

EX5600-T0/EX5601-T0/ EX5600-T1/EX5601-T1 Generic

Firmware Release Note

V5.70(ACDZ.4)C0

Date: Feb. 24, 2025

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Reviewer:

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Revision History

Date	Release	Author	Description
2022/04/06	1.0	Frank Chang	FW release for V5.70(ACDZ.0)b1
2022/05/23	2.0	Frank Chang	FW release for V5.70(ACDZ.0)b2
2022/06/22	3.0	Winnie Wen	FW release for V5.70(ACDZ.0)b3
2022/07/18	4.0	Frank Chang	FW release for V5.70(ACDZ.0)b4
2022/08/08	5.0	Frank Chang	FW release for V5.70(ACDZ.0)b5
2022/08/29	6.0	Frank Chang	FW release for V5.70(ACDZ.0)b6
2022/09/05	7.0	Frank Chang	FW release for V5.70(ACDZ.0)b7
2022/09/08	8.0	Frank Chang	FW release for V5.70(ACDZ.0)C0
2022/09/27	9.0	Frank Chang	FW release for V5.70(ACDZ.1)b1
2022/11/04	10.0	Frank Chang	FW release for V5.70(ACDZ.1)b2
2022/11/30	11.0	Frank Chang	FW release for V5.70(ACDZ.1)b3
2022/12/19	12.0	Frank Chang	FW release for V5.70(ACDZ.1)b4
2022/12/26	13.0	Frank Chang	FW release for V5.70(ACDZ.1)b5
2022/12/30	14.0	Frank Chang	FW release for V5.70(ACDZ.1)C0
2023/02/24	15.0	Frank Chang	FW release for V5.70(ACDZ.2)b1
2023/04/28	16.0	Frank Chang	FW release for V5.70(ACDZ.2)b2
2023/06/16	17.0	Frank Chang	FW release for V5.70(ACDZ.2)b3
2023/07/28	18.0	Frank Chang	FW release for V5.70(ACDZ.2)b4
2023/09/01	19.0	Frank Chang	FW release for V5.70(ACDZ.2)C0
2023/10/20	20.0	Yen-Chun Lin	FW release for V5.70(ACDZ.3)b1
2023/12/29	21.0	Yen-Chun Lin	FW release for V5.70(ACDZ.3)b2
2024/03/01	22.0	Yen-Chun Lin	FW release for V5.70(ACDZ.3)b3
2024/04/08	23.0	Yen-Chun Lin	FW release for V5.70(ACDZ.3)b4
2024/04/24	24.0	Yen-Chun Lin	FW release for V5.70(ACDZ.3)C0
2024/06/14	25.0	Yen-Chun Lin	FW release for V5.70(ACDZ.3.1)b1
2024/06/14	26.0	Yen-Chun Lin	FW release for V5.70(ACDZ.3.1)C0
2024/06/28	27.0	Yen-Chun Lin	FW release for V5.70(ACDZ.3.2)b1
2024/06/28	28.0	Yen-Chun Lin	FW release for

			V5.70(ACDZ.3.2)C0
2024/07/31	29.0	Yen-Chun Lin	FW release for V5.70(ACDZ.4)b1
2024/11/01	30.0	Yen-Chun Lin	FW release for V5.70(ACDZ.4)b2
2025/01/03	31.0	Yen-Chun Lin	FW release for V5.70(ACDZ.4)b3
2025/02/24	32.0	Yen-Chun Lin	FW release for V5.70(ACDZ.4)C0

EX5600-T0/EX5601-T0/EX5600-T1/EX5601-T1
Generic
V5.70(ACDZ.4)C0
Release Note

Date: Feb. 24, 2025

Supported Platforms:

Zyxel EX5600-T0/EX5601-T0/EX5600-T1/EX5601-T1 Generic

Versions:

Bootbase version : V3.0 | 10/04/2024 10:28:56

Firmware version : V5.70(ACDZ.4)C0

Kernel version: 5.4.171

WLAN code version: 7.6.2.5

3G WWAN package version: 1.26

D2 DSP package version: HERMAN4 GW 2.4 Release 6.0

Notes:

Public Domain Software Announcements

Open Source Used (3rd party software)	Version	From (Source)	Licensing Term	Modifi ed / Used
alsa-lib	1.2.4	https://ftp.osuosl.org/pub/blfs/conglomeration/alsa-lib/alsa-lib-1.2.4.tar.bz2	LGPLv2.1	Used
alsa-ucm-conf	1.2.4	https://www.alsa-project.org/files/pub/lib/alsa-ucm-conf-1.2.4.tar.bz2	BSD 3-Clause	Used
alsa-utils	1.2.4	https://ftp.osuosl.org/pub/blfs/conglomeration/alsa-utils/alsa-utils-1.2.4.tar.bz2	GPLv2	Used
argp-standalone	1.3	http://sources.buildroot.net/argp-standalone/argp-standalone-1.3.tar.gz	LGPLv2	Used
atftp	0.8.0	https://sourceforge.net/projects/atftp/	GPLv2	Modifi ed
attr	2.4.48	http://savannah.nongnu.org/projects/attr	GPLv2	Used
binutils	2.35.1	https://sourceware.org/pub/binutils/releases/	GPLv2	Used
bridge-utils	1.7	http://www.linuxfromscratch.org/blfs/view/svn/basicnet/bridge-utils.html	GPLv2	Modifi ed
busybox	1.31.1	https://busybox.net/	GPLv2	Modifi ed
bwm-ng	0.6.1	http://www.grobb.org/?id=projects&sub=bwm-ng	GPLv2	Modifi ed
bzip2	1.0.8	http://sources.buildroot.net/bzip2/bzip2-1.0.8.tar.gz	BSD-style license	Modifi ed
ca-certificates	20210119	http://ftp.debian.org/debian/pool/main/c/ca-certificates/ca-certificates_20210119.tar.xz	GPLv2	Used
c-ares	1.30.0	https://c-ares.haxx.se/download	c-ares license	Modifi ed
cgi-io	44447	https://firmware.download.immortalwrt.eu.org/package-sources/cgi-io-2021-09-08-98cef9dd.tar.xz	ISC	Used
clinkc	2.4	https://sourceforge.net/projects/clinkc/	BSD	Modifi ed
conntrack-tools	1.4.6	https://git.netfilter.org/conntrack-tools/	GPLv2	Used

curl	8.7.1	https://curl.se/	MIT	Modified
Berkeley DB	4.7.25.NC	https://src.fedoraproject.org/lookaside/extras/nss_db/db-4.7.25.NC.tar.gz/073ab7f20d24b3872a51ca762f5090e7/db-4.7.25.NC.tar.gz	Sleepycat	Modified
dnsmasq	2.85	http://www.thekelleys.org.uk/dnsmasq/doc.html	GPLv2/GPLv3	Modified
dropbear	2024.85	https://github.com/mkj/dropbear	MIT	Modified
ebtables	2018-06-27-48cff25d	https://git.netfilter.org/ebtables/	GPLv2	Modified
elfutils	0.18	https://fedorahosted.org/elfutils/	GPLv2/GPLv3/LGPLv3	Modified
ethtool	5.1	http://www.kernel.org/pub/software/network/ethtool/	GPLv2	Used
eventlog	0.2.10	https://github.com/balabit/eventlog	BSD	Used
expat	2.6.2	https://github.com/libexpat/libexpat	MIT	Used
ez-ipupdate	3.0.11b8	http://ez-ipupdate.com/	GPLv2	Modified
ffmpeg	7.1	https://ffmpeg.org/releases/	GPLv2/GPLv3/LGPLv2.1/LGPLv3	Modified
flac	1.3.3	https://downloads.xiph.org/releases/flac/	GPLv2/LGPLv2.1	Modified
fstools	2021-01-04-c53b1882	https://sources.openwrt.org/fstools-2021-01-04-c53b1882.tar.xz	GPLv2	Modified
fwtool	2019-11-12-8f7fe925	https://openwrt.org/packages/pkgdata/fwtool	GPLv2	Used
gdbm	1.18.1	https://www.gnu.org/software/gdbm/	GPLv3	Modified
gettext	0.19.8.1	http://www.gnu.org/software/gettext/	GPLv3	Used

glib	2.68.4	http://www.gtk.org/	LGPLv2.1	Used
gmp	6.2.1	http://gmplib.org/	GPLv3	Used
gnutls	3.7.1	http://www.gnutls.org/	GPLv2 + LGPL v2.1	Modified
i2c-tools	4.3	https://i2c.wiki.kernel.org/index.php/I2C_Tools	GPLv2 + LGPL v2.1	Used
iproute2	5.11.0	https://github.com/shemminger/iproute2	GPLv2	Modified
iptables	1.8.7	https://git.netfilter.org/iptables/	GPLv2	Modified
iw	5.9-8fab0c9e	http://wireless.kernel.org/en/users/Documentation/iw	ISC	Modified
json-c	0.15	https://github.com/json-c/json-c/downloads	MIT	Modified
jsonfilter	2018-02-04-c7e938d6	http://git.openwrt.org/?p=project/jsonpath.git	ISC	Modified
kmod	27	https://www.kernel.org/pub/linux/utils/kernel/kmod/	LGPL2.1	Used
lame	3.1	http://sourceforge.net/projects/lame	LGPLv2	Used
libcap	2.43	https://www.kernel.org/pub/linux/libs/security/linux-privs/libcap2/	GPLv2	Modified
libcap-ng	0.8.1	https://people.redhat.com/sgrubb/libcap-ng/index.html	GPLv2+LGPL2.1	Used
libdbi	0.9.0	http://libdbi.sourceforge.net/	LGPL2.1	Used
libedit	20210419-3.1	http://pkgs.fedoraproject.org/repo/pkgs/libedit/libedit-20080712-2.11.tar.gz/	BSD	Modified
libexif	0.6.22	https://libexif.github.io/	LGPL2.1	Modified
libffi	3.3	http://pkgs.fedoraproject.org/repo/pkgs/libffi/libffi-3.0.11.tar.gz/	MIT	Used
libgcrypt	1.8.7	https://www.gnupg.org/related_software/libgcrypt/	GPLv2+LGPL2.1+BSD_3 Clause+ X License+Public domain+ OCB license 1	Used
libpgp-error	1.42	https://www.gnupg.org/related_software/libpgp-error/	GPLv2+LGPL2.1	Modified

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libgpiod	1.4.4	https://git.kernel.org/pub/scm/libs/libgpiod/libgpiod.git	LGPL2.1	Used
libiconv	1.16	https://ftp.gnu.org/gnu/libiconv/libiconv-1.16.tar.gz	GPLv3/LGPLv2	Modified
libid3tag	0.15.1b	http://mad.sourceforge.net/	GPLv2	Used
libjpeg-turbo	2.0.6	https://www.libjpeg-turbo.org/	IJG License + BSD 3-clause License + zlib License	Used
libmnl	1.0.4	http://www.netfilter.org/projects/libmnl/	LGPLv2.1	Modified
libnetfilter_conntrack	1.0.8	https://git.netfilter.org/libnetfilter_conntrack/	GPLv2	Used
libnetfilter-cthelper	1.0.0	http://www.netfilter.org/projects/libnetfilter_cthelper/	GPLv2	Used
libnetfilter_cttimeout	1.0.0	http://www.netfilter.org/projects/libnetfilter_cttimeout/	GPLv2	Used
libnetfilter_queue	1.0.5	https://git.netfilter.org/libnetfilter_queue/	GPLv2	Used
libnfnl	1.0.1	https://git.netfilter.org/libnfnl/	GPLv2	Used
libnl	3.5.0	http://www.infradead.org/~tgr/libnl/	LGPLv2.1	Modified
libnl-tiny	2020-08-05-c291088f	https://github.com/openwrt/openwrt/tree/master/package/libs/libnl-tiny	LGPLv2.1	Modified
libogg	1.3.4	https://downloads.xiph.org/releases/ogg/	BSD 3-Clause	Used
libpcap	1.9.1	www.tcpdump.org	BSD 3-Clause	Used
libselenium	3.2	https://github.com/SELinuxProject/selinux/releases/download/3.2	public domain	Used
libsepol	3.2	https://github.com/SELinuxProject/selinux/releases/download/3.2	LGPLv2.1	Used
libsrtp	1.6.0	http://oss.metaparadigm.com/json-c/	BSD	Modified
libstrophe	0.10.0	https://codeload.github.com/strophe/libstrophe/tar.gz/	GPLv3	Modified

libtirpc	1.3.2	http://libtirpc.sourceforge.net/	BSD	Modified
libtool	2.4.6	http://www.gnu.org/software/libtool/	GPLv2	Used
libubox	2021-05-16-b14c4688	http://mirror.greenwavereality.com/openwrt/	ISC	Used
libusb	1.0.24	https://sourceforge.net/projects/libusb/	LGPL 2.1	Used
libvorbis	1.3.7	http://downloads.xiph.org/releases/vorbis/	BSD	Used
libxml2	2.9.12	http://xmlsoft.org/sources/	MIT	Used
Linux/Arm Kernel	5.4.171	http://ftp.ntu.edu.tw/pub/linux/kernel/v5.x/	GPLv2	Modified
logrotate	3.22.0	https://launchpad.net/ubuntu/+source/logrotate	GPLv2	Modified
lua	5.1.5	http://www.tecgraf.puc-rio.br/lua/ftp/	MIT	Modified
lua	5.3.5	http://www.tecgraf.puc-rio.br/lua/ftp/	MIT	Modified
luasocket	2019-04-21-733af884	https://github.com/diegonehab/luasocket	MIT	Modified
lucihttp	2021-06-11-3dc89af4	https://github.com/jow-/lucihttp.git	MIT	Used
lxc	2.0.4	https://linuxcontainers.org/lxc/downloads/	LGPLv2.1/GPLv2	Modified
mailsend	1.19	https://github.com/muquit/mailsend/	BSD	Modified
mbedtls	2.16.11	https://code.load.github.com/ARMmbed/mbedtls/tar.gz/v2.16.11	GPLv2	Modified
minidlna	1.3.0	https://sourceforge.net/projects/minidlna/files/minidlna/1.3.0/	GPLv2/BSD	Modified
musl-fts	1.2.7	https://github.com/pullmoll/musl-fts.git	BSD 3-Clause	Used

nbtscan	1.7.2	http://ftp.debian.org/debian/pool/main/n/nbtscan/	GPLv2	Used
ncurses	6.2	http://ftp.gnu.org/pub/gnu/ncurses/	MIT with exception	Modified
net-snmp	5.9.4	http://www.net-snmp.org/	BSD/BSD-like	Modified
nettle	3.6	https://ftp.gnu.org/gnu/nettle/	GPLv2/LGPLv3	Modified
nghttp2	1.57.0	https://osdn.net/projects/immortalwrt/storage/sources/nghttp2-1.43.0.tar.xz/	MIT	Used
ntfs-3g	2022.10.3	http://ntfs-3g.org	GPLv2/LGPLv2	Used
ntpclient	2015_365	http://doolittle.icarus.com/ntpclient/	GPLv2	Modified
omcproxy	2018-12-14-722151f0	https://osdn.net/projects/immortalwrt/storage/sources/omcproxy-2018-12-14-722151f0.tar.xz/	Apache License v2	Modified
openssl	3.2.0	http://www.openssl.org	OpenSSL	Modified
pciutils	3.7.0	https://github.com/yifengyou/pciutils-3.7.0	GPLv2	Modified
pcre	8.44	https://sourceforge.net/projects/pcr/files/pcr/8.44/	PCRE LICENCE	Used
pcr2	10.44	https://www.linuxfromscratch.org/blfs/view/systemd/general/pcr2.html	PCRE2 LICENCE	Modified
popt	1.16	http://rpm5.org/files/popt/	MIT	Modified
ppp	2.4.3	http://www.roaringpenguin.com/pppoe	GPLv2/BSD	Modified
pptp	1.7.1	https://sourceforge.net/projects/pptpclient/files/pptp/pptp-1.7.1/	GPLv2	Used
procd	2021-02-23-37eed131	https://downloads.openwrt.org/releases/21.02.1/targets/arc770/generic/openwrt-21.02.1-arc770-generic-default.manifest	LGPL v2.1	Modified
pure-ftpd	1.0.50	http://pureftpd.org	ISC/BSD	Modified

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radvd	1.8	http://www.litech.org/radvd/	BSD	Used
readline	8.2	https://ftp.gnu.org/gnu/readline/	GPLv3	Used
resolveip	2	https://github.com/openwrt/openwrt/tree/openwrt-21.02/package/network/utils/resolveip	GPLv2	Used
rp-pppoe	3.14	https://dianne.skoll.ca/projects/rp-pppoe/download	GPLv2	Modified
samba	3.6.25	https://download.samba.org/pub/samba/samba-3.6.25.tar.gz	GPLv3	Modified
sqlite	3460000	http://www.sqlite.org/	Public Domain License	Used
swconfig	12	https://github.com/openwrt-mirror/openwrt/blob/master/target/linux/generic/files/drivers/net/phy/swconfig.c	GPLv2	Used
syslog-ng	4.7.1	https://github.com/balabit/syslog-ng	GPLv2/LGPL v2.1	Used
tcpdump	4.99.4	http://www.tcpdump.org/	BSD	Used
u-boot	2021.01	https://source.denx.de/u-boot/u-boot	BSD 2-clause / BSD 3-clause / eCos-2.0 / GPLv2 / ibm-pibs / ISC / LGPLv2.0 / LGPLv2.1 / MIT / OFL / X11 License / Others	Used
ubox	2020-10-25-9ef88681	https://git.openwrt.org/project/ubox.git	GPLv2	Used
ubus	2021-06-30-4fc532c8	https://git.openwrt.org/?p=project/ubus.git;a=shortlog	LGPLv2.1	Used
uci	2020-10-06-52bbc99f	https://git.openwrt.org/project/uci.git	LGPLv2.1	Used
uclient	2021-05-14-6a6011d	https://git.openwrt.org/project/uclient.git	ISC	Used

	f			
udhcp	0.9.8	http://udhcp.busybox.net/	GPLv2	Modified
unbound	1.14.0	https://nlnetlabs.nl/downloads/unbound/	BSD 3 Clause	Modified
urandom-seed	3	https://github.com/ntlf9t/openwrt-1/blob/master/package/system/urandom-seed/files/etc/init.d/urandom_seed	GPLv2	Used
urngd	2020-01-21-c7f7b6b6	http://mirror.greenwavereality.com/openwrt/	GPLv2	Used
usb-modeswitch	2.1.0	http://www.draisberghof.de/usb_modeswitch/	GPLv2	Used
usign	2020-05-23-f1f65026	https://download.iopsys.eu/iopsys/mirror/usign-2020-05-23-f1f65026.tar.xz	ISC	Used
ustream-ssl	2020-12-10-68d09243	https://github.com/KoWming/Openwrt-LEDE-dl/blob/main/ustream-ssl-2020-12-10-68d09243.tar.xz	ISC	Used
util-linux	2.36.1	https://github.com/karelzak/util-linux/	GPLv2	Used
vim	9.0	http://ftp.vim.org/pub/vim/unix	VIM LICENSE	Modified
wide-dhcpv6	20080615	https://sourceforge.net/projects/wide-dhcpv6/	BSD	Modified
wireless-regdb	2021.08.28	https://git.kernel.org/pub/scm/linux/kernel/git/sforshee/wireless-regdb.git/	ISC	Modified
wireless-tools	29	https://hewlettpackard.github.io/wireless-tools	GPLv2	Modified
wolfssl	4.8.1-stable	http://www.wolfssl.com/	GPLv2	Modified
wsdd2	2021-08-09-bcc51c3	https://github.com/Netgear/wsdd2	GPLv3	Used

	e			
xl2tpd	1.3.16	https://github.com/xelerance/xl2tpd.git	GPLv2	Modified
xz	5.2.5	https://tukaani.org/xz	XZ Utils Licensing	Modified
zlib	1.3.1	https://github.com/madler/zlib	zlib	Used
zoneinfo	2021a	https://www.iana.org/time-zones/repository/releases/tzcode2021a.tar.gz https://www.iana.org/time-zones/repository/releases/tzdata2021a.tar.gz	BSD 3-clause	Modified
miniupnpd	2.3.1	https://github.com/miniupnp/miniupnp	BSD-3-Clause	Used
quagga	1.2.4	https://github.com/Quagga/quagga	GPLv2	Used

Known issues

Modules	Issue	Risk Impact Information

Notification

1. OpenSSL 3.1.2 Upgrade Notification

The certificates signed using SHA1 or older/weaker hashes are no longer supported for authenticating servers or clients.

Before upgrading the firmware:

- Please ensure that certificates in your devices are not using weak hashes.
- If weak hashes are detected, kindly update and verify your certificates promptly with stronger hash
(The minimum recommended hash is SHA256)

Modifications in 5.70(ACDZ.4)C0

Based on V5.70(ACDZ.4)b3 to release FCS version

Modifications in 5.70(ACDZ.4)b3

● Feature Enhancement

Modified Modules	Features Enhancement List
Security	1. [EN18031][CVE] Fixed CVE libxml2 : CVE-2022-23308, CVE-2022-40303, CVE-2024-25062 nghttp2 : CVE-2023-35945, CVE-2023-44487 ffmpeg : CVE-2020-35965, CVE-2021-38291, CVE-2022-3109, CVE-2022-48434, CVE-2024-22860, CVE-2024-22861, CVE-2024-22862 pppd : CVE-2006-2194, CVE-2014-3158, CVE-2015-3310, CVE-2018-11574, CVE-2020-8597

● Bug Fixed

Modified Modules	Bug Fixed List
Security	1. [CVE-2024-12010] Zyxel-SI-1592 [Vulnerability] Post-authentication command injection vulnerability in the email sending function 2. [CVE-2024-12009] Zyxel-SI-1591 [Vulnerability] Post-authentication command injection vulnerability in the function "ZyEE"

Modifications in 5.70(ACDZ.4)b2

● Feature Enhancement

Modified Modules	Features Enhancement List
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● Bug Fixed

Modified Modules	Bug Fixed List
Security	1. [CVE-2024-20017] [Vulnerability] Improper input validation in wlan service

	2. [CVE-2024-8748] [Zyxel-SI-1576] [Vulnerability] Unauthenticated buffer overflow in VMG8825-T50 3. [CVE-2024-9197] [Zyxel-SI-1583] [Vulnerability] Buffer overflow and potential command injection vulnerabilities in VMG3625- T50B (Medium)
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Modifications in 5.70(ACDZ.4)b1

● Feature Enhancement

Modified Modules	Features Enhancement List
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● Bug Fixed

Modified Modules	Bug Fixed List
Security	1. [CVE-2024-5412][Zyxel-SI-1557][Vulnerability] Unauthenticated heap buffer overflow in the libclinkc library. 2. [CVE-2024-38266, 38267, 38268, 38269][Zyxel-SI-1559] [Vulnerability] Multiple authenticated buffer overflow vulnerabilities