Controlled Configuration Data (SMB)
ACS	[#180453][eITS 221200771]EX5501, TransferComplete messages without Start/Complete Time value, reference]221100865
System	[#181731][eITS 221001669]EX5501, Broken devices, see 220500910
System	[eITS 220500910] EX5501, Broken device returned from customer

## Modifications in 5.17(ABRY.4)b1

### ● Feature Enhancement

Modified Modules	Features Enhancement List
System	[#172839][Feature] Support EX5501-B1
WLAN	[#172100][Feature] Upgrade wlan driver to 17.10.188.75

### ● Bug Fixed

Modified Modules	Bug Fixed List
LAN	[#170030][eITS 220700252]EX5501, 2.5G LAN link lists MaxBitRate as 5G
WIFI	[#169504][VMG3625-T50B] WiFi button not working correct - Align WiFi on/off behavior with HW button and GUI.

## Modifications in 5.17(ABRY.3.3)C0

### ● Feature Enhancement

Modified	Features Enhancement List
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Modules	
FCS	FCS firmware released

## Modifications in 5.17(ABRY.3.3)b1

### ● Bug Fixed

Modified Modules	Bug Fixed List
System	[#181731] EX5501, Allente - Broken devices, see 220500910

## Modifications in 5.17(ABRY.3.2)C0

### ● Feature Enhancement

Modified Modules	Features Enhancement List
FCS	FCS firmware released

## Modifications in 5.17(ABRY.3.2)b1

### ● Bug Fixed

Modified Modules	Bug Fixed List
Security	[#177521] [Security] Zyxel-SI-1433 [Vulnerability] Buffer overflow vulnerabilities and command injection vulnerability in NR7101
Security	[#179465] [Security] Zyxel-SI-1441 [Vulnerability] Hidden SSID and symbolic Links in ftpd of EX5501
Security	[#178845] [Security] [Security report 4.2.9] Unsafe User-Controlled Configuration Data (SMB)

## Modifications in 5.17(ABRY.3)b5

### ● Feature Enhancement

Modified Modules	Features Enhancement List
GUI	[#166326] [OPAL Generic] GUI translation_ES_NL

### ● Bug Fixed

Modified Modules	Bug Fixed List
Security	[#166005] [Security] CPE happen "Invalid memory segment access" after Create Certificate Request

## Modifications in 5.17(ABRY.3)b4

### ● Feature Enhancement

Modified Modules	Features Enhancement List
WAN	[#164015][eITS #220301711] Allow HTTP/HTTPS access via IPoE interface.
WIFI	[#159699][eITS #220100035] EX5501, Device.WiFi.MultiAP.
Security	[#164360][Vulnerability] Infinite loop in BN_mod_sqrt() of OpenSSL when parsing certificates.

### ● Bug Fixed

Modified Modules	Bug Fixed List
WIFI	[#164007][eITS #220301708] Device sets EasyMesh ON and OFF when X_ZYXEL_EXT.EasyMesh.Enable is disabled.
	[#164004][eITS #220301715] The TR69 X_ZYXEL_Wireless_Mode for 5Ghz Band-AX Mixed mode value is not consistent.
	[#163020][WLAN] 5G Guest SSID switch button doesn't link with 2.4G Guest SSID behavior when onessid is enable.
Security	[#164250][eITS #220400041] VMG8825, cleartext storage of information.

## Modifications in 5.17(ABRY.3)b3

### ● Feature Enhancement

Modified Modules	Features Enhancement List
FTP	[#160480][OPAL Generic] Disable the FTP function

WLAN	[#156352][OPAL Generic] Change WPS button trigger condition
DHCP	[#161466][eITS #220100965]Support LAN DHCP option 43 suboptions to forward acs url
	[#162091][eITS #220300140] AX7501, Requested support for lan dhcp option 43 suboptions using cwnp to forward acs url
TR069	[#159523][eITS #211200832] Please sent TR069 cnonce in hexadecimal format
VoIP	[#153060][eITS #210701730]AX7501 - [ZAB-4] [SIP] Call hold does not work - medium
	[#152599][eITS #210701727]AX7501 - [ZAB-7] [SIP] Call is not executed when pound key is present - Medium
	[#156443][eITS #210601569]Call Hold does not work
GUI	[#162045][OPAL Generic] Portuguese GUI translation
	[#162101][OPAL Generic] French GUI translation
	[#162310][OPAL Generic] Italian GUI translation

## ● Bug Fixed

Modified Modules	Bug Fixed List
WLAN	[#156808][Wireless] DUT 5G channel on Band 2 (60), smart phone can't connect
VoIP	[#152404][eITS #210701735]AX7501 - [ZAB-1] [SIP] User-agent format does not follow standard - low

## Modifications in 5.17(ABRY.3)b2

## ● Bug Fixed

Modified Modules	Bug Fixed List
System	[#157516][System] Port mirror page can't display monitor interface list when no wan connect.
Security	[#146975][Security] L2TP VPN can't work on Multi-WAN interface.
TR-098	[#156612][TR-098] Account parameters are missing.
GUI	[#156514][GUI] In bridge <-> routing mode, IPv6 DHCP



	behavior does not follow IPv4 DHCP.
TR069	[#155173][eITS 210901346] The TR69 X_ZYXEL_Wireless_Mode for 5Ghz Band AX Mixed mode acceptable value is not consistent TR-181: Device.WiFi.Radio.{i}.OperatingStandards TR-098: InternetGatewayDevice.LANDevice.{i}.WLANConfiguration.{i}.X_ZYXEL_OperatingStandards

## Modifications in 5.17(ABRY.3)b1

### ● Feature Enhancement

Modified Modules	Features Enhancement List
LED	[#132874][eITS#200701283] EX5501, LED control
Port Forwarding	[#145239][eITS#210200785] Question: PCP (Port Control Protokoll) support
ICMP	[#149438][eITS#210600461] EX5401, disable or optimize client check
F-secure	[#149820][eITS#210600835] EX5501, disable F-secure
Routing	[#150626][eITS#210600904][230757] AX7501-B0 / RA-MTU
GUI	[#147975][OPAL Generic] Media Server GUI Change
	[#147255][eITS#210401527] EMG3525 Configure available cards in web-gui

### ● Bug Fixed

Modified Modules	Bug Fixed List
TR-069	[#154485][eITS#210900863] EX5501, Value for StaticAddressNumberOfEntries does not survive boot
IPv6	[#150913][eITS#210601930][NetCom_BW] DS-Lite setting missing Automatically configured by DHCP/DX5401-B0

## Modifications in 5.17(ABRY.2)C0

### ● Feature Enhancement

Modified Modules	Features Enhancement List
FCS	FCS firmware released

## Modifications in 5.17(ABRY.2)b8

### ● Bug Fixed

Modified Modules	Bug Fixed List
TR-069	[#157272][eITS #211001429][ASELCOM][ONTITEL] ACS problems with EX5501
DHCPv6	[#157439][eITS #211000436][Studerus] IPv6 neighbor not working AX 7501-B0

## Modifications in 5.17(ABRY.2)b7

### ● Bug Fixed

Modified Modules	Bug Fixed List
WLAN	[#156039] EX5501, acsd2 not running in 2b6_D0

## Modifications in 5.17(ABRY.2)b6

### ● Bug Fixed

Modified Modules	Bug Fixed List
F-Secure	[#149820][eITS#210600835] EX5501. disable F-secure
TR069	[#154485][eITS#210900863] EX5501, Value for StaticAddressNumberOfEntries does not survive boot

## Modifications in 5.17(ABRY.2)b5

### ● Bug Fixed

Modified Modules	Bug Fixed List
WLAN MESH	[#152094][eITS #210701811]AX7501, mesh not enabled when enabling via gui
TR069	[#151496][eITS #210301420][Lünecom] TR069 ACS get parameter / refresh objekt error AX 7501-B0

## Modifications in 5.17(ABRY.2)b4

### ● Feature Enhancement

Modified Modules	Features Enhancement List
WAN	[#149486][#210401267][#210401267][NYNEX] IPv4 DHCP client with 32 MASK works not AX7501-B0

## Modifications in 5.17(ABRY.2)b3

### ● Feature Enhancement

Modified Modules	Features Enhancement List
GUI	[#148279]Multi-language GUI for OPAL generic GW + Extender
TR069	[#148406][#210500049][Digimobil] XGSPON- Apply as Default Gateway for IPV6

### ● Bug Fixed

Modified Modules	Bug Fixed List
Security	[#143384][Vulnerability] BRCM "DeAgg & DeFrag Attacks

## Modifications in 5.17(ABRY.2)b2

### ● Bug Fixed

Modified	Bug Fixed List
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Modules	
System	[#146223][#210200611]EX5501, MAC offset changed after upgrade
Configuration	[#134885][# 200801911] EX5501, modify SP Domain
Security	[#146987][#210100668][Vulnerability] Vulnerabilities in Multiple Zyxel Equipment from Sec consult => issue 11

## Modifications in 5.17(ABRY.2)b1

### ● Feature Enhancement

Modified Modules	Features Enhancement List
TR-069	[#201001159][#137761][#137762][Feature]EX5501, support for Lifemote agent
	[#201101346][#139580]EX5501, firmware-download url does not follow routing path
Parental control	[#143397][OPAL]Change time format 00:00-23:59 in Parental control page.
System	[#143457][OPAL Generic]Key Feature - F-Secure 2.3
	[#143458][#143248][OPAL Generic]Key Feature - ZyEE Container
	[#143464][OPAL Generic]Key Feature - L2TP (default disabled)
	[#143779][OPAL Generic]Key Feature - MAP-T/MAP-E
WLAN	[#143252][OPAL Generic]Upgrade WLAN driver to 17.10.121.37
Configuration	[#210200336][#143165]Quickline - EX5501-B0 -- VLAN Support for CityFibre Network

### ● Bug Fixed

Modified Modules	Bug Fixed List
Security	[Vulnerability]UPnP protocol can be abused to perform DDoS and/or data exfiltration via SUBSCRIBE capability.
	[eITS #200800711][Vulnerability]CVE-2019-11358 vulnerability - update jQuery to "3.5.1".
	[#210100668][Vulnerability] Vulnerabilities in Multiple Zyxel

	Equipment from Sec consult => issue 1,2,4,5, 7~10
	[#210100667][Vulnerability]Dnsmasq multiple vulnerabilities (DNSPooq)
	[Vulnerability][CVE-2020-1971][Openssl]Correctly compare EdiPartyName in GENERAL_NAME_cmp()
TR-069	[#201000011][#136730]EX5501, can't set DataModelSpec
Configurati on	[#200701348][#135223]EX5501-B0 - V5.15(ABRY.0)C0 remote access not working
	[#200700852][#132302]EX5501, config backup-restore
Interface Group	[#200800057][#138519]EX5501-B0_No option of PPPoE on Quick Start Wizard
GUI	[#200800056][#135061]EX5501-B0_Unable to access the Web Gui after IP alias added
Remote MGMT	[#200500517][#128713]EX5501, dropbear not running after reboot

## Modifications in 5.15(ABRY.1)C0

### ● Feature Enhancement

Modified Modules	Features Enhancement List
FCS	FCS firmware released

## Modifications in 5.15(ABRY.1)b7

### ● Feature Enhancement

Modified Modules	Features Enhancement List
Routing	[BUGFIX][ #140034][EX5501-B0][#201100997] EX5501, VPN issues

### ● Bug Fixed

Modified Modules	Bug Fixed List

- **Issues have been enhanced**

Modified Modules	Bug Fixed List
System	[BUGFIX][EX5501-B0][#141175][#210100097] - EX5501, sporadic crash-boot

## **Modifications in 5.15(ABRY.1)b6**

- **Feature Enhancement**

Modified Modules	Features Enhancement List

- **Bug Fixed**

Modified Modules	Bug Fixed List
MESH	[#200900090] - EX5501, powered off/disconnected repeater still shown as active

## **Modifications in 5.15(ABRY.1)b5**

- **Feature Enhancement**

Modified Modules	Features Enhancement List
WAN	[eITS#200700865][#132260]EX5501, add 2.5G LAN-port to ccWAN

- **Bug Fixed**

Modified Modules	Bug Fixed List
WLAN	[eITS#200701017][#132439]EX5501, SSID hidden after upgrade

## **Modifications in 5.15(ABRY.1)b4**

- **Feature Enhancement**

Modified	Features Enhancement List
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Modules	

## Modifications in 5.15(ABRY.1)b3

### ● Feature Enhancement

Modified Modules	Features Enhancement List
GUI	Default wifi key reminder

## Modifications in 5.15(ABRY.1)b2

### ● Feature Enhancement

Modified Modules	Features Enhancement List
SYSTEM	Feature enhanced about Remote Access Privilege
	Support Intel 2.5G phy FW upgrade method
Cli	Config Default password(root, admin, psk) by AT command

## Modifications in 5.15(ABRY.1)b1

### ● Feature Enhancement

Modified Modules	Features Enhancement List
TR-069	[eITS#191200210][#119288]OPAL Support Device.ManagementServer.InformParameter.{i}.
SYSTEM	[eITS#191101310][#119060]OPAL Static allocation of MAC Offset
	[eITS#191200226][#119284]EX5501 Support Energy-Efficient-Ethernet per port in TR-181 data-model
	[eITS#191200262][#119456]OPAL Support user_startup_parameters.sh

### ● Bug Fixed

Modified Modules	Bug Fixed List

WLAN	[eITS#191200777][#120277]EX5501 No QR-code in GUI when using WPA3-SAE/WPA2-PSK or WPA3-PSK
TR-069	[eITS#191200213][#123136]EX5501 SPV Device.DeviceInfo.ProvisioningCode returns status=1

## Modifications in 5.15(ABRY.0)C0

### ● Feature Enhancement

Modified Modules	Features Enhancement List
FCS	First FCS firmware released

## Modifications in 5.15(ABRY.0)b6

### ● Bug Fixed

Modified Modules	Bug Fixed List
SYSTEM	[BUGFIX][BROADCOM][CS9088367]Wrong WLAN packet drop in case of high congestion which cause runner stuck

## Modifications in 5.15(ABRY.0)b5

### ● Feature Enhancement

Modified Modules	Features Enhancement List
GUI	[eITS #190900380][#114118]EX5501 How to remove a Card from the WEB-GUI
SYSTEM	[eITS #190900791][#114471]EX5501 Support Energy-Efficient-Ethernet in TR-181 data-model <ul style="list-style-type: none"> <li>● Device.X_ZYXEL_Power_Management.EEE</li> </ul>
	[eITS #190900790][#114470]EX5501 Disable eee on all Ethernet-ports
	[eITS #190900325][#114019]EX5501 Device.X_ZYXEL_LoginCfg.LogGp.i.Account.i.RemoteAccessPrivilege doesn't work



LED	[eITS #190900836][#114626]EX5501 LED-behavior when connected to 100Mbit on WAN
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### ● Bug Fixed

Modified Modules	Bug Fixed List
SYSTEM	[eITS #191001176][#116663]EX5501 zcfg_msg.c:235, _msg_recv(), WARNING: EID = 15, select() wait forever
	[eITS #190900429][#114051]EX5501 Formatting-error in default rom-file
WLAN	[eITS #190600865][#116633]EX5501 Configuration-parameter for length of auto-generated WiFi password
	[eITS #190900951][#114882]EX5501 Change Wi-Fi settings via Wi-Fi-card
Security	[eITS #190800137][#111795]IZyShell Privilege Escalation [privesc] - P1
LAN	[eITS #190801234][#114617]EX5501 LAN-port Bytes Sent counter in GUI stops at uint32 max value

### ● Issue Has Been Enhanced

Modified Modules	Bug Fixed List
SYSTEM	[eITS #190801106][#112930]EX5501 Ethernet IOP

## Modifications in 5.15(ABRY.0)b4

### ● Feature Enhancement

Modified Modules	Features Enhancement List
SYSTEM	[eITS #190600145]EX5501 Get complete data-model
WLAN	[eITS #190600635][#109414]EX5501 Parameter to black-list characters from auto-generated WiFi Passphrase
	[eITS #190600289][#112307]EX5501 Support WPA3

### ● Bug Fixed

Modified Modules	Bug Fixed List
IGMP	[eITS #190800989][# 112874]Multiple STB's watching same multicast-channel fails

## Modifications in 5.15(ABRY.0)b3

### ● Feature Enhancement

Modified Modules	Features Enhancement List
Cli	[eITS #190600540][ #108492]EX5501 Add commands to busybox
WLAN	[#190600600]EX5501 Config-parameter for 5GHz SSID suffix [eITS #190700108][#109595]EX5501 Parameter to control case for auto-generated Wi-Fi passphrase
System	[eITS #190600832][#109358]EX5501 Still using old algorithm for generating supervisor-password

### ● Bug Fixed

Modified Modules	Bug Fixed List

## Modifications in 5.15(ABRY.0)b2

### ● Feature Enhancement

Modified Modules	Features Enhancement List

### ● Bug Fixed

Modified Modules	Bug Fixed List

## Modifications in 5.15(ABRY.0)b1

### ● Feature Enhancement

Modified Modules	Features Enhancement List

### ● Bug Fixed

Modified Modules	Bug Fixed List

## Check list for the items may be related to HW functions

Items	Any change?	Comments
DSL/Modem code	N	
DSL/GE/PON Application/Driver code and setting parameters	N	
Wireless driver (WiFi/3G/WiMAX/LTE..)	N	
VoIP driver & setting	N	
Video decoder driver	N	
Memory access related (like tuning DDR parameters, etc)	N	
Dying gasp	N	
LED behavior	N	
SDK version upgraded	N	
NAND Flash: File system type change; Partition layout change	N	
Others	N	

### Default Setting:

1. Default setting table : <http://172.20.0.37/documents/689>
2. Default URL: <http://192.168.1.1>

Manufactory Data

Firmware Version	: V5.17(ABRY.5)C0
Bootbase Version	: V1.65   08/11/2023 15:42:24
Vendor Name	: Zyxel Communications Corp.
Product Model	: EX5501-B0
Serial Number	: S190Y40045910
GPON Serial Number	: ZYXE12345678
GPON Password	: 1234567890
First MAC Address	: C86C876551FF
Last MAC Address	: C86C8765520A
MAC Address Quantity	: 12
Default Country Code	: FF
Boot Module Debug Flag	: 01
Kernel Checksum	: 00004595
RootFS Checksum	: 0000577F
Romfile Checksum	: N/A (default)
Main Feature Bits	: 00
Other Feature Bits	:
ffea8cec: 04070001 ffffffff 00000000 00000000	
ffea8cfc: ffffffff ffffffff ffffffff	

Firmware Version	: V5.17(ABRY.5)C0
Bootbase Version	: V1.65   08/11/2023 15:42:24
Vendor Name	: Zyxel Communications Corp.
Product Model	: EX5501-B1
Serial Number	: S210Y39040011
GPON Serial Number	: ZYXE12345678
GPON Password	: 1234567890
First MAC Address	: 5C648EB5A224
Last MAC Address	: 5C648EB5A22F
MAC Address Quantity	: 12
Default Country Code	: FF
Boot Module Debug Flag	: 01
Kernel Checksum	: 00004595
RootFS Checksum	: 0000577F
Romfile Checksum	: N/A (default)
Main Feature Bits	: 00
Other Feature Bits	:
ffa88d2c:	04070001 ffffffff 00000000 00000000
ffa88d3c:	ffffffff ffffffff ffffffff