Fast Ethernet Switch ES3528M/ES3552M[-V1] Firmware Version 1.4.8.2

INTRODUCTION:

The ES3528M/ES3552M[-V1] is a cost effective managed L2/L4 Fast Ethernet Standalone Switch. ES3528M[-V1]

contains 24 Ethernet/Fast Ethernet ports (1-24) and 4 Combo-Giga ports* (25-28). ES3552M[-V1] contains 48

Ethernet/Fast Ethernet ports (1-48) and 4 Combo-Giga ports* (49-52).

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 ES3528M/ES3552M[-V1] 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.

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

this product.

FIRMWARE SPECIFICATION:

Note:

6/2000 P/N: 9038023-04

Subject to Change Without Notice

F0615-E

Page: 1 of 6

- 1) Phase3 image will be obsoleted after Phase 4.2 released. Since the phase4 image is backward compatible with Phase3 image, so only Phase4 image will be supported in the future. Please be aware that Phase4 image is single image for both PoE and non-PoE devices.
- 2) If your are running Phase3 image on PoE boxes, you will need to load your PoE box with a converting image First before you load the Phase4 released image. Otherwise the upgrade to Phase4 image will fail on PoE boxes. Please ask the converting image from Technical Support. The upgrade process is just like regular image upgrade.
- 3) "G.8032, 802.1x supplicant and non-STP loopback detection" are the new added functions. The Web pages of both functions are not available in this release, only CLI/SNMP are supported in this release.
- 4) If any of the devices are running a Phase3 image (version number of 1.3.x.x) will be upgrade to this Phase4 released image. The device will need to load 1.4.4.0 first, then the device could be upgraded from 1.4.4.0 to this released. If the device tried to upgrade from Phase3 to this one directly without loading 1.4.4.0 first, then the upgrading will fail.
- Loader has updated version of 1.0.4.0. The new version of loader fixed the problem of backdoor passwd is not encrypted (ES3528MO-FLF-38-00800).

Firmware	Version	File Name
Loader	1.0.4.0	ES3528_52M_loader_V1.0.4.0.bin
Diagnostics	1.2.1.2	ES3528_52M_diag_V1.2.1.2.bix
Software	1.4.8.2	ES3528_52M_opcode_V1.4.8.0.bix

Status	Version No.	Туре	Release Date
Phase 4.8			
Current	1.4.8.2	Patch	2010/08/26
Cancelled	1.4.8.1	Patch	2010/08/23
Cancelled	1.4.8.0	QA	2010/08/04
Cancelled	1.4.7.1	NTC	2010/07/19
Cancelled	1.4.7.0	NTC	2010/07/28
Phase 4.4			
Current Version	1.4.6.4	Patch	2010/06/18
Cancelled	1.4.6.3	Dummy (label mistake)	2010/06/14
	1.4.6.2	Patch	2010/06/03
	1.4.6.1	Patch	2010/05/20
	1.4.6.0	Formal	2010/05/18

6/2000 P/N: 9038023-04

Page: 2 of 6

Phase 4.3			
Cancelled	1.4.5.1	NTC	2010/05/11
cancelled	1.4.5.0	NTC	2010/05/07
Phase 4.2	1.4.4.0	QA	2010/03/09
Current Version	1.4.3.4	NTC	2010/03/02
Cancelled	1.4.3.3	NTC	2010/03/02
Cancelled	1.4.3.2	NTC	2010/02/24
Cancelled	1.4.3.1	NTC	2010/02/10
Cancelled	1.4.3.0	NTC	2001002/08
Cancelled			
Phase 4.1	1.4.2.1	QA	2009/07/17
Current Version	1.4.2.0	QA	2009/06/11
	Cano	celled	
Phase 4.0	1.4.1.1	Formal/ECN	2009/06/05
Current Version	1.4.1.0	Formal/ECN	2009/05/20
Cancelled	1.4.0.6	NTC	2009/05/11
Current Version	1.4.0.5	NTC	2009/04/29
Cancelled	1.4.0.4	NTC	2009/04/27
Cancelled	1.4.0.3	NTC	2009/04/15
Cancelled	1.4.0.2	Test/CNS	2009/03/12
Cancelled	1.4.0.1	NTC	2009/03/04
Cancelled	1.4.0.0	NTC	2009/01/20
First Version			

HARDWARE COMPATIBILITY:

ALL

BOOTPROM COMPATIBILITY:

ALL

6/2000 P/N: 9038023-04 Page: 3 of 6

Subject to Change Without Notice

NETWORK MANAGEMENT SOFTWARE SUPPORT:

NMS Platform	Version No.	Module No.
TBD		

If you install this image, you may not have control of all of the latest features of this product until the next version(s) of network management software. Please review the software release notes for your specific network management platform for details.

SUPPORTED FUNCTIONALITY:

Category	Feature	Support	Priority
Monitor Environment	Power Status	Yes	RTS
Layer 2 Features			
Link Aggregation	802.3ad with LACP	Yes	RTS
		1) Total 8 Trunks (including	
		Cisco EtherChannel Like	
		trunks	
		2) 2~8 port/trunk FE	
		3) 4 port/trunk GE	
	Cisco EtherChannel Linked	Yes	RTS
		1) Total 8 Trunks (including	
		Cisco EtherChannel Like	
		trunks	
		2) 2~8 port/trunk FE	
		3) 4 port/trunk GE	
	Unicast / Multicast traffic Balance	Yes	
	over Trunking port		
VLAN	IEEE 802.1Q – Tag-based	Yes	RTS
	IEEE 802.1Q – Port-based	Yes (256 VLANs)	RTS
	Private VLAN	YES (Community)	RTS
		(isolated PVLAN, Phase 3)	
	GVRP	Yes	RTS

6/2000 P/N: 9038023-04

Page: 4 of 6

Category	Feature	Support	Priority
	802.1v – Protocol	Yes	
	voice VLAN	Yes	
	MAC-based VLAN	YES (Phase 3)	
	IP-subnet VLAN	YES (Phase 3)	
	VLAN trunking	YES (Phase 3)	
	4K (4092) VLANs	YES (Phase 4.1)	
Spanning Tree	IEEE 802.1D	Yes	RTS
	IEEE 802.1s	Yes (8 instances)	RTS
	IEEE 802.1w	Yes	
	Spanning Tree Fast Fording	Yes	
	Loop back detection	YES (Phase 3)	
	Auto edge port	YES (Phase 3)	
	BPDU filter/guard	YES (Phase 3)	
	Root guard	YES (Phase 3)	
BroadCast Storm Control		YES (bit/sec)	
		1) per port rate control	
		2) range: 64K bits/sec -	
		100M bits/sec	
		3) resolution: 64K bits/sec	
		4) Broadcast, B+M,	
		B+M+DLF	
IGMP Snooping	IGMPSnooping v1/v2 support	Yes (256 groups)	
	IGMP v1/v2 querier support	Yes	
	IGMP Immediate Leave	Yes	
	IGMP Filtering and throttling	Yes	
	IGMP snooping Leave Proxy	Yes	
	IGMP v3 snooping	Yes	
MVR		Yes (groups - admin: 1024,	
		active: 255)	
Jumbo Frame	10K (only supported in Giga)	Yes	
QinQ		Yes	
Selective QinQ		YES (Phase 4.0)	
EAPS		YES (Phase 4.1)	

6/2000 P/N: 9038023-04 Page: 5 of 6

Category	Feature	Support	Priority
QoS Features			
Number of priority queue		Yes (4 queues/port)	RTS
Scheduling for priority queue	WRR Priority scheduling	YES	
		Fixed WRR weight	
		1:2:4:8(no way to change)	
	Strict Priority scheduling	YES	
		Once Strict Priority is	
		selected, WRR can not	
		work	
	Hybrid(WRR + Strict) Priority	No	
	scheduling		
COS	802.1p based COS	Yes (per system)	
	IP TOS Precedence based COS	No	
	IP DSCP based COS	DSCP only (per system)	
	TCP/UDP Port based COS	No	
Rate Limiting	Ingress	YES	
		1) Per Port-based	
		2) FE:	
		- 64K bits/sec ~	
		100Mbits/sec	
		- Resolution 64K bits/sec	
		3) GE:	
		- 64K bits/sec ~	
		1000Mbits/sec	
		- Resolution 64K bits/sec	

6/2000 P/N: 9038023-04 Page: 6 of 6

Category	Feature	Support	Priority
	Egress	YES	
		1) Per Port-based	
		2) FE:	
		- 64K bits/sec ~	
		100Mbits/sec	
		- Resolution 64K bits/sec	
		3) GE:	
		- 64K bits/sec ~	
		1000Mbits/sec	
		- Resolution 64K bits/sec	
DiffServ		Yes	
Security Features			
Static/Dynamic Port Security		YES	RTS
(MAC-based)		1) Per system: Total 1024 MAC	
		2) Auto-learned support	
802.1x	Port-Based	YES	
		1) Support Single host mode	
		2) Single host mode:	
		- Per port 1 MAC	
	MAC-based	YES (Phase 3)	
	Supplicant Support	Yes (Phase4.3)	
		1) support Win XP	
		2) support Win 2000 w/ SP4	
		3) support Win 95/98 w/ AEGIS	S
	VLAN assignment	Yes	
	Guest VLAN	Yes	
	QoS assignment (w/o ACL profile)	YES (Phase 3)	
	EAPOL frames pass-through	YES (Phase 3.1)	
	QoS assignment w/ ACL profile	YES (Phase 3.1)	
ACL	Number of rules	Mixed mode: 1024 rules	
		Extended mode: 500 rules	
		(per system) (Phase 3)	

6/2000 P/N: 9038023-04 Page: 7 of 6

Category	Feature	Support	Priority
	L2/L3/L4	YES	
		1) L2 SA/DA MAC, VLAN ba	sed
		2) L3 IP SA/DA, subnet based	
		3) L4 TCP/UDP port	
		4) IPv6 (Phase 3)	
	Time Range	YES (Phase 4.1)	
RADIUS authentication		YES	
		1) Encryption: MD5	
		2) Multiple RADIUS Server: 5	
		servers	
RADIUS authorization and		Yes	
accounting			
TACACS+ authentication		YES	
		1) Encryption: MD5	
		2) Single Server	
TACACS+ authorization and		Yes	
accounting			
TACACS+ 3.0	Support Cisco ACS 3.0 server	Yes	
MAC Based authentication		YES	
HTTPS and SSL (Secured Web)		YES	
		Support cipher:	
		1) AES128-cbc	
		2) 3ES-cbc	
		3) Blowfish-cbc	
SSH V1/V2.0 (Secured Telnet		YES	
session)		Support cipher:	
		1) AES128-cbc	
		2) 3ES-cbc	
		3) Blowfish-cbc	
User name password	Local authentication	YES	
authentication		Cisco-like (5 User/Password)	
	Remote authentication via	YES	
	RADIUS/TACACS+	Cisco-like	
Management Interface	SNMP	Yes	

6/2000 P/N: 9038023-04 Page: 8 of 6

Category	Feature	Support	Priority
Access Filtering	WEB	Yes	
	Telnet	Yes	
Instruction lock (link detection)		YES (Phase 3)	
MAC filter		YES (Phase 3)	
PPPoE Intermediate Agent		YES (Phase 4.1)	
Management Features			<u>.</u>
Cisco Like CLI		Yes	RTS
	CLI filtering and terminal setting	YES (Phase 3)	
Web Based Management		Yes	RTS
Telnet		Yes (8 sessions)	RTS
Software Download	TFTP	Yes (opcode/diag/loader,	RTS
		Phase 3)	
	Xmodem	Yes	RTS
	Diag support TFTP download	YES (Phase 3)	
	FTP	YES (Phase 3)	
	НТТР	YES (Phase 3)	
Auto Upgrade	TFTP	YES (Phase 3)	
Dual Image		Yes	RTS
Configuration Download	TFTP	Yes (multiple copies)	RTS
SNMP	V1	Yes	RTS
		1) 5 SNMP community	
		string	
		2) 5 trap receivers	
	V2c	Yes	RTS
		1) 5 SNMP community	
		string	
		2) 5 trap receivers	
	V3	Yes	RTS

6/2000 P/N: 9038023-04 Page: 9 of 6

Category	Feature	Support	Priority
RMON	RMON1(1,2,3,9 group)	Yes	RTS
		1) Statistic:	
		- Total 24 entries	
		- Per port 1 entry	
		2) Histroy:	
		- Total 48 entries	
		- Per port 2 entries	
		3) Alarm: 48 entries	
		4) Event : 24 entries	
		(Note: RMON configure	
		will not be saved to Flash)	
BOOTP	Client	Yes	RTS
	Relay	No	RTS
DHCP	Client	Yes	RTS
	Relay	No	RTS
	Snooping	Yes	RTS
	Option 82 Relay	Yes	RTS
	Server	No	RTS
	dynamic provision (option 66,67)	YES (Phase 3)	
	Relay Option 82	YES (Phase 4.0)	
IP Source Guard		Yes	RTS
Port Mirroring		Yes (1Dst to manySrc	RTS
		mirroring)	
Event/Error Log	Local Flash	Yes	RTS
		1) 512 entries	
		2) 256Kbyte Flash	
	Remote server via System Log (RFC	Yes	RTS
	3164)	1) Cisco-like	
		2) Support up to 5 servers	
	SMTP	Yes	RTS
DNS	Client	No	RTS
	Proxy	No	RTS
Remote Ping		Yes	RTS

6/2000 P/N: 9038023-04 Page: 10 of 6

Category	Feature	Support	Priority
SNTP		Yes	RTS
		1) Support 3 Servers	
		2) User configurable	
NTP		Yes	
IP Clustering		Yes (36 members)	RTS
LLDP(802.1ab, Link Layer		Yes	
Discovery Protocol)			
UPnP		Yes	
Banner		Yes	
WEB authentication		Yes	
sFlow		YES (Phase 3)	
Dynamic ARP inspection (DAI)		YES (Phase 3)	
VLAN mirror		YES (Phase 3)	
MAC based mirror		YES (Phase 3)	
ATC		YES (Phase 3)	
Delay reload		YES (Phase 3)	
CLI "show debug"		YES (Phase 3)	
CLI "show tech"		YES (Phase 3)	
CLI "show interfaces brief"		YES (Phase 3)	
Cable Diagnostics /TDR		YES (Phase 3.2)	
Port Utilization (kbits/sec, Pkts/sec,		YES (Phase 3.2)	
% Util in recent 300secs)			
MO/MO-PoE universal opcode		YES (Phase 4.0)	
Support new Marvell 88E6097,		YES (Phase 4.0)	
as well as existing 88E6095			
G.8032		YES (phase4.3)	
Non-STP Loopback Detection		YES (Phase4.8)	

INSTALLATION AND CONFIGURATION NOTES:

In general, the ES3528M/ES3552M[-V1] Switch will be shipped to you pre-configured with this version of firmware. If you would like to upgrade an existing ES3528M/ES3552M[-V1] Switch, please follow the TFTP download instructions that are included with your firmware image upgrade kit.

6/2000 P/N: 9038023-04

Page: 11 of 6

Subject to Change Without Notice

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 V 1.4.8.2; Diag V 1.2.1.1; Loader V1.0.4.0

ES3528MO-FLF-38-00876	CLI command losing priority of administrator and normal users
-----------------------	---

The following Known Issues have been fixed in this release of firmware.

Runtime V 1.4.8.1; Diag V 1.2.1.1; Loader V1.0.4.0

ES3528MO-FLF-38-00813	Web pages of configuable DHCP option 82
ES3528MO-FLF-38-00868	add a new CLI to disable option 82 to carry sub-type of CIR & RID
ES3528MO-FLF-38-00869	add a new mib node to disable option82 to carry sub-type of CID & RID
ES3528MO-FLF-38-00870	Traffic Segmentation: wrong CLI command: uplink-to-uplink

Runtime V 1.4.8.0; Diag V 1.2.1.1; Loader V1.0.4.0

ES3552MO-FLF-38-00486	How to manage the LLDP via SNMP for ES3528M
-----------------------	---

6/2000 P/N: 9038023-04

Page: 12 of 6

Subject to Change Without Notice

ES3552MO-FLF-38-00524	ProtocolVLAN:the members of protocol-vlan didn't receive packet when inject ip
	frame with vid=0.
ES3552MO-FLF-38-00565	Date&time not saved during reboot
ES3552MO-FLF-38-00567	Web: It doesn't provide "PoE" help page.
ES3552MO-FLF-38-00568	PoE:Maximum power allocation range is not correct on web.
ES3552MO-FLF-38-00569	Web :Edit classes on policy-map page without checking the check box, it will not
	show any pop-up message like "Remove Policy"
ES3552MO-FLF-38-00570	ES3528M: DHCP Snooping – false bindings are shown on port 1
ES3552MO-FLF-38-00575	no permit/deny (MAC ACL) - missing [cos cos bitmask] option
ES3552MO-FLF-38-00577	corrections to grammar in "show ip igmp snooping"
ES3552MO-FLF-38-00578	correction to spelling convention in "show mvr"
ES3552MO-FLF-38-00580	correction to grammar in "show mvr interface"
ES3552MO-FLF-38-00581	giga-phy-mode command errors
ES3552MO-FLF-38-00582	corrections to spelling convention in "show Ildp config" output
ES3552MO-FLF-38-00584	corrections to grammar in web ui - show lldp info remote device details
ES3552MO-FLF-38-00585	ES3528M latest FW
ES3552MO-FLF-38-00586	DAI crash after 30 minites or 1 hours
ES3552MO-FLF-38-00587	DAI validation parameters on ES3528M priority low
ES3552MO-FLF-38-00588	IGMPSNP:It should be able to create 64 static multicast group. not 16.
ES3552MO-FLF-38-00590	output modifier added for command of" show interface brief"
ES3552MO-FLF-38-00592	SFP in ports 28 on ES3528MO has ifType is wrong in sFlow counter packets.
ES3552MO-FLF-38-00593	ES3528M, ES3526XAv2 - OID for viewing "show mac-address-table count"
ES3552MO-FLF-38-00594	add CLI command to stop sending trap
ES3552MO-FLF-38-00595	ES3528M: Copy startup-config running-config will cause skipping of opcode auto upgrade
ES3552MO-FLF-38-00596	ES3528M-SFP-38 after create vlan 311 and copy startup,it will stop after reboot
ES3552MO-FLF-38-00597	corrections to grammar/formatting in web ui
ES3552MO-FLF-38-00598	BOOTP packet is blocked when DHCP snooping enable
ES3552MO-FLF-38-00599	ES3528M DAI web management
ES3552MO-FLF-38-00600	BOOTP packet is blocked when DHCP snooping enable
ES3552MO-FLF-38-00601	ES3528M network-access RADIUS authorisation bug
ES3552MO-FLF-38-00602	"BPDU tunneling" feature on Phase 4 firmware(v1.4.4.0) did not implemented
	completely as mentioned in spec.

6/2000 P/N: 9038023-04 Page: 13 of 6

ES3552MO-FLF-38-00603	SSL and Port security causing web management problems and STP instability
ES3552MO-FLF-38-00604	DNS: After replace the hostname setting, DUT can not show the correct configure.
ES3552MO-FLF-38-00605	dot1qstaticunicaststatus and dot1qstaticunicastallowedtogoto will dispaer
ES3552MO-FLF-38-00573	EAPS port just only 28 ports in port 52 switch.

Runtime V 1.4.6.4; Diag V1.2.1.1; Loader V1.0.4.0

Patch	
ES3528MO-FLF-38-00619	Port Lock
ES3528MO 1-FLF-38-00021	224.0.0.x can't be flood on vlan

Runtime V 1.4.6.2; Diag V 1.2.1.1; Loader V1.0.4.0

ES3552MO-FLF-17-00060	Makefile path error

Runtime V 1.4.6.1; Diag V1.2.1.1; Loader V1.0.4.0

ES3552MO-FLF-38-00735	ES3528M: NTP has 24h offset
ES3552MO-FLF-38-00570	ES3528M: DHCP Snooping – false bindings are shown on port 1
ES3528MO-FLF-17-00064	add Mac address info in the Trap message of port security when there is MAC violation
ES3528MO-FLF-38-00839	can't login with default username/passwd
ES3528MO-FLF-38-00784	ES3528M: Copy startup-config running-config will cause skipping of opcode auto upgrade

Runtime V 1.4.6.0; Diag V1.2.1.1; Loader V1.0.4.0

QA	
ES3552MO-FLF-38-00486	How to manage the LLDP via SNMP for ES3528M
ES3552MO-FLF-38-00519	L2PT:Can't find L2PT function via mib browser.
ES3552MO-FLF-38-00525	RadiusAcc:The total session should be 4 , not 8 when opening by using telnet and
	SSH at the same time
ES3552MO-FLF-38-00531	diffserv:The packet forwarding ratio doesn't correspond to the cos.
ES3552MO-FLF-38-00538	ES3528M: help with diagnosis of management freezing
ES3552MO-FLF-38-00540	ES3552M do not Telnet access. Display "memPartAlloc: block too big" message
	From console.

6/2000 P/N: 9038023-04

Page: 14 of 6

ES3552MO-FLF-38-00542	轉寄: Why why ith the status of Option82 is Disable ?
ES3552MO-FLF-38-00543	Trunk:Create a static trunk,commmand "sh run" ,it displays "lacp" word in running
	config.
ES3552MO-FLF-38-00544	PoE Web pages are gone
ES3552MO-FLF-38-00545	Enable igmp snooping on specify vlan, unknown multicast data is still flood
ES3552MO-FLF-38-00546	"no ip http secure-server" command will cause switch to reboot automatically
ES3552MO-FLF-38-00547	backdoor passwd should be encrypted
ES3552MO-FLF-38-00550	description of vlan display incorrect while create mst instance
ES3552MO-FLF-38-00552	vlantrunk:vlantrunk config on lacp will be lost after DUT reload
ES3552MO-FLF-38-00554	Rate limit configuration will casue the error message "Failed to join egress list on
	ethernet 1/1" during provision
ES3552MO-FLF-38-00556	ifType of SFP ports 28 on sFlow counter packets is not correct in ES3528MO
ES3552MO-FLF-37-00557	[ES3528M] Unknown unicast storm control
ES3552Mo-FLF-38-00558	PPPoE should not replace the tag if the packets came from a trusted port
ES3552MO-FLF-38-00559	ES3528M - IF-MIB::ifDescr is empty
ES3552MO-FLF-38-00560	Port link status will not be up after run TDR diagnostics test.
ES3552MO-FLF-38-00561	[ES3528MO-PoE] The ifOperStatus of networkAccessPortLinkDetectionTrap is
	always up.
ES3552MO-FLF-38-00562	miss the command of "show ip igmp snooping groups" on Phase4 image
ES3552MO-FLF-38-00563	ES3528M cableDiag question
ES3552MO-FLF-38-00564	Suspended Vlan 4093 will become active after reload the device
ES3552MO-FLF-38-00565	Date&time not saved during reboot
ES3552MO-FLF-38-00566	certain 'name-server' command doesn't apply on ES3528M priority low
ES3528MO 1-FLF-38-00016	ES3528M reboots on FW 1.4.4.0 priority medium
ES3528MO 1-FLF-38-00015	Suspended Vlan 4093 will become active after reload the
	deviceES3528MF-PoE-FLF-38-
ES3528MF-PoE-FLF-38-00007	The NTP config didn't supported ntp server "version" and "poll" in 1.3.7.4 and 1.4.4.0

Runtime V1.4.4.0; Diag V1.2.1.1; Loader V1.0.3.0

QA	
ES3552MO-FLF-38-00538	ES3528M: help with diagnosis of management freezing
ES3552MO-FLF-38-00530	GVRP:DUT didn't learn mac-address and the port didn't register to the vlan
	dynamically when injecting joinin
ES3552MO-FLF-38-00529	DHCPDynamicProvision:DUT didn't succeed to download configuration file when The
	TFTP server use domain-name

6/2000 P/N: 9038023-04 Page: 15 of 6

ES3552MO-FLF-38-00518	L2PT:It doesn't provide command "show I2protocol-tunnel" to display Layer 2
	Protocol Tunneling configuration
ES3552MO-FLF-38-00517	L2PT:Can't find L2PT function on web.
ES3552MO-FLF-38-00516	PortSecurity: ports can be configured so that both LACP and portsec are enabled
ES3552MO-FLF-38-00507	rootguard:the lacp stp state will continue change,discarding-> learning->discarding
ES3552MO-FLF-38-00505	SSL: the generate RSA public key contains too many ZEROs
ES3552MO-FLF-38-00503	ES3528M: Rate-limiting is not working after a reboot of the switch
ES3552MO-FLF-38-00502	802.1Q trunk with arp inspection does not work.
ES3552MO-FLF-38-00501	MVR doesn't work on trunk port.
ES3552MO-FLF-38-00495	can't delete vlan4093 from port of ES3528M
ES3552MO-FLF-38-00491	"Agent Remote ID" field filled with zeros if management ip address set other than VLAN 1 by using Option82 DHCP snooping.
ES3552MO-FLF-38-00490	Multicast traffic flood on MVR source port even there are no multicast request from multicast clients
ES3528MO-FLF-38-00763	When using SNMP to copy running-config to ftp, some problem occured.
ES3528MO-FLF-38-00744	Device will lose management interface when heavy loading
ES3528MO-FLF-38-00768	ES3528M lldp bug
ES3552MO-FLF-38-00479	ES3552MO SFP port can't link on port 50 and 51.
ES3552MO-FLF-38-00476	DUT show an exception error when copy running-config to startup-config continuously.
ES3552MO-FLF-38-00475	ES3528/52MO[-PoE]_V1.3.7.3 dynamic QoS problem
ES3552MO-FLF-38-00467	DynamicQoSAssignment:The IPV6-ACL of DQA can't work.
ES3552MO-FLF-38-00466	DynamicQoSAssignment:The MAC-ACL of DQA can't work.

6/2000 P/N: 9038023-04 Page: 16 of 6

ES3552MO-FLF-38-00465	802.1x:the port can't be changed port-control mode when port-control mode
	is in auto.
ES3552MO-FLF-38-00464	IPConfiguration:The original existed ip will be lost when configured special ip
	parameters in WEB/CLI.
ES3552MO-FLF-38-00445	SNTP:The value of sysTimeZone is empty when It is timezone-predefined
	mode in MIB
ES3552MO-FLF-38-00440	LoginBanner:Use wizard mode to set parameters, user can't change characters
	before click enter button.
ES3552MO-FLF-38-00409	The system time can not be updated after contact with NTP Server.
ES3528MO-FLF-38-00773	[Enhancement] BPDU tunneling
200025M0 121 00 00110	[Emilianoomork] Di Do tamiomig
ES3528MO-FLF-38-00771	ES3528M - strange record appears, when I have untagged vlan on pregoing
L00020W0-1 El -00-00771	interface
	interface
E02520MO ELE 20 00760	IFC2F20M 1.2.7.10] Freeble/Disable DAI by Web coour error massage
ES3528MO-FLF-38-00769	[ES3528M_1.3.7.10] Enable/Disable DAI by Web occur error message
E00500MO EL E 00 00700	TEAL AND
ES3528MO-FLF-38-00766	[Enhancement] New feature: MAC notification trap
500500MO 51 5 00 00705	
ES3528MO-FLF-38-00765	Rate limit configuration will casue the error message "Failed to join egress list
	on ethernet 1/1" during provision
500500MO 51 5 00 00700	14 IV. 44 (6) (1 1 10 (5)
ES3528MO-FLF-38-00762	Multicast traffic flood on MVR source port even there are no multicast request
	from multicast clients
ES3528MO-FLF-38-00759	"Agent Remote ID" field filled with zeros if management ip address set other
	than VLAN 1 by using Option82
ES3528MO-FLF-38-00758	[ES3528MO] The ifOperStatus of networkAccessPortLinkDetectionTrap is
	always up.
ES3528MO-FLF-38-00701	[ES3528MO_V1.3.7.4] No service policy problem
ES3528MO-FLF-38-00704	[ES3528MO_V1.3.7.4] Debug port-security message
ES3528MO-FLF-38-00720	[ES3528MO_V1.3.7.4] Debug telnet does not work

6/2000 P/N: 9038023-04 Page: 17 of 6

ES3528MO-FLF-38-00721	[ES3528MO_V1.3.7.4] DHCP snnoping trap problem
ES3528MO-FLF-38-00722	[ES3528MO_V1.3.7.4] ATC traps prooblem
ES3528MO-FLF-38-00733	MR2228N no ip igmp snooping problem
ES3528MO-FLF-38-00675	Loading time of Web Authentication page needs more than 5 minutes
ES3528MO-FLF-38-00726	There is no way to enable port which was disabled by ATC
ES3528MO-FLF-38-00730	MIB: While trying to find OIDs for 802.1x security management, Couldn't find following configurations OIDs
	Tollowing configurations ones
ES3528MO-FLF-38-00729	MIB: Protocol vlan mib not working
ES3528MO-FLF-38-00728	MIB: Issue while setting the port capabilities.
ES3528MO-FLF-38-00727	MIB: Strom Control(broadcast, multicast, Unknown Unicast) is inconsistent, while setting and reading the
ES3528MO-FLF-38-00714	Value of storm control packets rate is inconsistent while reading the values via
	SNMP
ES3528MO-FLF-17-00062	switch manager error
ES3528MO-FLF-17-00060	auto negotiation
ES3528MO-FLF-38-00758	[ES3528MO] The ifOperStatus of networkAccessPortLinkDetectionTrap is
	always up.

Runtime V1.4.2.1; Diag V1.2.1.1; Loader V1.0.3.0

QA	
ES3528MO 1-FLF-17-00122	TimeACL: Can't bind any ACLs to a port with time range.
ES3528MO 1-FLF-17-00118	DHCPL2Relay: CLI and WebGUI succeeds to configure DHCP relay server in

6/2000 P/N: 9038023-04 Page: 18 of 6

	"subnet broadcast IP address" (a.b.c.255/24) or "subnet IP address"
	(a.b.c.0/24).
ES3528MO 1-FLF-17-00115	EAPS: MAC address learning does not work if any control packets are not
	received.
ES3528MO 1-FLF-17-00113	EAPS: Global state is disabled on the CLI.
ES3528MO 1-FLF-17-00111	As unknown VLAN tagged traffic rate incomes higher, console response
ES3528MO 1-FLF-17-00108	becomes slower and finally stops responding
ES3528MO 1-FLF-17-00107	Once 4K VLANs are created, MAC address learning stops.
ES3528MO 1-FLF-17-00103	Dot1X: The operation-mode in 'multi-host' works same as 'single-host' mode.
ES3528MO 1-FLF-17-00102	CLI "sh dot1x interface" does not provide max-count on a port in 1X multi-host
	mode.
ES3528MO 1-FLF-17-00067	BannerConfig: the backspace keystroke does not work on the "banner
	configure" command.
RD	
ES3552MO-FLF-38-00474	STP loopback detection records logging messages and sends traps that are
	disabled at default.

Runtime V1.4.2.0; Diag V1.2.1.1; Loader V1.0.3.0

QA	
ES3528MO 1-FLF-17-00099	802.1x: It should allow X+1 mac entries to pass when the maximum count is
ES3552MO-FLF-38-00444	configured X.
ES3528MO 1-FLF-17-00098	802.1X port-control mode can't be set to 'force-authorized' or
ES3552MO-FLF-38-00465	'force-unauthorized' when the CLI command is typed in upper-case letters.
ES3528MO 1-FLF-17-00094	NTP: The packets always carry version 3 even the NTP server version is set to
ES3552MO-FLF-38-00429	1. (Removed the "ntp server < ip_addr> version {1 2 3}" command)
RD	
ES3528MO 1-FLF-17-00089	FR: EAPOL forwarding/transparent
	(New CLI command: "Console(config)#[no] dot1x eapol-pass-through". Default:
	Disabled)
ES3528MO 1-FLF-17-00088	(Enhance) VLAN trunking on FE ports (Ever GE ports only)
ES3528MO 1-FLF-17-00087	(Enhance) Support up to 4K (4092) VLANs
ES3528MO 1-FLF-17-00086	FR: EAPS
ES3528MO 1-FLF-17-00081	FR: Time-based ACL
ES3528MO 1-FLF-17-00080	FR: PPPoE Intermediate Agent
ES3528MO 1-FLF-17-00076	(Enhance) Individual traffic controls for Rate-limiting, Broadcast, Multicast, and
	UnknownUnicast storms.

6/2000 P/N: 9038023-04 Page: 19 of 6

	82	FR: DHCP Relay Option 82	ES3552MO-FLF-38-00400
--	----	--------------------------	-----------------------

Runtime V1.4.1.1; Diag V1.2.1.1; Loader V1.0.3.0

QA	
ES3528MO 1-FLF-17-00072	Cluster: Console display an error message in ""aborted http_relay_action"
	when WebGUI attempts to connect to a non-existing member
ES3528MO 1-FLF-17-00069	Candidates (Members to be) should not get on the Member droplist on the
	right-top of browser window. (There should be active members only.)
RD	
ES3528MO 1-FLF-17-00091	(Enhance) Need new identifiers for the 28/52MO 1 devices, and unify system
	description and model name - "Edge-Core FE L2 Switch ES3528M-V1".
ES3528MO 1-FLF-17-00076	(Enhance) Individual traffic controls for Rate-limiting, Broadcast, Multicast, and
	UnknownUnicast storms. (Not work in v1.4.1.1)
ES3528MO-FLF-38-00650	[DevDrv,PHY] ComboG ports might not be able to link up by chance.

Runtime V1.4.1.0 (Re-conversion of V1.4.0.6 for ECN), Diag V1.2.1.0; Loader V1.0.3.0

Runtime V1.4.0.6; Diag V1.2.1.0; Loader V1.0.3.0

ES3528MO 1-FLF-17-00082	DHCP dynamic provision does not work when on DHCP server user configures
	'String' format for the IP address of TFTP server (option 66).
ES3528MO 1-FLF-17-00078	The measured rates on TCP traffic become totally inaccurate while input
	rate-limiting values are larger than 6144 kbps.
ES3552MO-PoE-FLF-17-00020	'calendar set' incorrectly works when it attempts to set Feb 29 th of a year.
	(V1.4.0.5 only)
ES3528MO-FLF-17-00055	(DCR) 'sfp-preferred-auto': Auto switching 1000T/SFP port type of a comboG
	port by link status, fiber then copper. (Current design: fixed SFP once module
	inserted)

Runtime V1.4.0.5; Diag V1.2.1.0; Loader V1.0.3.0

ES3552MO-FLF-38-00413	Setting system time, ex. " Console#calender set" and " Console(config)#clock
	summer-time", allows invalid Feb 29 th in a non-leap year.

Runtime V1.4.0.4; Diag V1.2.1.0; Loader V1.0.3.0

ES3528MO 1-FLF-17-00074	Traffic controls for Rate-limit, Broadcast, Multicast, and UnknownUnicast
	storms do not work while the limiting value is *small*, ex. 64 kbps.
ES3528MO 1-FLF-17-00073	IP Cluster: It fails to block a 2 nd trial attempt to set the commander's cluster IP
	pool on the same subnet as its management IP, and following 'rcommand' will
	fail.

6/2000 P/N: 9038023-04

Page: 20 of 6

ES3552MO-PoE-FLF-17-00014	WebGUI: The 'Telnet' hyperlink on home page can't connect to a telnet session
	after the telnet port number is moved out of the default value: 23.
ES3552MO-PoE-FLF-17-00006	FlowCtrl: Sending multiple-port pair traffic with FC enabled ports will cause
	several severe problems.
ES3528MO-FLF-38-00629	802.1x supplicant's MAC address will not be removed even though it fails
	re-authentication, ex. client disconnected or station move.

Runtime V1.4.0.3; Diag V1.2.1.0; Loader V1.0.3.0

ES3528MO 1-FLF-17-00040,	PortSecurity: After the security action is invoked, the continual incoming traffic
-00042	with instruction MAC addresses will cause system lockup, say console no
	response.
ES3528MO 1-FLF-17-00038	L2SWPERF:Some ports(2,10,18) will happen packet loss (100%) – Marvell
	Opal+ port lockup
ES3552MO-PoE-FLF-17-00006	FlowCtrl: Sending multiple-port pair traffic with FC enabled ports will cause
	several severe problems

(Cancelled) Runtime V1.4.0.1

ES3528MO 1-FLF-17-00032	DHCP: The extra "ip dhcp client-identifier" (option 61 Client ID) makes it
	confusing with "ip dhcp client class-id" (option 60 Vendor Class ID).
ES3528MO 1-FLF-17-00024	802.1X: It fails to set port control mode.
ES3528MO 1-FLF-17-00013	After "no ip address" is issued to remove the management IP address, the last
	port member on that VLAN fails to leave.

Runtime V1.4.0.0

ES3528MO 1-FLF-17-00002	(Enhance) "show version" displays the information of "Chip Device ID" with
	'88E6097' or '88E6095'.
ES3528MO 1-FLF-17-00001	(Enhance) Support new Marvell 88E6097 (Opal+), as well as existing 88E6095
	(Opal), chips
ES3552MO-FLF-38-00391	(Enhance) MO/MO-PoE universal opcode

Runtime V1.3.2.2

Customer	
ES3552MO-FLF-38-00396	(Enhance) DHCPSNP: log/trap for the mac address of a rouge server, together
	with the receive port. (only logs in this version)
ES3552MO-FLF-38-00394	Cracked syslog message for "topology change, ID=".
ES3552MO-FLF-38-00392	(Enhance) To save the startup configuration file for that being downloaded by

6/2000 P/N: 9038023-04

Page: 21 of 6

	dynamic provision (via DHCP option 66,67).
ES3552MO-FLF-38-00372	(Enahce) Enlarge DHCPSNP binding entries per port up to 16
ES3528MO-FLF-38-00613	(Enhance) Support up to 8 telnet sessions
ES3528MO-FLF-38-00612	802.1ad QinQ: The switch fails to transmit ARP or IP packets to dot1q-tunnel
	uplink ports ("switchport dot1q-tunnel mode uplink").
ES3528MO-FLF-38-00610	PVlan: After configuring uplink and/or downlink ports, running-config gives the
	last port# incremented by 1 unexpectedly.
NTC	
ES3552MO-FLF-38-00384	Can't learn MAC address up to the 8K L2 table size after reloading the switch
	system. (256 L2 entries are occupied by BPDU_MAC(01-80-c2-00-00-00) +
	VLAN_ID[0255].).
ES3552MO-FLF-38-00383	Disabling MAC aging has no effect.
ES3552MO-FLF-38-00378	WebGUI pops up an error message in "Data Invalid" when an attempt to change
	the spanning tree mode from STP/RSTP to MSTP.
ES3552MO-FLF-38-00377	IP cluster members, of which IDs are equal to or larger than 10, are not
	accessible via WebGUI.
ES3552MO-FLF-38-00376	NTP: When a NTP is added following the client is enabled, it needs to wait 600
	seconds for polling request being sent out.
RD	
ES3552MO-FLF-38-00397	(Enhance) Update web help to fit new features in ver1.3 (phaseIII).
ES3552MO-FLF-38-00393	"show interfaces brief", Status :- {Up Down Disabled}, instead of {Linkup
	Linkdown Disabled}.
ES3552MO-FLF-38-00390	With any SFP modules inserted, console displays "0x3df98a8 (tExcTask): 316
	messages from interrupt level lost" while booting till "Enter Master mode".
Known Issue	
ES3552MO-FLF-38-00395	DNS: Domain name is not supported on ping out.
(E02E20M) Dtime V4 2 2 4	

(ES3528M) Runtime V1.3.2.1

ES3528MO-FLF-38-00607	[CQ855] SW Reset Chip
ES3528MO-FLF-38-00608	RSTP 'message_age' incorrect incremental by 2, instead of 1 according to
	802.1D-2004.
ES3552MO-FLF-38-00372	(Enahce) Enlarge DHCPSNP binding entries per port up to 16.

(ES3528M) Runtime V1.3.2.0

ES3552MO-FLF-38-00365	New Feature: DNS client
ES3552MO-FLF-38-00363	New Feature: Logging messages and traps for user authentication, Login
	Success or Failure, via Console or Telnet

6/2000 P/N: 9038023-04 Page: 22 of 6

ES3552MO-FLF-38-00360	New Feature: "show interfaces brief", to display the summary of all ethernet/trunk
	interfaces.
ES3552MO-FLF-38-00359	New Feature: "clear ip igmp snooping groups dynamic", to delete dynamic
	IGMP/MVR multicast groups.

Runtime V1.3.0.2

ES3528MO-FLF-17-00041	Customization based on ES3528MO-38 V1.3.0.2 of PhaseIII
-----------------------	---

MODIFICATIONS:	
1.	
KNOWN BUGS AND ISSUES:	
1.	

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

KNOWN RESTRICITIONS AND LIMITATIONS:	

IEEE STANDARDS SUPPORT:

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

6/2000 P/N: 9038023-04

Page: 23 of 6

Subject to Change Without Notice

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:

6/2000 P/N: 9038023-04 Page: 24 of 6

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	IEEE8021-PAE-MIB	- dot1xPaeSystem (1-2)
802.1X MIB		- 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)

6/2000 P/N: 9038023-04 Page: 25 of 6

ES3526XA PRIVATE ENTERPRISE MIB SUPPORT:

Title	Version
es3552m_52m-poe.mib	200907170000Z

SNMP TRAP SUPPORT:

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)

Customer Support:

By Phone:

By Email:

By Web:

By Fax:

6/2000 P/N: 9038023-04 Page: 26 of 6

Subject to Change Without Notice