Fast Ethernet Switch ES3528MV2

***Firmware Version 1.0.0.1***

**INTRODUCTION:**

The ES3528MV2 is a cost effective managed L2/L4 Fast Ethernet Standalone Switch. ES3528MV2 contains 24 Ethernet/Fast Ethernet ports (1-24) and 4 Combo-Giga ports\* (25-28).

The base hardware is a 1U height, 19” rack mountable metal enclosure. The switch can be managed either by in-band management via the network station remotely or out-of-band management via the console port (RS232) locally. An imbedded Web agent also provides management capability to any computer on the network via common HTTP browsers such as Netscape Navigator (Version 6.2 or above) or Microsoft’s Internet Explorer (Version 5.0 or above).

Local Console Management (LCM) allows the user to monitor and configure the ES3528MV2 from a VT-type terminal. LCM can be used to configure features such as SNMP community names and access rights, Port Enable/Disable, firmware downloads, and Device IP address as well as most other parameters. LCM can also provide statistical and diagnostic information about the entire device or an individual port.

Management of the switch is password protected; the same password is used for LCM and for the Web browser interface. Prior to accessing the Management Module via a network connection, a valid IP address, subnet mask, and in some cases a default gateway must be configured using an out-of-band connection or the BootP/DHCP protocol. The management option provides SNMP, RMON (4 groups: 1,2,3,9), and Web management for system control and statistical monitoring.

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| **It is recommended that one thoroughly review this release notes prior to the installation or upgrade of this product.** |

**Firmware Specification:**

Loader

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| **Firmware** | **Version** | **File Name** |
| Loader | 1.0.0.0 | ES3528mv2\_ld\_V1.0.0.0.bix |
| Software | 1.0.0.0 | ES3528MV2\_V1.0.0.0.bix |

Runtime

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| **Status** | **Version No.** | **Type** | **Release Date** | |
| **Phase 1** |  |  | |  |
| **MP** | **1.0.0.0** | QA | | **01/18/2012** |
| **Current** | **1.0.0.1** | patch | | **06/21/2012** |

**Loader CODE MODIFICATIONS:**

N/A

**RUNTIME CODE MODIFICATIONS:**

**Runtime V 1.0.0.1**

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| 1. When device enable dhcp relay and dhcp packets from trunking port, we will face exception message. |
| 1. There is no way to set admin-key 4 for port-channel |
| 1. If a port within a port channel, “show dot1x” will got failed information about this port. |
| 1. There is no any trunk information of spanning-tree in web interface |
| 1. Switch stuck when I attempted to inject dhcpv6 packet to switch with dhcpv6 snooping. |
| 1. Need to clear the command setting by snmp(alias) |
| 1. High CPU utilization after enabling switchport ingress-filtering function. |
| 1. SNMP: All LED cannot work as run SNMP-walk |

**HARDware compatibility:**

ALL

**BootPROM compatibility:**

ALL

**Installation and Configuration Notes:**

In general, the ES3528MV2 **Switch** will be shipped to you pre-configured with this version of firmware. If you would like to upgrade an existing ES3528MV2 **Switch,** please follow the TFTP download instructions that are included with your firmware image upgrade kit.

To download new firmware form a TFTP server, enter the IP address of the TFTP server, select “opcode” as the file type, then enter the source and destination file names. When the file has finished downloading, set the new file to start up the system, and then restart the switch. To start the new firmware, enter the “reload” command or reboot the system.

**CLI commands:**

Console#*copy tftp file*

TFTP server IP address: *192.168.1.23*

Choose file type:

1. config: 2. opcode: 4. diag: 5. loader: <1,2,4,5>: *2*

Source file name: *opcode.bix*

Destination file name: *opcode.bix*

\Write to flash programming.

Programming flash started.

Success.

Console#*config*

Console(config)#*boot system opcode:opcode.bix*

Console(config)#*exit*

Console#*reload*

**Firmware Changes and Enhancements:**

***Runtime V1.0.0.0; Loader V1.0.0.0***

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| Initial Release |  |

**Known RESTRICTION and LIMITATION:**

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Any other problems than those listed above should be reported to our Technical Support Staff.

**IEEE Standards Support:**

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| **Standard** | **Title** |
| IEEE 802.1D | Transparent Bridging Specifications (ISO/IEC 10038) |
| IEEE 802.1p | Traffic Class Expediting and Dynamic Multicast Filtering |
| IEEE 802.1Q | Virtual Bridged Local Area Networks |
| IEEE 802.1w | Rapid Spanning Tree |
| IEEE 802.2 | Local Area Networks, Logical Link Control (LLC) |
| IEEE 802.3 | CSMA/CD 9 (ISO/IEC 8802-3) |
| IEEE 802.3I | 10Base-T (ISO/IEC 8802-3, clause 14) |
| IEEE 802.3u | 100Base-TX (ISO/IEC 8802-3, clause 25) |
| IEEE 802.3x | Flow Control |
| IEEE 802.3z | 1000Base-SX, 1000Base-LX |
| IEEE 802.3ab | 1000Base-TX |
| IEEE 802.3ac | VLAN Tag |
| IEEE 802.3ad | Link Aggregation |
| IEEE 802.1X | Port-based Network Access Control |

**IETF Standards MIB Support:**

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| **RFC No.** | Title | **Groups Supported** |
| 1907 | SNMPv2-MIB (MIB II) | - system group ( 1-9)  - snmp group (1-6, 8-22, 24-32) |
| 2011 | IP-MIB (MIB-II) | - ip group (1-20, 22-23) - icmp group (1-26) |
| 2012 | TCP-MIB (MIB-II) | - tcp group (1-15) (tcpConnTable only support read.) |
| 2013 | UDP-MIB (MIB-II) | - udp group (1-5) |
| IEEE  802.1X MIB | IEEE8021-PAE-MIB | - dot1xPaeSystem (1-2)  - dot1xPaeAuthenticator (1-3) (not support per-port timer setting) |
| 1493 | Bridge MIB | - dot1dBase group (1-4) - dot1dStp group (1-15) - dot1dTp group (1-4) - dot1dStatic group (1) |
| 2863 | Interfaces Evolution MIB (IF-MIB) | - interface group (1-2) (ifadminStatus not support set to 3(testing))  - ifXTable group (1) - ifStackTable group (1) (support read-only) |
| 2819 | RMON MIB | - statistics group (1) - history group (1-2) - alarm group (1) - event group (1-2) |
| 2618 | RADIUS MIB | - radiusAuthClientMIB (1) |
| 2665 | Etherlike MIB | - dot3StatsTable group (1-19) |
| 2737 | Entity MIB | - entityPhysical group (1-16) (support read-only) |
| 2674 | P-bridge | - dot1dExtBase group (1-4) - dot1dPriority group (1,3)  - dot1dGarp group (1) |
| 2674 | Q-bridge | - dot1qBase group (1-5) - dot1qTp group (1-2) - dot1qStatic group(1) - dot1qVlan (1-5) (9-10) |

**SNMP Trap Support:**

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| **RFC No.** | **Title** |
| RFC 1215 | ColdStart (v1) warmStart (v1) linkDown (v1) linkUp (v1) authenticationFailure (v1) |
| Rfc 1907 | coldStart (v2c) warmStart (v2c) authenticationFailure (v2c) |
| Rfc 2863 | linkDown (v2c) linkUp (v2c) |
| RFC 1493 | newRoot (v1) topologyChange (v1) |
| Rfc 1757 | risingAlarm (v1)  fallingAlarm (v1) |
| RFC 2819 | risingAlarm (v2c) fallingAlarm (v2c) |