

# **PX7501-B0/AX7501-B0/AX7501-B1/PM7510-00**

## **Generic**

Firmware Release Note

V5.17(ABPC.7.1)D0

|           |              |
|-----------|--------------|
| Date:     | Dec 19, 2025 |
| Author:   | PeiPing Chen |
| Reviewer: | Justin Lin   |

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## Revision History

| Date       | Release | Author       | Description                      |
|------------|---------|--------------|----------------------------------|
| 2019/03/15 | 1.0     | Joanna Su    | FW release for V5.15(ABPC.0)b1   |
| 2019/04/23 | 1.1     | Joanna Su    | FW release for V5.15(ABPC.0)b2   |
| 2019/06/04 | 1.2     | Joanna Su    | FW release for V5.15(ABPC.0)b3   |
| 2019/08/23 | 1.3     | Justin Lin   | FW release for V5.15(ABPC.0)b4   |
| 2019/12/27 | 1.4     | Justin Lin   | FW release for V5.15(ABPC.0)b5   |
| 2020/02/27 | 1.5     | Justin Lin   | FW release for V5.15(ABPC.0)b6   |
| 2020/03/18 | 1.6     | Justin Lin   | FW release for V5.15(ABPC.0)b7   |
| 2020/03/20 | 1.7     | Justin Lin   | FW release for V5.15(ABPC.0)C0   |
| 2021/02/26 | 2.0     | Justin Lin   | FW release for V5.17(ABPC.1)b1   |
| 2021/04/23 | 2.1     | Justin Lin   | FW release for V5.17(ABPC.1)b2   |
| 2021/05/21 | 2.2     | Justin Lin   | FW release for V5.17(ABPC.1)b3   |
| 2021/06/25 | 2.3     | Justin Lin   | FW release for V5.17(ABPC.1)b4   |
| 2021/08/06 | 2.4     | Justin Lin   | FW release for V5.17(ABPC.1)b5   |
| 2021/11/10 | 2.5     | Justin Lin   | FW release for V5.17(ABPC.1)b6   |
| 2021/11/30 | 2.6     | Justin Lin   | FW release for V5.17(ABPC.1)b7   |
| 2021/11/30 | 2.7     | Justin Lin   | FW release for V5.17(ABPC.1)C0   |
| 2021/10/15 | 3.0     | Justin Lin   | FW release for V5.17(ABPC.2)b1   |
| 2021/12/29 | 3.1     | PeiPing Chen | FW release for V5.17(ABPC.2)b2   |
| 2022/03/10 | 3.2     | PeiPing Chen | FW release for V5.17(ABPC.2)b3   |
| 2022/04/22 | 3.3     | PeiPing Chen | FW release for V5.17(ABPC.2)b4   |
| 2022/05/13 | 3.4     | PeiPing Chen | FW release for V5.17(ABPC.2)b5   |
| 2022/06/01 | 3.5     | Justin Lin   | FW release for V5.17(ABPC.2)C0   |
| 2022/08/10 | 3.6     | PeiPing Chen | FW release for V5.17(ABPC.2.1)b1 |
| 2022/08/19 | 3.7     | PeiPing Chen | FW release for V5.17(ABPC.2.1)b2 |
| 2022/08/19 | 3.8     | PeiPing Chen | FW release for V5.17(ABPC.2.1)C0 |
| 2022/08/31 | 4.0     | PeiPing Chen | FW release for V5.17(ABPC.3)b1   |
| 2022/10/20 | 4.1     | PeiPing Chen | FW release for V5.17(ABPC.3)b2   |
| 2022/11/21 | 4.2     | PeiPing Chen | FW release for V5.17(ABPC.3)b3   |
| 2022/12/30 | 4.3     | PeiPing Chen | FW release for V5.17(ABPC.3)b4   |
| 2023/01/05 | 4.4     | PeiPing Chen | FW release for V5.17(ABPC.3)C0   |
| 2023/01/12 | 4.5     | PeiPing Chen | FW release for V5.17(ABPC.3)D0   |

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|------------|-------|--------------|----------------------------------|
| 2023/04/28 | 5.0   | PeiPing Chen | FW release for V5.17(ABPC.4)b2   |
| 2023/06/16 | 5.1   | PeiPing Chen | FW release for V5.17(ABPC.4)b3   |
| 2023/07/28 | 5.2   | PeiPing Chen | FW release for V5.17(ABPC.4)b4   |
| 2023/08/11 | 5.3   | PeiPing Chen | FW release for V5.17(ABPC.4)b5   |
| 2023/09/01 | 5.4   | PeiPing Chen | FW release for V5.17(ABPC.4)b6   |
| 2023/09/20 | 5.5   | PeiPing Chen | FW release for V5.17(ABPC.4)C0   |
| 2023/09/20 | 5.6   | PeiPing Chen | FW release for V5.17(ABPC.4)D0   |
| 2023/12/15 | 6.0   | PeiPing Chen | FW release for V5.17(ABPC.5)b2   |
| 2024/03/01 | 6.1   | PeiPing Chen | FW release for V5.17(ABPC.5)b3   |
| 2024/03/29 | 6.2   | PeiPing Chen | FW release for V5.17(ABPC.5)b4   |
| 2024/04/24 | 6.3   | PeiPing Chen | FW release for V5.17(ABPC.5)C0   |
| 2024/05/02 | 6.4   | PeiPing Chen | FW release for V5.17(ABPC.5)D0   |
| 2024/05/29 | 6.5   | PeiPing Chen | FW release for V5.17(ABPC.5.1)b1 |
| 2024/05/29 | 6.6   | PeiPing Chen | FW release for V5.17(ABPC.5.1)C0 |
| 2024/05/29 | 6.7   | PeiPing Chen | FW release for V5.17(ABPC.5.1)D0 |
| 2024/06/28 | 6.6   | PeiPing Chen | FW release for V5.17(ABPC.5.2)b1 |
| 2024/07/01 | 6.7   | PeiPing Chen | FW release for V5.17(ABPC.5.2)C0 |
| 2024/07/01 | 6.7.1 | PeiPing Chen | FW release for V5.17(ABPC.5.2)D0 |
| 2024/10/04 | 6.8   | PeiPing Chen | FW release for V5.17(ABPC.5.3)b1 |
| 2024/10/04 | 6.9   | PeiPing Chen | FW release for V5.17(ABPC.5.3)C0 |
| 2024/10/04 | 6.9.1 | PeiPing Chen | FW release for V5.17(ABPC.5.3)D0 |
| 2024/07/31 | 7.1   | PeiPing Chen | FW release for V5.17(ABPC.6)b1   |
| 2024/10/21 | 7.2   | Isaac Tarn   | FW release for V5.17(ABPC.6)b2   |
| 2025/01/10 | 7.3   | PeiPing Chen | FW release for V5.17(ABPC.6)b3   |
| 2025/02/20 | 7.4   | PeiPing Chen | FW release for V5.17(ABPC.6)C0   |
| 2025/04/11 | 7.5   | PeiPing Chen | FW release for V5.17(ABPC.6.1)b1 |
| 2025/04/18 | 7.6   | PeiPing Chen | FW release for V5.17(ABPC.6.1)C0 |
| 2025/05/08 | 7.6.1 | PeiPing Chen | FW release for V5.17(ABPC.6.1)D0 |
| 2025/08/15 | 7.7   | PeiPing Chen | FW release for V5.17(ABPC.6.2)b1 |
| 2025/08/15 | 7.8   | PeiPing Chen | FW release for V5.17(ABPC.6.2)C0 |
| 2025/09/11 | 7.8.1 | PeiPing Chen | FW release for V5.17(ABPC.6.2)D0 |
| 2025/05/16 | 8.1   | PeiPing Chen | FW release for V5.17(ABPC.7)b1   |
| 2025/07/11 | 8.2   | PeiPing Chen | FW release for V5.17(ABPC.7)b2   |
| 2025/08/29 | 8.3   | PeiPing Chen | FW release for V5.17(ABPC.7)b3   |

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|------------|-------|--------------|----------------------------------|
| 2025/09/16 | 8.4   | PeiPing Chen | FW release for V5.17(ABPC.7)b4   |
| 2025/10/03 | 8.5   | PeiPing Chen | FW release for V5.17(ABPC.7)b5   |
| 2025/10/22 | 8.6   | PeiPing Chen | FW release for V5.17(ABPC.7)C0   |
| 2025/10/22 | 8.6.1 | PeiPing Chen | FW release for V5.17(ABPC.7)D0   |
| 2025/12/19 | 8.7   | PeiPing Chen | FW release for V5.17(ABPC.7.1)b1 |
| 2025/12/19 | 8.8   | PeiPing Chen | FW release for V5.17(ABPC.7.1)C0 |
| 2025/12/19 | 8.8.1 | PeiPing Chen | FW release for V5.17(ABPC.7.1)D0 |

**PX7501-B0/AX7501-B0/AX7501-B1/PM7510-00**  
**Generic**  
**V5.17(ABPC.7.1)D0**  
**Release Note**

Date: Dec 19, 2025

**Supported Platforms:**

Zyxel PX7501-B0/AX7501-B0/AX7501-B1/PM7510-00

**Versions:**

Firmware Version: V5.17(ABPC.7.1)D0

Bootbase Version: V1.66 | 04/12/2024 18:55:12

Kernel version: 4.1.52

BSP version: 502L07p2

WLAN code version : 17.10.188.75

3G WWAN package version : 1.26

**Notes:**

**Public Domain Software Announcements**

| Open Source<br>Used In<br>Product | Version | From (Source)   | License Terms | Modified<br>/ Used |
|-----------------------------------|---------|---|---------------|--------------------|
| atftp                             | 0.8.0   | <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                | 2.85          | <a href="http://www.thekelleys.org.uk/dnsmasq/doc.html">http://www.thekelleys.org.uk/dnsmasq/doc.html</a>   | GPLv2          | Modified |
| dropbear               | 2024.85       | <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                  | 2.6.2         | <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 |
| jpegsrvc               | 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     |
| 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       | 4.1.52        |   |                | Modified |
| logrotate              | 3.22.0        | <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       | 5.9.4     | <a href="http://www.net-snmp.org/">http://www.net-snmp.org/</a>   | BSD/BSD-like          | Modified |
| ntfs-3g        | 2022.10.3 | <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        | 3.2.0     | <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      | 1.0.50    | <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       | 8.2       | <a href="http://cnswww.cns.cwru.edu/php/chet/readline/rlt_op.html">http://cnswww.cns.cwru.edu/php/chet/readline/rlt_op.html</a> | GPLv2                 | Used     |
| samba          | 3.6.25    | <a href="http://www.samba.org/samba/">http://www.samba.org/samba/</a>   | GPLv3                 | Modified |
| sqlite         | 3.46.0    | <a href="http://www.sqlite.org/">http://www.sqlite.org/</a>   | Public Domain License | Used     |
| syslog-ng      | 4.7.1     | <a href="https://github.com/balabit/syslog-ng">https://github.com/balabit/syslog-ng</a>   | GPLv2                 | Used     |
| tcpdump        | 4.99.4    | <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 |
| quagga         | 1.2.4     | <a href="https://github.com/Quagga/quagga">https://github.com/Quagga/quagga</a>   | GPLv2                 | Used     |
| Zlib           | 1.3.1     | <a href="https://github.com/madler/zlib">https://github.com/madler/zlib</a>   | zlib                  | Used     |
| miniupnp       | 2.3.1     | <a href="https://github.com/miniupnp/miniupnp">https://github.com/miniupnp/miniupnp</a>   | BSD                   | Used     |

## Known issues

| Modules | Issue  | Risk Impact Information |
|---------|--|-------------------------|
| WiFi    | #144426 [Wireless] Using Android phone and iPhone can't connect DUT via wireless 2.4G/5G QR code. (Security mode=WPA3) |                         |

## Modifications in 5.17(ABPC.7.1)D0

### ● Feature Enhancement

| Modified Modules | Bug Fixed List                                   |
|------------------|--|
| FCS              | Based on 5.17(ABPC.7.1)C0, Change to D0 version. |

## Modifications in 5.17(ABPC.7.1)C0

### ● Feature Enhancement

| Modified Modules | Bug Fixed List                                   |
|------------------|--|
| FCS              | Based on 5.17(ABPC.7.1)b1, Change to FCS version |

## Modifications in 5.17(ABPC.7.1)b1

### ● Bug Fixed

| Modified Modules | Bug Fixed List  |
|------------------|---|
| Vulnerability    | [#246922][CVE-2025-11845, CVE-2025-11846, CVE-2025-11847, CVE-2025-11848] Zyxel-SI-1638 [Vulnerability] Multiple potential null pointer dereference vulnerabilities in the CGI program. |
|                  | [#246923][CVE-2025-13942、CVE-2025-13943] Zyxel-SI-1644 [Vulnerability] Command injection vulnerabilities in zupnp and zhttpd binaries in customized firmware.                           |

## Modifications in 5.17(ABPC.7)D0

### ● Bug Fixed

| Modified Modules | Bug Fixed List                                 |
|------------------|--|
| FCS              | Based on 5.17(ABPC.7)C0, Change to D0 version. |

## Modifications in 5.17(ABPC.7)C0

### ● Feature Enhancement

| Modified Modules | Bug Fixed List                                  |
|------------------|---|
| FCS              | Based on 5.17(ABPC.7)b5, Change to FCS version. |

## Modifications in 5.17(ABPC.7)b5

### ● Bug Fixed

| Modified Modules | Bug Fixed List   |
|------------------|--|
| GUI              | [#242612][System] [Time Zone page] CLI will print "Invalid memory segment access" when Time Zone select non-default country. |

## Modifications in 5.17(ABPC.7)b4

### ● Bug Fixed

| Modified Modules | Bug Fixed List  |
|------------------|---|
| GUI              | [#241575][System] CPE Help Link URL error.  |
| MPro Mesh        | [#228406][MPro Mesh][Zyxel One_Agent] The Uptime is different in Agent's System Info card page and APP detail information page. |
| TR-369           | [#236116][ACTS][Mpro Mesh][TR-369] Mutiple Parameter missing.   |
|                  | [#236211][ACTS][Mpro Mesh][TR-369] Fail to check AssociationEvent: failconnection.  |

## Modifications in 5.17(ABPC.7)b3

### ● Bug Fixed

| Modified Modules | Bug Fixed List  |
|------------------|---|
| Vulnerability    | [#239848]Zyxel-SI-1612 Improper privilege management in VMG4005-B50A. |
|                  | [#239864][CVE-2025-6599] Zyxel-SI-1616 [Vulnerability] Slow HTTP DoS  |

|  |   |
|--|---|
|  | vulnerability in the DX3301-T0.   |
|  | [#239883][CVE-2025-6599] Zyxel-SI-1621 [Vulnerability] Slow read DoS vulnerability on the zhttpd web server.  |
|  | [#239900][CVE-2025-8693] Zyxel-SI-1624 [Vulnerability] A post-authentication command injection vulnerability in the certificate upload CGI program of DX3300-T0 and VMG3925-B10B. |

## ● Feature Enhancement

| Modified Modules | Features Enhancement List  |
|------------------|--|
| WLAN             | [#240792][eITS#250700234]Support for optional Traffic Separated SSIDs.   |
| MPro Mesh        | [#240944][eITS#250401446] Feature request to add easy Mesh Reboot option from cli.   |
| GUI              | [#240959][eITS#250601863] Use the term Wi-Fi instead of wifi in the GUI.   |
| IPv6             | [#240953][eITS#250200028] Routing is still possible in the environment even when no RA (Router Advertisement) messages are sent. |

## Modifications in 5.17(ABPC.7)b2

### ● Bug Fixed

| Modified Modules | Bug Fixed List   |
|------------------|--|
| MPro Mesh        | [#225320][MPro Mesh][Zyxel One_Agent] Enable guest wifi via APP, it will lead two RP_Agent auto config fail. |
| GUI              | [#236925][eITS#250601302]Error on Secutiry >> MAC Filter text in Spanish.                                    |
| TR369            | [#235796][TR-369] After reboot CPE, CPE disconnect websocket TR-369 server.                                  |

## Modifications in 5.17(ABPC.7)b1

### ● Feature Enhancement

| Modified Modules | Features Enhancement List  |
|------------------|--|
| MPro Mesh        | [#197859][eITS#230300767]EX5601, MProMesh App feature request to include guest isolation level |

|                  |   |
|------------------|---|
| APP              | [#234515]#16 [Feature] Extend local APP session timeout time  |
| GPON             | [#224999][xPON] Support SLID(GPON password or registration ID) won't back to default after system reset to default. |
| System           | [#231319]Mesh is enabled by default and is not configurable in the GUI.   |
|                  | [#234275][eITS#240401289][OPAL OS] system log for OOM killer (Out Of Memory Killer)                                 |
|                  | [#234518]#13_Block special character in the account user name field   |
|                  | [#234510][eITS#250100964] Support ROM-D defined GUI change password rule  |
|                  | [#234678][eITS#250200287] add 'screen' utility to FW  |
| GUI              | [#234513][eITS#240900420] Explain pictographic explanation of Guest Access Scenario                                 |
|                  | [#234278]WEB GUI meets the request of Europe EAA (European Accessibility Act)                                       |
|                  | [#234514][eITS#241200053] Change values of Traffic Status from Byte to MB or GB                                     |
|                  | [#234679][eITS#250100038] Implement Wi-Fi SSID Split while Mesh is active from CPE GUI                              |
|                  | [#234680][eITS#250301657] Remove warning message change when bands are decoupled                                    |
|                  | [#234517][Feature] Follow RESTful API, add APPUICustomization Parameters  |
| WLAN             | [#234274][eITS#230701179] Synchronize X_ZYXEL_CountryInBeacon values in mesh.                                       |
|                  | [#234508]Support of Generic DataElements parameters   |
| VoIP             | [#234504][eITS#240700831] Carry voice over IPV6   |
|                  | [#234511][eITS#250100461] increase SIP Accounts from 4 to 5 per SIP provider and 10 SIP Accounts in total           |
|                  | [#234512][eITS#241200677] Voice Fallback IPv6 > IPV4 (in case of a DualStack IPv4v6 interface).                     |
| Time             | [#234506][Feature] Timezone Auto Detect   |
|                  | [#234519][Feature] Timezone Auto Detect parameter in RESTful API  |
| Parental Control | [#234507][Feature] Parental Control Overnight feature   |
| DDNS             | [#234761][eITS#241101470] Dynamic DNS & IPv6  |

### ● Bug Fixed

| Modified Modules | Bug Fixed List  |
|------------------|---|
| TR069            | [#217105][TR-069] After CPE set static WAN IP and unplug / plug WAN cable during connection process, CPE can't get ACS connection request any more. |
| TR369            | [#224480][TR-369] While TR-369 Local Agent -> General is enable, add MQTT rule. GUI display incorrect.  |
| System           | [#224454][Security] Home Security function cannot work for https.   |
| Vulnerability    | [#234265][CVE-2024-8176] Zyxel-SI-1605 [Vulnerability] The libexpat open source library is vulnerable to DoS attacks through stack overflow.        |
|                  | [#234267][eITS#250400461] CVE-2024-6531: Bootstrap v4.6.2 Vulnerability.  |

## Modifications in 5.17(ABPC.6.2)D0

### ● Feature Enhancement

| Modified Modules | Features Enhancement List                       |
|------------------|---|
| FCS              | Based on 5.17(ABPC.6.2)C0, Change to D0 version |

## Modifications in 5.17(ABPC.6.2)C0

### ● Feature Enhancement

| Modified Modules | Features Enhancement List                        |
|------------------|--|
| FCS              | Based on 5.17(ABPC.6.2)b1, Change to FCS version |

## Modifications in 5.17(ABPC.6.2)b1

### ● Bug Fixed

| Modified Modules | Bug Fixed List   |
|------------------|--|
| vulnerability    | [#239830][CVE-2024-8176] Zyxel-SI-1605 [Vulnerability] The libexpat open source library is vulnerable to DoS attacks through stack |

|  |   |
|--|---|
|  | overflow.   |
|  | [#239848] Zyxel-SI-1612 Improper privilege management in VMG4005-B50A.  |
|  | [#239864][CVE-2025-6599] Zyxel-SI-1616 [Vulnerability] Slow HTTP DoS vulnerability in the DX3301-T0.  |
|  | [#239883][CVE-2025-6599] Zyxel-SI-1621 [Vulnerability] Slow read DoS vulnerability on the zhhttpd web server.   |
|  | [#239900][CVE-2025-8693] Zyxel-SI-1624 [Vulnerability] A post-authentication command injection vulnerability in the certificate upload CGI program of DX3300-T0 and VMG3925-B10B. |

## Modifications in 5.17(ABPC.6.1)D0

### ● Feature Enhancement

| Modified Modules | Features Enhancement List                       |
|------------------|---|
| FCS              | Based on 5.17(ABPC.6.1)C0, Change to D0 version |

## Modifications in 5.17(ABPC.6.1)C0

### ● Feature Enhancement

| Modified Modules | Features Enhancement List                        |
|------------------|--|
| FCS              | Based on 5.17(ABPC.6.1)b1, Change to FCS version |

## Modifications in 5.17(ABPC.6.1)b1

### ● Feature Enhancement

| Modified Modules | Features Enhancement List   |
|------------------|---|
| Vulnerability    | [#229959] EN18031 OPAL20 product compliance release.                            |
| System           | [#229966] WEB GUI meets the request of Europe EAA (European Accessibility Act). |

### ● Bug Fixed



| Modified Modules | Bug Fixed List   |
|------------------|--|
| PON              | [#229794][#250200418] AX7501-B1 DS throughput is low with test tool "cnlab". |

## Modifications in 5.17(ABPC.6)C0

### ● Feature Enhancement

| Modified Modules | Features Enhancement List                      |
|------------------|--|
| FCS              | Based on 5.17(ABPC.6)b3, Change to FCS version |

## Modifications in 5.17(ABPC.6)b3

### ● Feature Enhancement

| Modified Modules | Features Enhancement List   |
|------------------|---|
| Log              | [#225561][EN18031][Log] Add some logs when end users change their profile on GUI.   |
| SSH              | [#225569][EN18031][SSH] Remove insecure cipher suit for dropbear SSH  |
| CVE              | [#225577][EN18031][CVE] Fixed CVE.<br>libxml2 : CVE-2022-23308, CVE-2022-40303, CVE-2024-25062<br>nghttp2 : CVE-2023-35945, CVE-2023-44487<br>pppd : CVE-2006-2194, CVE-2014-3158, CVE-2015-3310, CVE-2018-11574, CVE-2020-8597 |

### ● Bug Fixed

| Modified Modules | Bug Fixed List   |
|------------------|--|
| System           | [#222229][#241001515] EX3301, Unable to perform SCP file transfers   |
| Vulnerability    | [#225282]Zyxel-SI-1591 [Vulnerability] Post-authentication command injection vulnerability in the function "ZyEE"        |
|                  | [#225290]Zyxel-SI-1592 [Vulnerability] Post-authentication command injection vulnerability in the email sending function |

## Modifications in 5.17(ABPC.6)b2

### ● Feature Enhancement

| Modified Modules | Features Enhancement List   |
|------------------|---|
| DHCP             | [#215808][#240200611] EX5601, MAP-T issue with s46-portparams                             |
| System           | [#218204][#240900304] AX7501, Add SFP support: SFP-10G-BXU-LR20                           |
|                  | [#218205][#240900307] AX7501, Add SFP support: SFP-10G-BXD-LR20                           |
|                  | [#218209][#240900308] AX7501, Add SFP support: SFP10GBXULR20                              |
|                  | [#218210][#240900309] AX7501, Add SFP support: SFP-10G2733-20D                            |
|                  | [#218211][#240900311] AX7501, Add SFP support: SFP-10G2733-20                             |
|                  | [#218213][#240900320] AX7501, Add SFP support: SFP10GBXULR                                |
|                  | [#220028] Will not force Web http redirect to https.                                      |
|                  | [#205282] [#240101611] IOP with 1G P2P transceiver ZYXEL SFPBCI-10DS for AX 7501-B        |
|                  | [#221961][#240801627] Conditional ROM convert for Guest WiFi password scheme enhancement. |

### ● Bug Fixed

| Modified Modules | Bug Fixed List   |
|------------------|--|
| GUI              | [#217020] [GUI] The unit and number should be separated for "Connection Uptime" of wireless client in Connectivity List page |
| GUI              | [#217021] [System] It should be "GPON Serial Number" instead of "GPON serial number" in System Info page.                    |
| GUI              | [#217025] [System] There's no blank space between the number and seconds in Connection Uptime.                               |
| LED              | [#217031] [LED] USB LED display off, While plug in ADATA HD to DUT.  |
| GUI              | [#217101] [MGMT] Select "Local Certificate Used by TR-069 Client" then press Apply, the column will display empty.           |
| Security         | [#217103] [TR-069] CPE can't connect to ACS server(10.10.100.55) after Import Certificate(ipv4_openssl3.crt).                |

|          |  |
|----------|--|
| WAN      | [#217192] [WAN] When set IPv6 Address of PPPoE WAN from Dynamic to Static, System Info will show 2 IPv6 Address                                  |
| WLAN     | [#217244] [WLAN] WLAN Station Status & Connectivity card oage very slow when CPE connect to 60 STA (Test by 學禮樓)                                 |
| OMCI     | [#217645] [OMCI] QinQ work fail  |
| TR-369   | [#217680] [TR369] CPE upgrade FW fail via TR-369.  |
| TR-069   | [#217706] [TR-069] AX7501 should support parameter to Control LED  |
| Security | [#220432] [CVE-2024-9197] Zyxel-SI-1583 [Vulnerability] Buffer overflow and potential command injection vulnerabilities in VMG3625-T50B (Medium) |
| Security | [#220433] [CVE-2024-8748] [Zyxel-SI-1576] [Vulnerability] Unauthenticated buffer overflow in VMG8825-T50   |

## Modifications in 5.17(ABPC.6)b1

### ● Feature Enhancement

| Modified Modules | Features Enhancement List  |
|------------------|--|
| SFP              | [#209514][ #240400095] AX7501, Add SFP support: OP3420D  |
|                  | [#209515] [#240400094] AX7501, Add SFP support: OP4420D-34   |
| GUI              | [#210098][ENHANCE] Change GPON status to Optical status  |
|                  | [#215819][#240701741]Add "GPON SN, gateway IP and connection up time for WAN and WLAN client" in system Info page. |
| TR369            | [#215603][#230900654] implementation request / WebSocket   |
|                  | [#215609][#231000272] Certificate management for websocket   |
|                  | [#215653][#231001817] Web GUI configuration for websocket  |
| APP              | [#215704][APP] Zyxel One APP implement   |
| DHCP             | [#214527][#240600337] DHCP option 43 - ACS information   |
| System           | [#215679][Security][TSA] V.E.4 : Downgrade protection.   |
|                  | [#215747][Enhance] Open Source Packages Upgrade - Phase I  |
|                  | [#215800][#240301447] Guest WiFi password scheme enhancement   |
|                  | [#215696]SFP Management GUI modification.  |

**● Bug Fixed**

| Modified Modules | Bug Fixed List   |
|------------------|--|
| Security         | [#215759][Security] SSH Weak Host Key Algorithm  |
|                  | [#215794][Security] SNMP Agent Default Community Name (public, private)  |
| MPro Mesh        | [#209165][MPro Mesh_Agent] When turn off APP LED in Home page icon, Controller LED will dark but all AP/RP_Agent still on. |

**Modifications in 5.17(ABPC.5.3)D0****● Feature Enhancement**

| Modified Modules | Features Enhancement List                       |
|------------------|---|
| FCS              | Based on 5.17(ABPC.5.3)C0, Change to D0 version |

**Modifications in 5.17(ABPC.5.3)C0****● Feature Enhancement**

| Modified Modules | Features Enhancement List                        |
|------------------|--|
| FCS              | Based on 5.17(ABPC.5.3)b1, Change to FCS version |

**Modifications in 5.17(ABPC.5.3)b1****● Bug Fixed**

| Modified Modules | Bug Fixed List  |
|------------------|---|
| Vulnerability    | [#220429][CVE-2024-8748] [Zyxel-SI-1576] [Vulnerability] Unauthenticated buffer overflow in VMG8825-T50.                                |
|                  | [#220430][CVE-2024-9197] Zyxel-SI-1583 [Vulnerability] Buffer overflow and potential command injection vulnerabilities in VMG3625-T50B. |

## Modifications in 5.17(ABPC.5.2)D0

### ● Feature Enhancement

| Modified Modules | Features Enhancement List                       |
|------------------|---|
| FCS              | Based on 5.17(ABPC.5.2)C0, Change to D0 version |

## Modifications in 5.17(ABPC.5.2)C0

### ● Feature Enhancement

| Modified Modules | Features Enhancement List                        |
|------------------|--|
| FCS              | Based on 5.17(ABPC.5.2)b1, Change to FCS version |

## Modifications in 5.17(ABPC.5.2)b1

### ● Bug Fixed

| Modified Modules | Bug Fixed List   |
|------------------|--|
| Vulnerability    | [#213686][CVE-2024-38266, 38267, 38268, 38269][Zyxel-SI-1559]<br>Multiple authenticated buffer overflow vulnerabilities. |
| TR069            | [#213134][#240600932] AX7501, TR069 communication issue with authentication, see 240501006.                              |
| System           | [#213503][#240600746] AX7501, Rejecting firmware due to WebGUI https CA handling and http shut down decision.            |

## Modifications in 5.17(ABPC.5.1)D0

### ● Feature Enhancement

| Modified Modules | Features Enhancement List                       |
|------------------|---|
| FCS              | Based on 5.17(ABPC.5.1)C0, Change to D0 version |

## Modifications in 5.17(ABPC.5.1)C0

### ● Feature Enhancement

| Modified Modules | Features Enhancement List                        |
|------------------|--|
| FCS              | Based on 5.17(ABPC.5.1)b1, Change to FCS version |

## Modifications in 5.17(ABPC.5.1)b1

### ● Bug Fixed

| Modified Modules | Bug Fixed List  |
|------------------|---|
| Security         | [#211607] [CVE-2024-5412][Zyxel-SI-1557][Vulnerability]<br>Unauthenticated heap buffer overflow in the libclinkc library. |

## Modifications in 5.17(ABPC.5)D0

### ● Feature Enhancement

| Modified Modules | Features Enhancement List                     |
|------------------|---|
| FCS              | Based on 5.17(ABPC.5)C0, Change to D0 version |

## Modifications in 5.17(ABPC.5)C0

### ● Feature Enhancement

| Modified Modules | Features Enhancement List  |
|------------------|--|
| OpenSSL 3.1.2    | <b>OpenSSL 3.1.2 Upgrade Notification:</b> <ul style="list-style-type: none"><li>- The certificates signed using SHA1 or older/weaker hashes are no longer supported for authenticating servers or clients.</li><li>- Before upgrading the firmware:<ul style="list-style-type: none"><li>- Please ensure that certificates in your devices are not using weak hashes.</li></ul></li></ul> |

|     |  |
|-----|--|
|     | - If weak hashes are detected, kindly update and verify your certificates promptly with stronger hash (The minimum recommended hash strength is SHA256). |
| FCS | Based on 5.17(ABPC.5)b4, Change to FCS version   |

## Modifications in 5.17(ABPC.5)b4

### ● Feature Enhancement

| Modified Modules | Features Enhancement List                       |
|------------------|---|
| ZYEE             | [#184745][#220400813] Container based F-secure. |

### ● Bug Fixed

| Modified Modules | Bug Fixed List  |
|------------------|---|
| MPro Mesh        | [#207915][#240300916] AX7501 Guest network not working from a wired WX5600 AP.  |
| TR-069           | [#207724][#240200784] GPN Device.WiFi.  |
|                  | [#209014][#230201031] Wrong event types sent after fw upgrading.  |
|                  | [#209016][#230801660] Change GUI language by TR069  |
| TR-369           | [#207777][DST] TR-369 setting does not match DST.   |
| GUI              | [#208359][#240301182] Conditionally unable to open Connectivity List and add new Parental Control rule.                               |
|                  | [#209013][#230900302] VLAN Group - GPON bridge  |
| Configuration    | [#208358][#240100410] EX5401, Custom ROMD configuration handling moving from ABYO3->5 and traffic separation from EM1->EM2.           |
| VoIP             | [#208697][#240101401] CPE cannot receive Some Incoming Calls after Huawei adds the new SIP service port 5062 to the Soft Switch (SS). |

## Modifications in 5.17(ABPC.5)b3

### ● Feature Enhancement

| Modified Modules | Features Enhancement List   |
|------------------|---|
| LED              | [#197861][eITS#230400862] EMG3525-T50B LED control  |
| CLI              | [#205726][eITS#231200465] EX5501 + OPAL family, Feature improvement request - WAN ip lease time |
| System           | [Feature]Support PM7510 series.   |
| SFP              | [#206180][#240200476] AX7501-B1 / not supported SFP-31W2ASM10-DR (1GB).                         |
|                  | [#206184][#240200485] AX7501-B1 / not supported SFP-31W2ASM10-DR (1GB).                         |
|                  | [#206383][#240200555] AX7501, Add SFP support - GLC-BX-U-1315-20-SC-O.                          |
|                  | [#206948][#240201326] AX7501, Add SFP support - GLC-BX-D-1513-20-O.                             |
|                  | [#206944][ #240201524] AX7501, Add SFP support - APSB53123CDL20.                                |
|                  | [#206943][ #240201523] AX7501, Add SFP support - APSB35123CDS20.                                |

## ● Bug Fixed

| Modified Modules | Bug Fixed List   |
|------------------|--|
| Vulnerability    | [#204907][CVE-2024-0816][Zyxel-SI-1536] [Vulnerability] Buffer overflow vulnerability in the "traceroute" command. |
|                  | [#240200940] PEN test report issue 3.1.2   |

## Modifications in 5.17(ABPC.5)b2

### ● Feature Enhancement

| Modified Modules | Features Enhancement List   |
|------------------|---|
| System           | [#182233: [ETSI EN 303 645] 5.3-2: When the device is not a constrained device, it shall have an update mechanism for the secure installation of updates. |
|                  | [#197870] [#230601286]End users are complaining about -   |



|           |   |
|-----------|---|
|           | DNSmasq vulnerabilities and symptoms  |
|           | [#197875] [ENHANCEMENT] Enhancement Request for EX3510/EX5510/EX7710 - MAC filter - MAC address mask. |
|           | [#197866] [Security] Setting Up the Password Strength   |
|           | [#198184] OPAL Generic Reboot 頁面設計  |
| CLI       | [#183196][#230101253] AX7501, From CLI, display remaining lease time on WAN ip lease                  |
|           | [#197869] [#230500277] EX5601, CLI cfg command to IGMP snooping                                       |
| SFP       | [#196137] [#230800888] AX7501-B0/B1, New SFP: OP3401G   |
| MPro Mesh | [#197859] [#230300767] EX5601, MProMesh App feature request to include guest isolation level          |
| TR369     | [#197860] Support TR369   |
| XMPP      | [#197863] [#230601075] XMPP / STUN server support   |
| GUI       | [#197868] [#230301802] EX5601, Feature enhancement - Add connected LANport to client information      |
| OpenSSL   | [#198737] upgrade OpenSSL to 3.1.2  |
| DHCP      | [#200612] [#231000756] Feature Request - DHCP opt 12  |
| TR069     | [#202038] [#231101419] How to change DOS Protection Blocking with TR098                               |
|           | [#202272] [#231000006] IoT SSID (FRQ to propagate 3 parameters from the controller to the agents)     |

## ● Bug Fixed

| Modified Modules | Bug Fixed List   |
|------------------|--|
| IPv6             | [#202652] [#231101110] IPv6 from PPPoE connection is lost – continues  |
| System           | [#197862] [CVE-2011-5053][Zyxel-SI-1498][Vulnerability] WPS vulnerability on CPE in WLAN.  |
|                  | [#197864] [System] Wish description Protected Management Frames want to abbreviation, should change to PMF not show Protected MGMT Frames. |
|                  | [#197865] [Security] Unauthenticated Access to APIs  |
|                  | [#197867] [Security] Session/Cookie Security Test  |

|  |   |
|--|---|
|  | [#198046] [Security] Outdated Software  |
|  | [#198052] [Security] Header Security Test   |
|  | [#199670] [CVE-2023-37929][Zyxel-SI-1506][Vulnerability] Post-authentication buffer overflow. |
|  | [#199704] Upgrade curl to 8.4.0   |

## Modifications in 5.17(ABPC.4)D0

### ● Feature Enhancement

| Modified Modules | Features Enhancement List                     |
|------------------|---|
| FCS              | Based on 5.17(ABPC.4)C0, Change to D0 version |

## Modifications in 5.17(ABPC.4)C0

### ● Feature Enhancement

| Modified Modules | Features Enhancement List                      |
|------------------|--|
| FCS              | Based on 5.17(ABPC.4)b6, Change to FCS version |

## Modifications in 5.17(ABPC.4)b6

### ● Bug Fixed

| Modified Modules | Bug Fixed List   |
|------------------|--|
| MPro Mesh        | [#196683][MPro Mesh] AX7501 Perform Mesh Full Factory Reset. |
| TR143            | [#196943][#230701028] UploadDiagnostic fail AX 7501-B1.      |

## Modifications in 5.17(ABPC.4)b5

### ● Bug Fixed

| Modified Modules | Bug Fixed List  |
|------------------|---|
| IPv6             | [#195460][#230600277] AX7501, prefix changed on br0 after upgrade |

|        |   |
|--------|---|
| System | [#195609][#230600128] EX5401-Bootloop Issue |
|--------|---|

## Modifications in 5.17(ABPC.4)b4

### ● Bug Fixed

| Modified Modules | Bug Fixed List   |
|------------------|--|
| IPv6             | [#193985][#230700605] IPv6 from PPPoE connection is lost.  |
| TR143            | [#192499][#230601511] AX7501-B1 - Query returns wrong result.  |
| MPro Mesh        | [#190961][MPro Mesh_Agent] Gateway Internet Speed does not work.   |
|                  | [#182873][#230600828] AX7501, Disabling Mesh does not bring down the backhaul, which is still broadcasted as a hidden SSID |

### ● Feature Enhancement

| Modified Modules | Features Enhancement List  |
|------------------|--|
| SFP              | [#192796][#230601569] Active Fiber SFP Transceiver works not in the AX 7501-B1.                  |
| WLAN             | [#192624][#230600825] AX7501, SSID naming logic when disabling mesh and allowing separate SSIDs. |

## Modifications in 5.17(ABPC.4)b3

### ● Bug Fixed

| Modified Modules | Bug Fixed List   |
|------------------|--|
| TR069            | [#187630][#230400446] AX7501, iPerf from TR069 fail if the iPerf parameters are sent in separate SPVs. |
| Security         | [#190137][#230500907] Possible security flaw that allows to retrieve root password.                    |

## Modifications in 5.17(ABPC.4)b2

### ● Feature Enhancement

| Modified Modules | Features Enhancement List   |
|------------------|---|
| MPro Mesh        | [#186282][OPAL Generic] Controller Guest (1/2/3) WiFi on/off 下放到 Extender.  |
|                  | [#184243][OPAL Regular] support APP 3.0   |
| GUI              | [#184844] Networks Topology.  |
|                  | [#184762][GUI] Compact help link adding into GUI.   |
|                  | [#184761][OPAL Generic] GUI translation_ES_NL.  |
|                  | [#182309][OPAL Generic] No QoS setup page on OPAL for xPON products.  |
|                  | [#188589][#221000063] Change the wording in SteerStatus.  |
|                  | [#188521][#220901659] Translation error WIFI password strength at DX3301.   |
|                  | [#188520][#220901550] Translation error WIFI password strength.   |
| System           | [#184836] Support Web http redirect to https.   |
|                  | [#184776] Console redirect/Zconsole monitor.  |
|                  | [#182244][ETSI EN 303 645] The consumer IoT device shall protect the confidentiality of critical security parameters that are communicated via remotely accessible network interfaces.  |
|                  | [#188519][#221101418] OPAL, Partial factory reset option with firmware upgrades. (tr069/gui) 220701077.   |
|                  | [#188518][#220701077][System] OPAL, Feature proposal/request - Soft-Reset feature.  |
| Syslog           | [#182251][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. |
| DNS              | [#187138][#221102029] EX5501, Proxy DNS - Primary to Secondary fallback method.   |
| Interface Group  | [#186408][#230100744] EX5601, bridge config improvement.  |
| VOIP             | [#186396][#221101135][EX5601-T0] Grain IT - TLS encrypt the SIP signaling.  |

|      |  |
|------|--|
| IPv6 | [#184828][#221200506] Configuration of the AFTR should be possible with URL.       |
| DHCP | [#184823][#220900410] DHCP option providing CPE firmware version.                  |
| WIFI | [#188608][#220901661] EX5601, Configurable WiFi Country Code (ISO 3166-1 alpha-2). |
|      | [#188590] [#230200423] WX5600-T0 TR-098 support for WiFi X_ZYXEL_CountryCode.      |
| SFP  | [#186886][#230301237] AX7501, Support for SFP: METRIC MI-SF34G1-020AD              |
|      | [#186887][#230301236] AX7501, Support for SFP: Hexatronic BX10-U                   |

## ● Bug Fixed

| Modified Modules | Bug Fixed List   |
|------------------|--|
| DNS              | [#188691][#230400106] EX3301-T0 / DNSProxy issue when Primary DNS unreachable.                         |
| MPro Mesh        | [#188671][#230400635] WX3401 not able to join mesh with EX5401 or AX7501 and Guest Network.            |
|                  | [#187014][#230301473] AX7501, WX3401 not able to join mesh with AX7501 with Guest Network.             |
| TR069            | [#188595][#230301653] EX5601, CurrentTime not reporting in accordance to the TR-069 standard.          |
|                  | [#188594][#230201161] WX5600, enable/disable SSH via ACS.  |
|                  | [#183352][#221101357] Issues with setting some parameters via TR069                                    |
|                  | [#183355][#220401035] [TR-069] SPV WiFi BeaconType failed  |
|                  | [#186185][#230300897] AX7501, iPerf from tr069 fail, DownloadDiagnostics not ok, UploadDiagnostics ok. |
| Certificates     | [#188593][#230300429] EX5601, certificate Common Name doesn't match host name.                         |
| ROMD             | [#188592][#221200930] EX5601, romd backup include option 125 devices specific option value.            |
|                  | [#184817][#230100138] Rom-d backup.  |

|        |  |
|--------|--|
| GUI    | [#188591][#230300494] EX3301, GUI menu visible prior to login.   |
| WLAN   | [#186384][#230100382] EX5601, Not possible to enable 5GHz WiFi in GUI, if WiFi first is turned off by physical button.           |
|        | [#184684][#220601144] WiFi button not working correct (behavior change).   |
| IPv6   | [#184810][#221200452] Activate IPV6 Default gateway by TR069.  |
| DHCP   | [#184804][#221101734] No Management connection with new FW Version.  |
| NTP    | [#184799][#220900371] NTP Time Server URL cannot support "-".  |
| System | [#184254][CVE-2022-4203,4304,4450][CVE-2023-0215~0217,0286,0401][Zyxel-SI-1464] [Vulnerability] OpenSSL multiple vulnerabilities |
|        | [#182874][#230101319] AX7501, Lifemote trigger uncontrolled memory usage with script that is working for all other device types  |

## Modifications in 5.17(ABPC.3)D0

### ● Feature Enhancement

| Modified Modules | Features Enhancement List                    |
|------------------|--|
| FCS              | Based on 5.17(ABPC.3)C0, release D0 firmware |

## Modifications in 5.17(ABPC.3)C0

### ● Feature Enhancement

| Modified Modules | Features Enhancement List                       |
|------------------|---|
| FCS              | Based on 5.17(ABPC.3)b4, Change to FCS version. |

## Modifications in 5.17(ABPC.3)b4

### ● Bug Fixed

| Modified Modules | Bug Fixed List |
|------------------|----------------|
|------------------|----------------|

|          |  |
|----------|--|
| Security | [#178839][Security]Zyxel-SI-1441 [Vulnerability] Hidden SSID and symbolic Links in ftpd of AX7501-B0.<br>- Add romcovert |
| TR069    | [#180454][#221200772] AX7501, TransferComplete messages without Start/Complete Time value, reference: 221100865          |
| System   | [#221001669] Broken devices - When this issue happen, the data partition would broke and restore to default.             |

## Modifications in 5.17(ABPC.3)b3

### ● Feature Enhancement

| Modified Modules | Features Enhancement List                                   |
|------------------|---|
| Iperf            | [#164238][#220400115] AX7501, include MAC-ranges for iPerf. |

### ● Bug Fixed

| Modified Modules | Bug Fixed List   |
|------------------|--|
| Security         | [#178839][Security]Zyxel-SI-1441 [Vulnerability] Hidden SSID and symbolic Links in ftpd of AX7501-B0 |
| TR069            | [#178738][#221100670] Can't modify the WAN interface default gateway by TR069                        |
| GUI              | [#177126][WLAN] When Wireless only enable 2.4G or 5G, GUI doesn't show Wi-Fi QR code                 |

## Modifications in 5.17(ABPC.3)b2

### ● Feature Enhancement

| Modified Modules | Features Enhancement List                                |
|------------------|--|
| System           | [#175627][#221000644] AX7501, Support for SFP OP4420D-35 |
|                  | [#174570][#220901591] AX7501, Add SFP support            |

### ● Bug Fixed

| Modified | Bug Fixed List |
|----------|----------------|
|----------|----------------|

| Modules  |   |
|----------|---|
| IPv6     | [#175301][#221000378] ZYX-409 AX7501 - dhcp6c breaks on UnspecFail advertisements   |
|          | [#175290][#221000377] ZYX-407 AX7501 - Client does not send router advertisements on LAN with prefix lifetimes based on IA_PD lifetimes |
|          | [#175288][#221000376] ZYX-406 AX7501 - DUT does advertise itself as a default router when WAN RA lifetime is 0                          |
|          | [#175287][#221000374] ZYX-405 AX7501 - Two DHCPv6 Solicit packages are sent after renew and rebind fails                                |
|          | [#175286][#221000373] ZYX-404 AX7501- After some time, prefix delegation DHCPv6 client on WAN interface stops                           |
|          | [#220900584] ZYX-342, Packets sent to unreachable subnets in the delegated prefix are not dropped                                       |
| WAN      | [#173876][#220801049][330379] AX7501-B0 / P2P firmware sends 2 Mac addresses requests   |
| UPnP     | [#173212][#220900242] AX7501, UPnP doesn't work on .2C0   |
| Security | [#176288]Zyxel-SI-1433 [Vulnerability] Buffer overflow vulnerabilities and command injection vulnerability for AX7501-B1 Generic        |

## Modifications in 5.17(ABPC.3)b1

### ● Feature Enhancement

| Modified Modules | Features Enhancement List                              |
|------------------|--|
| System           | [#164754][Feature] Support PX/AX7501-B1                |
| WIFI             | [#172100][Feature] Upgrade wlan driver to 17.10.188.75 |
| MPro Mesh        | [#171367][Feature] Support EasyMesh R2                 |

### ● Bug Fixed

| Modified Modules | Bug Fixed List   |
|------------------|--|
| PON              | [#171525][#220701134] Downstream corrected and uncorrected FEC blocks AX 7501-B0 |



|      |   |
|------|---|
| WIFI | [#169504][VMG3625-T50B] WiFi button not working correct<br>- Align WiFi on/off behavior with HW button and GUI. |
|------|---|

## Modifications in 5.17(ABPC.2.1)C0

### ● Feature Enhancement

| Modified Modules | Features Enhancement List                         |
|------------------|---|
| FCS              | Based on 5.17(ABPC.2.1)b2, Change to FCS version. |

## Modifications in 5.17(ABPC.2.1)b2

### ● Feature Enhancement

| Modified Modules | Features Enhancement List                            |
|------------------|--|
| Iperf3           | [FEATURE] Update checking policy for iperf3 license. |

## Modifications in 5.17(ABPC.2.1)b1

### ● Feature Enhancement

| Modified Modules | Features Enhancement List   |
|------------------|---|
| PON              | [FEATURE][#166924][#220200664] AX7501 bridge configuration                  |
| SFP              | [FEATURE][#167013][#220500514] Problem AX7501-B0 with 10GBASE-T SFP+ (RJ45) |
|                  | [FEATURE][#169065][#220601041] AX7501, Fiberworks 10G SFPs                  |
|                  | [FEATURE][#163999][#220301699] AX7501, XGS-PON OP49N2-SU support            |

### ● Bug Fixed

| Modified Modules | Bug Fixed List  |
|------------------|---|
| PON              | [BUGFIX][#169644][#220601090][320028] AX7501-B0 / Does not synchronize with the new firmware. |
|                  | [BUGFIX][#169648][#220601424] Wrong speed mode on 2F0   |

|  |  |
|--|--|
|  | [BUGFIX][#169636][#220601441] After the upgrade the ont is xgpon   |
|  | [BUGFIX][#165249][#220400806](ZYN-338 AX7501, PON not working after reset).                                |
|  | [BUGFIX][#170576][#220600695] AX7501 - ONT Mismatch between actual and planned upstream rate               |
|  | [BUGFIX][#170684][#220701000] LAN port shut down issue.  |
|  | [BUGFIX][#170380][#220700783] Customer reports that PPPoE WAN disappear on GUI with ZTE OLT in the morning |

### ● Issues have been enhanced

| Modified Modules | Bug Fixed List   |
|------------------|--|
| PON              | [BUGFIX][#170379][#220700765] Adding services without reboot |

## Modifications in 5.17(ABPC.2)C0

### ● Feature Enhancement

| Modified Modules | Features Enhancement List                      |
|------------------|--|
| FCS              | Based on 5.17(ABPC.2)b5, Change to FCS version |

## Modifications in 5.17(ABPC.2)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(ABPC.2)b4

### ● Feature Enhancement

| Modified Modules | Features Enhancement List   |
|------------------|---|
| WAN              | [#164015][#220301711] Allow HTTP/HTTPS access via IPoE interface.                             |
| WIFI             | [#159699][#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   |
|------------------|--|
| WLAN             | [#164007][#220301708] Device sets EasyMesh ON and OFF when X_ZYXEL_EXT.EasyMesh.Enable is disabled             |
|                  | [#164004][#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. |
| RemoteM GMT      | [#162931][#220300408] Admin login still possible even after mgmt service has been reconfigured AX 7501-B0      |
| Security         | [#164250][#220400041] VMG8825, cleartext storage of information.   |
| Iperf3           | [#160295][#220100815] AX7501, iperf3 not working   |

## Modifications in 5.17(ABPC.2)b3

### ● Feature Enhancement

| Modified Modules | Features Enhancement List                                    |
|------------------|--|
| System           | [#160480][OPAL Generic] Disable the FTP function.            |
| WPS              | [#156352][OPAL Generic] Change WPS button trigger condition. |

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

## ● Bug Fixed

| Modified Modules | Bug Fixed List   |
|------------------|--|
| WIFI             | [#156808][Wireless] DUT 5G channel on Band 2 (60), smart phone can't connect.    |
| GUI              | [#155931][GUI] GUI pop out warn message after key in 72 hex.                     |
| VoIP             | [#152404][#210701735] AX7501 - [SIP] User-agent format does not follow standard. |

## Modifications in 5.17(ABPC.2)b2

### ● Feature Enhancement

| Modified Modules | Features Enhancement List  |
|------------------|--|
| TR-069           | [#158392][211200292] Change the GPON serial number for the ACS communication AX 7501-B0. |
| GUI              | [#147787][#210401424] Transceiver information DDMI via CLI WEB GUI AX7501-B0.            |
|                  | [#157765][#211101024] It is possible to see and check optical power.                     |

|     |  |
|-----|--|
| WAN | [#158905][#211200757] ROM-D config can only hold one Default Gateway AX 7501-B0. |
|-----|--|

### ● Bug Fixed

| Modified Modules | Bug Fixed List   |
|------------------|--|
| Security         | [BUGFIX][#146975][Security] L2TP VPN can't work on MultiWAN interface.   |
| WLAN             | [BUGFIX][#152457][WLAN] MAC Authentication page does not block duplicate MAC Address.  |
| System           | [#157516][System] Portmirror page can't display monitor interface list when no wan connect.  |
| GUI              | [#156514][GUI] In bridge <-> routing mode, IPv6 DHCP behavior does not follow IPv4 DHCP.   |
| TR069            | [#155173][#210901346]The TR69 X_ZYXEL_Wireless_Mode for 5Ghz Band AX Mixed mode acceptable value is not consistent.<br>TR-181: Device.WiFi.Radio.{i}.OperatingStandards<br>TR-098:<br>InternetGatewayDevice.LANDevice.{i}.WLANConfiguration.{i}.X_ZYXEL_OperatingStandards |

## Modifications in 5.17(ABPC.2)b1

### ● Feature Enhancement

| Modified Modules | Features Enhancement List   |
|------------------|---|
| System           | [#155086][Feature Enhancement][AX7501-B0] Support to set specify WAN type<br>[#155208][Feature Enhancement][AX7501-B0] Support XGPON with PM7000-00/01<br>[#149820][#210600835] EX5501. disable F-secure<br>[#155286][#210401425] AX7501, show sfp link status<br>[#132874][#200701283] EX5501, LED control |
| IPv6             | [#150626][#210600904][230757] AX7501-B0 / RA-MTU  |

|     |   |
|-----|---|
| NAT | [#145239][#210200785] Question: PCP (Port Control Protocol) support   |
| GUI | [#147255][#210401527] EMG3525 Configure available cards in web-gui<br>[#149438][#210600461] EX5401, disable or optimize client check<br>[#137229][#200901344] Feature request change SLID value AX 7501-B0<br>[#147975][OPAL Generic] Media Server GUI Change |

### ● Bug Fixed

| Modified Modules | Bug Fixed List   |
|------------------|--|
| GUI              | [#150913][#210601930] DS-Lite setting missing Automatically configured by DHCP DX5401-B0   |
| TR69             | [#154485][#210900863] EX5501, Value for StaticAddressNumberOfEntries does not survive boot |

## Modifications in 5.17(ABPC.1)C0

### ● Feature Enhancement

| Modified Modules | Features Enhancement List                      |
|------------------|--|
| FCS              | Based on 5.17(ABPC.1)b7, Change to FCS version |

## Modifications in 5.17(ABPC.1)b7

### ● Feature Enhancement

| Modified Modules | Features Enhancement List   |
|------------------|---|
| System           | [#157660][#211100671] AX7501, support for 3 SFPs<br>[#157783][#211101324] AX7501-B0 Addon ethernet SFP dongle support<br>[#15796][#211101415] 1G SFP transceiver works not AX 7501-B0 |

|       |  |
|-------|--|
| TR069 | [#155239][#210901600] Change CWMP implementation from SN to GPON SN AX 7501-B0 |
|-------|--|

### ● Bug Fixed

| Modified Modules | Bug Fixed List   |
|------------------|--|
| TR069            | [#157272][#211001429] ACS problems with EX5501             |
| IPv6             | [#157439][#211000436] IPv6 neighbor not working AX 7501-B0 |

## Modifications in 5.17(ABPC.1)b6

### ● Bug Fixed

| Modified Modules | Bug Fixed List   |
|------------------|--|
| TR069            | [#157272][#211001429] ACS problems with EX5501             |
| IPv6             | [#157439][#211000436] IPv6 neighbor not working AX 7501-B0 |

## Modifications in 5.17(ABPC.1)b5

### ● Feature Enhancement

| Modified Modules | Features Enhancement List   |
|------------------|---|
| System           | [#152090][#210701278] AX7501, eth-sfp doesn't work<br>[#152091][#210701804] AX7501, CTS SFP support<br>[#210701688] AX7501-B0 questions on features - SFP |

### ● Bug Fixed

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

## Modifications in 5.17(ABPC.1)b4

### ● Feature Enhancement

| Modified Modules | Features Enhancement List   |
|------------------|---|
| System           | [#150500][#210500683] Transceiver information DDMI via CLI not correct AX7501-B0<br>- Support 1G AE SFP+: fiberONE SFP-GE-BX20-U, ACAL BFi ABSFBL3412-20DAC<br>- Support 10G AE SFP+: fiberONE SFP-10G-BX10-U<br>[#149934] Support ZYXEL SFP+ AM7000-00 |
| DHCP             | [#149486][#210401267] IPv4 DHCP client with 32 MASK works not AX7501-B0.  |

### ● Bug Fixed

| Modified Modules | Bug Fixed List  |
|------------------|---|
| WAN              | [#148622][#210500535] AX7501, IP.Interface in iptables. |
| System           | [#140348][#201200665] AX7501, link issue.               |

### ● Issues have been enhanced

| Modified Modules | Bug Fixed List                                     |
|------------------|--|
| VoIP             | [#210601494] Random SIP accounts register failure. |

## Modifications in 5.17(ABPC.1)b3

### ● Feature Enhancement

| Modified Modules | Features Enhancement List   |
|------------------|---|
| System           | 1. [#148279] Multi-language GUI for OPAL generic GW + Extender<br>2. [#147075][Enhance][AX7501-B0] Support SFP+ THMPRS- |



|       |   |
|-------|---|
|       | 3511-10A  |
| OMCI  | [#201200573][#148260] Disable Serial Number PLOAM message<br>AX 7501-B0 |
| TR069 | [#148406][#210500049] XGSPON- Apply as Default Gateway for<br>IPV6      |

### ● Bug Fixed

| Modified Modules | Bug Fixed List  |
|------------------|---|
| Security         | [#143384][Vulnerability] BRCM "DeAgg & DeFrag Attacks |
| System           | [#140348][#201200665] AX7501, link issue .            |

## Modifications in 5.17(ABPC.1)b2

### ● Feature Enhancement

| Modified Modules | Features Enhancement List   |
|------------------|---|
| OMCI             | 1. [#146603][#210300514] XGSPON: Add WAN interface using<br>Hauwei OLT<br>- Feature only work with F0 config. |

### ● Bug Fixed

| Modified Modules | Bug Fixed List   |
|------------------|--|
| Security         | 1. [#146987][#210100668][Vulnerability] Vulnerabilities in<br>Multiple Zyxel Equipment from Sec consult => issue 11  |
| System           | 1. [#144917][#210300995] Option 43 Enable Broadband<br>setting not possible AX 7501-B0<br>2. [#144126][System] Language list include "French 、<br>Deutsch 、 Español" . |

## Modifications in 5.17(ABPC.1)b1

### ● Feature Enhancement

| Modified Modules | Features Enhancement List  |
|------------------|--|
| System           | <ol style="list-style-type: none"> <li>2. [#143718][#210200585] Zyxel PX7501-B0 Traffic management option</li> <li>3. [#125018][#200300516] AX7501, SFP-list config parameter</li> <li>4. [#140347][#201200664] AX7501, redirect_console</li> <li>5. [#133328] Set ONU Vendor ID to ZYXE</li> </ol>  |
| OPAL Generic     | <ol style="list-style-type: none"> <li>1. [#137763][#201001164] AX7501, support for Lifemote agent</li> <li>2. [#143252]upgrade WLAN driver to 17.10.121.37</li> <li>3. [#143397][OPAL] Change time format 00:00-23:59 in Parental control page.</li> <li>4. [#143457][OPAL Generic] Key Feature - F-Secure 2.3</li> <li>5. [#143458][OPAL Generic] Key Feature - ZyEE Container</li> <li>6. [#143464][OPAL Generic] Key Feature - L2TP (default disabled)</li> <li>7. [#143461][OPAL Generic] Key Feature - WPA3 (default Mix mode)</li> <li>8. [#143462][OPAL Generic] Key Feature - WiFi redminer (default disabled)</li> <li>9. [#143779][OPAL Generic] Key Feature - MAP-T/MAP-E</li> <li>10.[#143857][OPAL Generic] Support MproMESH and Multi-language <ul style="list-style-type: none"> <li>- Available Languages: en,cz,it,nl,pt,ru,tr,fr,de,es</li> </ul> </li> </ol> |

## ● Bug Fixed

| Modified Modules | Bug Fixed List |
|------------------|----------------|
|------------------|----------------|

|                   |  |
|-------------------|--|
| Security          | <ol style="list-style-type: none"> <li>[Vulnerability] UPnP protocol can be abused to perform DDoS and/or data exfiltration via SUBSCRIBE capability.</li> <li>[#200800711][Vulnerability] CVE-2019-11358 vulnerability - update jQuery to "3.5.1".</li> <li>[#210100668][Vulnerability] Vulnerabilities in Multiple Zyxel Equipment from Sec consult =&gt; issue 1,2,4,5, 7~10</li> <li>[#210100667][Vulnerability] Dnsmasq multiple vulnerabilities (DNSPooq)</li> <li>[Vulnerability][CVE-2020-1971][Openssl] Correctly compare EdiPartyName in GENERAL_NAME_cmp()</li> </ol> |
| IGMP              | <ol style="list-style-type: none"> <li>[#140334][#201200663] AX7501, IGMP snooping issue</li> </ol>  |
| Remote Management | <ol style="list-style-type: none"> <li>[#128707][#200500518] AX7501, dropbear not running after reboot</li> </ol>  |

## Modifications in 5.15(ABPC.0)C0

### ● Feature Enhancement

| Modified Modules | Features Enhancement List   |
|------------------|-----------------------------|
| FCS              | First FCS firmware released |

## Modifications in 5.15(ABPC.0)b7

### ● Feature Enhancement

| Modified Modules | Features Enhancement List |
|------------------|---------------------------|
|                  |                           |

### ● Bug Fixed

| Modified Modules | Bug Fixed List  |
|------------------|---|
| System           | <ol style="list-style-type: none"> <li>[BugFix][#125305][Stress] 5G WLAN client does not access internet overnight stress.</li> </ol> |

## Modifications in 5.15(ABPC.0)b6

### ● Feature Enhancement

| Modified Modules | Features Enhancement List  |
|------------------|--|
| System           | 1. [Feature] Support FS SFP module<br>- 10G Fiber: SFP-10G-BX<br>- 10G copper: SFP-10G-T |

### ● Bug Fixed

| Modified Modules | Bug Fixed List   |
|------------------|--|
| WAN              | 2. [#121109][WAN] FIBER LED and INTERNET LED are lit when DUT uses SFP 10G Copper EM7000-00.<br>3. [#124298]AX7501, 1G/10G auto-mode fails with fiber disconnected |

## Modifications in 5.15(ABPC.0)b5

### ● Feature Enhancement

| Modified Modules | Features Enhancement List  |
|------------------|--|
| System           | 1. [Feature] Support XGS SFP module for AX7501-B0<br>- Must to reset to default when changing AE model to XGS, and vice versa<br>- Support XGS SFP module:<br>ZYXEL PM7000-00, Hisense LTF7225-BH+<br>2. [Feature] Support ZYXEL SFP module<br>- XGS: ZYXEL PM7000-00<br>- 10G copper: ZYXEL EM7000-00 |
| WLAN             | 1. [Enhancement] Upgrade wifi driver to 17.10.99.1301<br>2. [Enhancement] Change WLAN country code to E0/0   |

### ● Bug Fixed

| Modified | Bug Fixed List |
|----------|----------------|
|----------|----------------|

| Modules |  |
|---------|--|
|         |  |

## Modifications in 5.15(ABPC.0)b4

### ● Feature Enhancement

| Modified Modules | Features Enhancement List  |
|------------------|--|
| System           | 3. [#107837][#190600142] AX7501, 1G/100M SFP <ul style="list-style-type: none"> <li>- Support 10G/1G WAN rate auto detect</li> </ul> Note: Chipset limitation: <ul style="list-style-type: none"> <li>- SFP module must plug in and connect cable during boot up</li> <li>- If SFP module is not in SFP support list, may work fail</li> <li>- If switch port is auto-nego 100M/1G, may work fail</li> </ul> |

### ● Bug Fixed

| Modified Modules | Bug Fixed List |
|------------------|----------------|
|                  |                |

## Modifications in 5.15(ABPC.0)b3

### ● Feature Enhancement

| Modified Modules | Features Enhancement List           |
|------------------|-------------------------------------|
|                  | 1. PX7501-B0 and AX7501-B0 is co-fw |

### ● Bug Fixed

| Modified Modules | Bug Fixed List |
|------------------|----------------|
|                  |                |

## Modifications in 5.15(ABPC.0)b2

- Feature Enhancement

| Modified Modules | Features Enhancement List |
|------------------|---------------------------|
|                  |                           |

- Bug Fixed

| Modified Modules | Bug Fixed List |
|------------------|----------------|
|                  |                |

## Modifications in 5.15(ABPC.0)b1

- Feature Enhancement

| Modified Modules | Features Enhancement List |
|------------------|---------------------------|
|                  |                           |

- Bug Fixed

| Modified Modules | Bug Fixed List |
|------------------|----------------|
|                  |                |