

# **EX5501-B0 Generic**

Firmware Release Note

V5.15(ABRY.1)C0

Date: Jan 29, 2021

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## Revision History

Date	Release	Author	Description
2019/05/31	1.0	GuanHong Chen	FW release for V5.15(ABRY.0)b1
2019/07/08	2.0	GuanHong Chen	FW release for V5.15(ABRY.0)b2
2019/08/07	3.0	Justin Lin	FW release for V5.15(ABRY.0)b3
2019/09/11	4.0	ChaoChengDo	FW release for V5.15(ABRY.0)b4
2019/11/15	5.0	Zhongde Lai	FW release for V5.15(ABRY.0)b5
2019/12/04	6.0	Zhongde Lai	FW release for V5.15(ABRY.0)b6
2019/12/06	7.0	Zhongde Lai	FW release for V5.15(ABRY.0)C0
2020/03/13	8.0	Zhongde Lai	FW release for V5.15(ABRY.1)b1
2020/04/30	9.0	Zhongde Lai	FW release for V5.15(ABRY.1)b2
2020/06/10	10.0	Zhongde Lai	FW release for V5.15(ABRY.1)b3
2020/07/17	11.0	Zhongde Lai	FW release for V5.15(ABRY.1)b4
2020/08/11	12.0	Zhongde Lai	FW release for V5.15(ABRY.1)b5
2020/09/11	13.0	PeiPing Chen	FW release for V5.15(ABRY.1)b6
2021/01/29	14.0	PeiPing Chen	FW release for V5.15(ABRY.1)b7
2021/01/29	15.0	PeiPing Chen	FW release for V5.15(ABRY.1)C0

## **EX5501-B0 Generic V5.15(ABRY.1)C0 Release Note**

Date: Jan 29, 2021

### **Supported Platforms:**

Zyxel EX5501-B0

### **Versions:**

Bootbase version : V1.61 | 07/16/2020 11:31:17

Firmware version : V5.15(ABRY.1)C0

Kernel version: 4.1.51

WLAN code version: 17.10 RC99.1301

3G WWAN package version: 1.20

### **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-Utills	1.5	<a href="https://git.kernel.org/pub/scm/linux/kernel/git/shemminger/bridge-utils.git/">https://git.kernel.org/pub/scm/linux/kernel/git/shemminger/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/GPLv3	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	1.4.16.3	<a href="https://git.netfilter.org/iptables/">https://git.netfilter.org/iptables/</a>	GPLv2	Modified
jpegsrcc	v9a	<a href="http://www.iijg.org/">http://www.iijg.org/</a>	IJG	Used
json-c	0.12	<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
libnftnl	1.0.1	<a href="https://git.netfilter.org/libnftnl/">https://git.netfilter.org/libnftnl/</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	4.1.51			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	5.7.2	<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	1.1.1b	<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

## 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

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- **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 Modules	Features Enhancement List

## 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	Features Enhancement List
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Modules	
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 ● Device.X_ZYXEL_Power_Management.EEE
	[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

### ● Bug Fixed

Modified Modules	Bug Fixed List
SYSTEM	[eITS #191001176][#116663]EX5501 zcfg_msg.c:235, _msg_rcv(),

	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	Features Enhancement List
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Modules	

● Bug Fixed

Modified Modules	Bug Fixed List