Gigabit Ethernet Switch ECS4130-28T

***Phase 1 Firmware Version 1.1.2.212***

**INTRODUCTION:**

The **ECS4130-28T** is a 24\*1G Base-T ports and 4\*10G SFP uplink ports L2+ 1GbE Switch.

Local Console Management (LCM) allows the user to monitor and configure the ECS4130 Series 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 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:**

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| --- | --- | --- | --- |
| **Status** | **Version No.** | **Type** | **Release Date** |
| Phase1 EIT Testing Version | 1.0.5.211 | EIT Test Version Gitlab: ECS4130-28T\_Phase1 Branch (2021/2/16) | 2021/2/16 |
| NTC Testing | 1.0.6.211 | NTC Test Version Gitlab:ECS4130-28T\_Phase1 Branch (2021/3/5) | 2021/3/5 |
| EIT Testing | 1.0.7.212 | EIT Test Version Gitlab: ECS4130-28T\_Phase1 (2021/4/12) | 2021/4/12 |
| NTC Testing | 1.0.8.212 | NTC Test Version Gitlab:ECS4130-28T\_Phase1 Branch (2021/4/26) | 2021/4/26 |
| EIT Testing | 1.0.9.212 | EIT Test Version Gitlab:ECS4130-28T\_Phase1 Branch (2021/5/20) | 2021/5/20 |
| NTC Testing | 1.1.0.212 | NTC Test Version Gitlab:ECS4130-28T\_Phase1 Branch (2021/6/2) | 2021/6/2 |
| NTC Testing | 1.1.1.212 | NTC Test Version Gitlab:ECS4130-28T\_Phase1 Branch (2021/6/11) | 2021/6/11 |
| NTC Testing | 1.1.2.212 | NTC Test Version Gitlab:ECS4130-28T\_Phase1 Branch (2021/6/25) | 2021/6/25 |

**LOADER:**

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| --- | --- | --- | --- |
| **Status** | **Version No.** | **Type** | **Release Date** |
| Test Version | 0.0.0.5 | Gitlab:ECS4130\_Phase1 Branch (2021/2/16) | 2021/2/16 |
| Test Version | 0.0.0.6 | Gitlab:ECS4130\_Phase1 Branch (2021/5/20) | 2021/5/20 |

**HARDware compatibility:**

ALL

**BootPROM compatibility:**

ALL

**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:**

Please see the EC4130\_FeatureSpec\_20201102.XLSX

**Installation and Configuration Notes:**

In general, the ECS4130 Series **Switch** will be shipped to you pre-configured with this version of firmware. If you would like to upgrade an existing ECS4130 Series **Switch,** please follow the TFTP download instructions that are included with your firmware image upgrade kit.

**Firmware Changes and Enhancements:**

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

**Loader V0.0.0.5**

|  |  |  |
| --- | --- | --- |
| 1 | NA |  |
| 2 | NA |  |
| 3 | NA |  |

**Runtime V1.0.5.211, Loader V0.0.0.5**

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| --- | --- | --- | --- |
| 1 | NA | a90306c2 | improvle i2c control and add watchdog funtion |
| 2 | NA | 91406c7a | add ecs4130-28t diag system |
| 3 | ECS4130EC-1 | eecd51f2 | WEB:Modify web panel for 4130. |
| 4 | ECS4130EC-2 | 6e3dd547 | When ports security stick mac-address enables, and send a large numbers of packets, the port link down; |
| 5 | ECS4130EC-3 | 6e3dd547 | Delete dot1x supplicant function and craft function |
| 6 | NA | 9ef6b91b | ECS4130-28T add u-boot version and delete log |
| 7 | ECS4130EC-4 | 61da51e9 | ERPS states error cause can not receive RAPS packet correctly |
| 8 | ECS4130EC-5 | 68b66613 | IPv6: Displayed "Invalid IPv6 address format" when adding IPv6 link local address. |
| 9 | ECS4130EC-6 | 04883543 | The function of detecting the present signal of  optical module is realized |
| 10 | ECS4130EC-7 | c9057c92 | Modify the maximum number of port-channel supported by product |
| 11 | ECS4130EC-8 | 04da562b | add UDLD moudle cli |
| 12 | ECS4130EC-10 | 87e61d2f | ECS4130 auto upgrade(show upgrade) file name error |
| 13 | ECS4130EC-11 | 7cc76fea | IP-Cluster module: add IP-Cluster CLI |
| 14 | ECS4130EC-14 | b87d3392 | update uboot the version and delete the cli power status |
| 15 | ECS4130EC-13 | 9266dde1 | slove the tx enable not working. |
| 16 | ECS4130EC-15 | a999e8eb | remove no support mirror CSC(ACL/VLAN/MAC Based Mirror) |
| 17 | ECS4130EC-16 | 0d19ab3a | change the broadcast control range |
| 18 | ECS4130EC-17 | d5dd282b | update license lib file and open license function |
| 19 | ECS4130EC-18 | a501b400 | add to support bid is one and update diag version |
| 20 | ECS4130EC-20 | e1239bd0 | need support Ip ACL+Diffserv work together |
| 21 | ECS4130EC-12 | 1a18996a | TWAMP module: add TWAMP CLI |
| 22 | ECS4130EC-23 | ef996688 | rate limit cli prompt change |
| 23 | ECS4130EC-24 | 9393a166 | flow control autonegotiation mode doesn't work. |
| 24 | ECS4130EC-21 | 5e1b251e | Dying-gasp module: add dying-gasp cli and efm oam critical-link-event dying-gasp |
| 25 | ECS4130EC-25 | 60786ae1 | Need support mDNS function |
| 26 | ECS4130EC-26 | 6f379ccb | mmu initial error. |
| 27 | ECS4130EC-27 | 39837cea | enable the Backdoor password |
| 28 | ECS4130EC-28 | 93efacfaf | cable-diagnostics function not work |
| 29 | ECS4130EC-29 | 53ffacc9 | support power-saving function and add mib file for power-saving |
| 30 | ECS4130EC-30 | f38437e0a | if optical port link shutdown but not support to link up |
| 31 | ECS4130EC-32 | 542c1927 | uboot support to bitflip check and fix data |

**Runtime V1.0.6.211, Loader V0.0.0.5**

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| --- | --- | --- | --- |
| 1 | ECS4130EC-33 | c1b42596 | Enhance the debug method |
| 2 | ECS4130EC-43 | ecd99002 | SNMP-0380.hostname SNMP\_0380\_abcdefg1234567890!~@ cannot be set |
| 3 | ECS4130EC-46 | aa4f4fa3 | StormCtrl-Bcast mcast unicast:1 max storm ratelimit value of 1G port cannot be set |
| 4 | ECS4130EC-39 | aa4f4fa3 | L2SW-0700:there is no media-type in port status display |
| 4 | ECS4130EC-35 | 6df0a4b3 | L2SW-0280:default Flow Control Type is Dot3X, when there is no flowcontrol in capability |
| 5 | ECS4130EC-34 | e8892312 | [enhancement] add backdoor command to CLI |
| 6 | ECS4130EC-40 | cd1fe681 | MirrorPortBased\_old-0020:port didnot recieve all packets from monitor port |
| 7 | ECS4130EC-51 | 867bd6c6 | IPv4-StaticRoute-0040 0120 0180 0200 0230 0290 0340 0350 0550 0560 0570 0580 0590:dut didnot |
| 8 | ECS4130EC-36 | e58bd7c9 | L2SW-0420 0430: DUT generate pause frames when the DUT receives some oversize frames |

**Runtime V1.0.7.212, Loader V0.0.0.5**

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| --- | --- | --- | --- |
| 1 | ECS4130EC-94 | fb6aa026 | ERPS:When we delete include vlan;DUT show exception and CLI halted |
| 2 | ECS4130EC-79 | 9935ceb2 | IPv4-StaticRoute: Source MAC address is wrong when DUT forwards routing packets |
| 3 | ECS4130EC-86 | d9d7d8ff | The certificatied is incorrect which show ECS4530 model |
| 4 | ECS4130EC-81 | 0905c0ff | L2switch: ports 25-28 could not be set to 1000Mps by "media-type sfp-forced 1000sfp" |
| 5 | ECS4130EC-104 | a558bb28 | ACL: Maximum ACE in one IP-extended doesn't match feature list |
| 6 | ECS4130EC-106 | 27ff897a | SwitchMgmt: Please remove FAN related command because it's not supported |
| 7 | ECS4130EC-82 | d76754a0 | Debug DHCP-SNP:DUT print debug message repeatedly as learn same entry |
| 8 | ECS4130EC-97 | 6a5ef278 | ECS4130-28T 25~26 port transceiver cause flapping |
| 9 | ECS4130EC-87 | f1e67db5 | IPv6-FTP: Copy FTP file doesn't support https-certificate |
| 10 | ECS4130EC-115 | 2da01b28 | IPv6-AddrConfig: CLI show -1 when set ipv6 nd prefix Valid… |
| 11 | ECS4130EC-99 | 4f7422a6 | Voice VLAN: After Port is change to access mode from trunk mode, DUT permit to set the port to auto mode. |
| 12 | ECS4130EC-98 | 9f3d18b3 | VLAN-trunking: It shows "switchport priority default 0" when "show running" after setting vlan-trunking |
| 13 | ECS4130EC-92 | fa499784 | ConfigFileMgmt: Got "Failed to allocate resource" and "Memory is not enough" |
| 14 | ECS4130EC-121 | f708c24e | DDM: SFP DDM information could not be read properly via CLI/WEB UI |
| 15 | ECS4130EC-134 | df5e4ef9 | Can not access the DUT via pinbg or http of mdns address |
| 16 | ECS4130EC-113 | 291643ed | Has no the mdns node in mib tree |
| 17 | ECS4130EC-133 | 658a3a2a | DAI: When ARP ACL include maximum length of name, it can't bind with DAI on web. |
| 18 | ECS4130EC-135 | 04a15465 | DAI: The packet rate limit range in help page is wrong. |
| 19 | ECS4130EC-116 | 1013b1b2 | LLDP:When port leave trunk,LLDP PDU can't sent sout properly. |
| 20 | ECS4130EC-114 | 53dc156a | LLDP:Dashboard can't display remote device when local port is trunk. |
| 21 | ECS4130EC-119 | 3547f7b8 | PortMonitor: Reset mirror setting will cause print continuous |
| 22 | ECS4130EC-141 | 70b54cd8 | DHCP Server: Configure detail pool setting from existing poll; CLI… |
| 23 | ECS4130EC-108 | 70b54cd8 | Cant not set the ipv6 address to tacacs+ server |
| 24 | ECS4130EC-148 | 70b54cd8 | Selective: Need to support the LACP and trunk interface |
| 25 | ECS4130EC-142 | b67662da | DHCP Server: DUT cannot display active pool range as configure… |
| 26 | ECS4130EC-137 | b67662da | DAI: The port number of DAI log are different between CLI and WEB |
| 27 | ECS4130EC-102 | d54d0d59 | RSTP: DUT cannot learn Root bridge as it receive tagged higher priority BPDU. |
| 28 | ECS4130EC-75 | d54d0d59 | IP Subnet vlan: DUT learn incorrect subnet vlan mac address. |
| 29 | ECS4130EC-76 | d54d0d59 | IP Subnet vlan: DUT cannot learn subnet vlan mac address. |
| 30 | ECS4130EC-147 | 3f55b754 | 1QVLAN: DUT cannot save ipv6 address setting on non-default vlan |
| 31 | ECS4130EC-131 | 1745126f | DNS: Can't display complete host information while host… |
| 32 | ECS4130EC-149 | 1745126f | Please remove SDVoE configuration from dashboard |
| 33 | ECS4130EC-129 | 1745126f | DNS: Please remove DNS proxy. |
| 34 | ECS4130EC-80 | 42b82727 | CableDiag: It's failed to be tested when it's short, open, or impedance |
| 35 | ECS4130EC-77 | 42b82727 | CableDiag: When it's connected to 10/100 Mbps, it's failed to be tested. |
| 36 | ECS4130EC-78 | 42b82727 | CableDiag: It's started cable-diag directly even it's never be run |
| 37 | ECS4130EC-123 | e73f3157 | Cluster: DUT can't relay SNMP packet |
| 38 | ECS4130EC-124 | e73f3157 | Cluster: After enabled cluster, all switch port didn't join VLAN 4093 automatically |
| 39 | ECS4130EC-125 | e73f3157 | Cluster: DUT can't relay web page |
| 40 | ECS4130EC-126 | e73f3157 | Cluster: There is no MIB node for cluster |
| 41 | ECS4130EC-140 | 3b977ff6 | Ztpv6: DUT does not support any setting command by CLI, WEB and MIB. |
| 42 | ECS4130EC-127 | 90a91fc6 | IPv4-StaticRoute: Packets loss when set maximum static route.&… |
| 43 | ECS4130EC-146 | 90a91fc6 | The maximum numbers of netroute&hostroute does not match the scpec 1024 entries. |
| 44 | ECS4130EC-156 | e089f8d8 | DUID Type 2 (DUID-EN) Support for DHCPv6 client |
| 45 | ECS4130EC-132 | a303b067 | Web: Help page doesn't contain LAND Attack… |
| 46 | ECS4130EC-61 | a303b067 | GVRP-PDU-0660..JoinIn... vlan=4096..DUT...JoinEmpty event.. |
| 47 | ECS4130EC-62 | 3953fee0 | IGMPFilter-0050:DUT cannot receive multicast packets in full rate when igmp filter set. |
| 48 | ECS4130EC-88 | bf52b0bd | IPv6-MLD-SNP: DUT sends respond report immediately when it received general query. |
| 49 | ECS4130EC-93 | fd6a1b70 | WebUI: Display wrong page after clear Public-Key of User-Key. |
| 50 | ECS4130EC-140 | 15dc3b1d | Ztpv6: DUT does not support any setting command by CLI, WEB and MIB |
| 51 | ECS4130EC-152 | dd398318 | IPv6 Source Guard: Failed to replace the DHCP-SNP and nd-snoop… |
| 52 | ECS4130EC-153 | c701c9fb | Dynamic Provision: Execute dynamic provision with auto upgrade, CLI show exception and system halted. |
| 53 | ECS4130EC-143 | c701c9fb | ImageDownload: Got exception "task NETCFG\_MGR\_ND\_T" when copy tftp file to the same filename on non-startup |
| 54 | ECS4130EC-159 | c701c9fb | Disable openssl ssl2/ssl3 function for ECS4130 |
| 55 |  |  |  |

**Runtime V1.0.8.212, Loader V0.0.0.5**

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| --- | --- | --- | --- |
| 1 | ECS4130EC-75 | 55b1baa4 | IP Subnet vlan: DUT learn incorrect subnet vlan mac address. |
| 2 | ECS4130EC-76 | 55b1baa4 | IP Subnet vlan: DUT cannot learn subnet vlan mac address. |
| 3 | ECS4130EC-83 | 8ef010d5 | PortMonitor: One port monitors two ports at the same time, it's lost some packets. |
| 4 | ECS4130EC-85 | 0e73068a | L2Switch: Port 27&28 could not receive any packet |
| 5 | ECS4130EC-88 | bf52b0bd | IPv6-MLD-SNP: DUT sends respond report immediately when it received general query. |
| 6 | ECS4130EC-92 | fa499784 | ConfigFileMgmt: Got "Failed to allocate resource" and "Memory is not enough" |
| 7 | ECS4130EC-94 | fb6aa026 | ERPS: When we delete include vlan; DUT show exception and CLI halted. |
| 8 | ECS4130EC-97 | 6a5ef278 | ECS4130-28T 25~26 port transceiver cause flapping |
| 9 | ECS4130EC-98 | 9f3d18b3 | VLAN-trunking: It shows "switchport priority default 0" when "show running" after setting vlan-trunking |
| 10 | ECS4130EC-99 | 4f7422a6 | Voice VLAN: After Port is change to access mode from trunk mode, DUT permit to set the port to auto mode. |
| 11 | ECS4130EC-102 | d54d0d59 | RSTP: DUT cannot learn Root bridge as it receive tagged higher priority BPDU. |
| 12 | ECS4130EC-104 | a558bb28 | ACL: Maximum ACE in one IP-extended doesn't match feature list. |
| 13 | ECS4130EC-106 | 27ff897a | SwitchMgmt: Please remove FAN related command because it's not supported |
| 14 | [ECS4130EC-109](https://jira.edge-core.com:8443/browse/ECS4130EC-108) | df03cba4 | MVR6: MVR6 shall be implemented in this project |
| 15 | ECS4130EC-110 | eb69264d | SwitchMgmt: No dying-gasp is sent when unplug power after disable power-save |
| 16 | [ECS4130EC-114](https://jira.edge-core.com:8443/browse/ECS4130EC-114) | 53dc156a | LLDP: Dashboard can't display remote device when local port is trunk. |
| 17 | ECS4130EC-116 | 1013b1b2 | LLDP: When port leave trunk, LLDP PDU can't sent out properly. |
| 18 | ECS4130EC-117 | 8ef010d5 | PortMonitor: Mirror multiple ports with mixed broadcast and multicast will packet loss |
| 19 | ECS4130EC-119 | 3547f7b8 | PortMonitor: Reset mirror setting will cause print continuous |
| 20 | ECS4130EC-133 | 658a3a2a | DAI: When ARP ACL include maximum length of name, it can't bind with DAI on web. |
| 21 | ECS4130EC-134 | df5e4ef9 | Can not access the DUT via pinbg or http of mdns address. |
| 22 | ECS4130EC-135 | 04a15465 | DAI: The packet rate limit range in help page is wrong. |
| 23 | ECS4130EC-137 | b7762da | DAI: The port number of DAI log are different between CLI and WEB. |
| 24 | ECS4130EC-140 | 15dc3b1d | Ztpv6: DUT does not support any setting command by CLI, WEB and MIB. |
| 25 | ECS4130EC-147 | 3f55b754 | 1QVLAN: DUT cannot save ipv6 address setting on non-default vlan. |
| 26 | ECS4130EC-148 | 70b54cd8 | Selective: Need to support the LACP and trunk interface |
| 27 | ECS4130EC-155 | 7e5b4c18 | DHCPv6 Relay: After we change destination address to “multicast all” from VLAN 1; DUT show exception and rebooting itself. |
| 28 | ECS4130EC-162 | 56bd70d0 | VLAN-Translation: Ingress vlan-translation setting could not be removed when removed multiple ports at the same time |

**Runtime V1.0.9.212, Loader V0.0.0.6**

|  |  |  |  |
| --- | --- | --- | --- |
| 1 | [ECS4130EC-92](https://jira.edge-core.com:8443/browse/ECS4130EC-92)(reopen) | 48c8ce50 | [ConfigFileMgmt: Got "Failed to allocate resource" and "Memory is not enough"](https://jira.edge-core.com:8443/browse/ECS4130EC-92) |
| 2 | [ECS4130EC-122](https://jira.edge-core.com:8443/browse/ECS4130EC-92) | A7602585 | [DoS-Protection: LAND Attack protection can not work.](https://jira.edge-core.com:8443/browse/ECS4130EC-122) |
| 3 | [ECS4130EC-138](https://jira.edge-core.com:8443/browse/ECS4130EC-92) | Dcdda811 | I[Pv4-StaticRoute: Packets can not be forwarded totally when add multiple entries.](https://jira.edge-core.com:8443/browse/ECS4130EC-138) |
| 4 | [ECS4130EC-168](https://jira.edge-core.com:8443/browse/ECS4130EC-168) | 8b552911 | Mdns: The mdns notification will malformed packet when using the Zero Configuration Tester |
| 5 | [ECS4130EC-174](https://jira.edge-core.com:8443/browse/ECS4130EC-174) | 27bead0c | [CableDiag: It's wrong when cable is broken](https://jira.edge-core.com:8443/browse/ECS4130EC-174) |
| 6 | [ECS4130EC-176](https://jira.edge-core.com:8443/browse/ECS4130EC-174) | B1716f29 | [StormCtrl: StormCtrl threshold will be forwarded double](https://jira.edge-core.com:8443/browse/ECS4130EC-176) |
| 7 | [ECS4130EC-178](https://jira.edge-core.com:8443/browse/ECS4130EC-178) | 9c7bf759 | [RateLimit: Egress rate-limit threshold is incorrect on fiber port](https://jira.edge-core.com:8443/browse/ECS4130EC-178) |
| 8 | [ECS4130EC-184](https://jira.edge-core.com:8443/browse/ECS4130EC-184) | Dcdda811 | [NetRoute&HostRoute: The wrong behavior of ip default-gateway](https://jira.edge-core.com:8443/browse/ECS4130EC-184) |
| 9 | [ECS4130EC-188](https://jira.edge-core.com:8443/browse/ECS4130EC-184) | 337d8198 | **(Need update bootloader)**  [Boot the DUT will show [Unknown command 'boota' - try 'help']](https://jira.edge-core.com:8443/browse/ECS4130EC-188) |
| 10 | [ECS4130EC-191](https://jira.edge-core.com:8443/browse/ECS4130EC-191) | Eabc337f | Cluster: Can't login web page when member device is "ECS4130". |

**Runtime V1.1.0.212, Loader V0.0.0.6**

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| --- | --- | --- | --- |
| 1 | [ECS4130EC-173](https://jira.edge-core.com:8443/browse/ECS4130EC-174) | Da3c0d56 | CableDiag: Suggest to remove fiber ports from cable diagnostics |
| 2 | ECS4130EC-144 | 0eb24fae | IPv4-AddrConfig: CLI shows unexpected message after reload with maximum IP address. |
| 3 | ECS4130EC-154 | 0eb24fae | UDLD: The snmp trap can not analyze. |
| 4 | ECS4130EC-183 | 0eb24fae | System: Ping is "request timed-out" after 2 minutes when VLAN100-4094 are joined and spanning is enabled |

**Runtime V1.1.1.212, Loader V0.0.0.6**

|  |  |  |  |
| --- | --- | --- | --- |
| 1 | [ECS4130EC-204](https://jira.edge-core.com:8443/browse/ECS4130EC-174) | B4015f56 | Power off the DUT that will dump the memory address |

**Runtime V1.1.2.212, Loader V0.0.0.6**

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| --- | --- | --- | --- |
| 1 | [ECS4130EC-205](https://jira.edge-core.com:8443/browse/ECS4130EC-174) | B4015f58 | StormCtrl：Please based on Bcast to design help for Mcast and DLF. |
| 2 | [ECS4130EC-20](https://jira.edge-core.com:8443/browse/ECS4130EC-174)8 | Efd7d094 | L2SW：Flow control type shall be displayed "Dot3X" after negotiation and capabilities flow control is enabled. |

**modifications:**

**Loader V0.0.0.5**

|  |  |
| --- | --- |
|  | Initial Version |

**Runtime V1.0.5.211**

|  |  |
| --- | --- |
|  | Initial Version |

**Work as Designed (wAD) eprs:**

**Known Bugs and Issues:**

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

NA

**Known RESTRICITIONS AND Limitations:**

|  |  |  |
| --- | --- | --- |
|  | Limitation Type | Description |
| 1 | Board limitation | Does not support Auto-nego on all port, due to this need dedicated/external cpu on board. (Drake or AC3 can support 802.3ap on their XG interfaces, but the criteria is using external CPU and interior processor core will run the firmware to handle AP.) |
| 2 | Chip limitation | Bridge FDB(L2), Multicast and Router IPv4/6 Host entries share the same 64K. |
| 3 | Chip limitation | FDB use hash algorithm to locate needed index for the pkt. It will happen collision in some case. |
| 4 | Chip limitation | Configuration of the length of the hash chain for address loopkups in FDB table to a value different than 0 can result in perfomance degradation. (Table 529: FDB Global Configuration Register. Bit 2:0) |
| 5 | Software limitation | For verify chip can support full multicast entry. The speed of data/control packet which used for igmp snooping learning shall not in line speed. |
| 6 | Chip limitation | EEE (802.3az, Cable Length), it's PHY's functionality. Only support copper front port. |
| 7 | Chip limitation | Broadcast/Multicast/UnknownUnicast Storm Control use the same configuration of rate limit. |
| 8 | Software limitation | Web Authentication only support IPv4 HTTP |
| 9 | Software limitation | Due to Jquery software limitation. The web browser need IE 9+, Chrome 54+, Firefox 52+ or Opera 41+. |
| 10 | Software limitation | Support muintuple vlan tag by software, but have limitation: can not support the packet need linux kernel process, like management features, arp, telnet, ping, tracerout, routing, snmp, ipv6…etc. [ES4627MB-FLF-EC-00889] |
| 11 | Chip limitation | The mirror function will mirror the voice vlan packet which before modified the priority. (Detail in ECS5520-18X-00138) |
| 12 | Chip limitation | Cannot config any value of CIR and CBS in chip. When configuring cir and cbs，you can identify the scope and unit of configuration for cir/cbs according to the cir exception configuration. Following table describes details for this, you can get more skillful cbs configuration by the actual tests. (ECS5520-18X-00119, ECS5520-18X-00120, ECS5520-18X-00177) 3 |
| 13 | Software limitation | Web-auth only support http and port 80. |
| 14 | Chip limitation | Dynamic QoS Assignment only support configure one acl per port: Marvell support ACL resource are finite, so the upper software limit only support configure one acl per port or per function;when mac-authentication enable Dynamic Qos Assignment base Radius, so also only support configure one acl per port，multiple acls will authentication failure. (ECS5520-18X-00335) |
| 15 | Chip limitation | For the rate limit of CPU Guard, the implementation in chip is bps. The actual rate is pps\*MTUsize (Default is 1536. 10240 when Jumbo frame enable). (ECS5520-18X-00232) |
| 16 | Phy chip limitation | ECS4130EC-38 ECS4130EC-207  The link flapping is caused by back-pressure and link would be up after back-pressure condition is gone(This Back-pessure only 100M/10M half on ECS5520-18T/18TT/ECS4130-28T) |
| 17 | Chip limitation | ECS4130EC-64  discard input counter in chip is drop Events,AC3 chip can not support this counter |
| 18 | Chip limitation | if the bandwidth is too slow, like 64K, and packet size is small, ratelimit will be not accurate,errorrange over 3%.( ECS4130EC-151) |
| 19 | Chip limitation | Per system, IC have 1 mirror buffer, after this packet is send out, it can be used for mirroring the next packet again.  So you can not enable the mirroring, source, destination or multiple at ac5/ac3, ac3bxh solution.  (ECS4130EC-117)  So when mirror two streams at same time,the mirror packets will loss |
| 20 | Chip limitation | ECS4130EC-66  when add new entry for IPMC,will cause old entry packet loss at same time |
| 21 | Chip limitation | ECS4130EC-122  chip not support dos-protection land function(it is feature from sip6,ac3 is sip4) |
| 22 | Chip limitation | ECS4130EC-101&ECS4130EC-136  Chip ACL Hardware counter not support count CPU packets. |
| 23 | Chip limitation | ECS4130EC-176  Chip can not support setting speed Granularity on port 25-28, so port 25-28 can not share the same Granularity with port 1-24(500 pkt/s).Just use same behavior as 4620，port25-28 use lager Granularity (1000 pkt/s). |
| 24 | Chip limitation | ECS4130EC-77/ECS4130EC-173  Cable Diagnosis is Copper relate function and Phy 88E1680 can not support 10/100M speed for DSP Cable Diagnosis，so ECS4130-28T just support on 1G speed copper. |
| 25 | Board limitation | ECS4130EC-202  L2SWPerf: RFC2544 is failed when it's 64 and 128 bytes.  When test RFC2544 with 64/128 bytes will packet loss.FAE told this is ppm issue, if test with 99.99% packet rate or use -5/-10 ppm can pass test.  Because HW can not change during this time, also SW has no any other solution，just record this as board limitation. |
| 26 | Chip limitation | ECS4130EC-206  Casue Phy limit,ECS4130-28T can not support auto-negotiate of flow-control，  We use force mode instead.So if link up with 100M/1G full，flow-control type should always Dot3X，10/100 half type should be backpress. |
| 27 | Board limitation | ECS4130EC-209 L2SWPerf: FullyMesh(1-24\*1G) will lose packets when it's jumbo frame  ECS4130EC-210 L2SWPerf: It will packet loss when it's run partial mesh testing  ECS4130EC-211 L2SWPerf: RFC2889 Many to one & One to many will lose packets  Use 100% packe rate test will cause packet loss，according to Marvell FAE feedback，should be PPM issue.NTC test with STC under 99% packet rate all issue passed.Because HW can not change during this time, also SW has no any other solution，just record this as board limitation. |

**Compliance support:**

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| --- | --- |
| **Compliance Level** | **Compliant** |
|  |  |

Known Anomalies: None.

**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) |
| V-Bridge MIB | V-Bridge MIB | - dot1vProtocol group |
| 3636 | MAU MIB | * dot3IfMauBasicGroup * dot3IfMauAutoNegGroup |

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| 1612 | DNS Reslover MIB | * dnsServConfig * dnsServCounter * dnsServCounterAuthAns * dnsServCounterAuthNoNames * dnsServCounterAuthNoDataResps * dnsServCounterNonAuthDatas * dnsServCounterNonAuthNoDatas * dnsServCounterReferrals * dnsServCounterErrors * dnsServCounterRelNames * dnsServCounterReqRefusals * dnsServCounterReqUnparses * dnsServCounterOtherErrors * dnsServOptCounter * dnsResMIBObjects * dnsResConfig * dnsResCounter * dnsResCache * dnsResCacheStatus * dnsResCacheMaxTTL * dnsResCacheGoodCaches * dnsResCacheBadCaches * dnsResOptCounter |
| 3411 | SNMP FrameWork | * snmpFrameworkMIBObjects |
| 3412 | SNMP MPD MIB | * snmpMPDMIBObjects |
| 3413 | SNMP Target MIB | * snmpTargetObjects |
| 3413 | SNMP Notify MIB | * SnmpNotifyObjects * snmpNotifyTable * usmMIBObjects |
| 3415 | SNMP View-Based ACM MIB | * vacmMIBObjects * Private MIB * switchMgt * portMgt * trunkMgt * lacpMgt * staMgt * tftpMgt * restartMgt * mirrorMgt * igmpSnoopMgt * ipMgt * bcastStormMgt * vlanMgt * priorityMgt * trapDestMgt * qosMgt * securityMgt * sysLogMgt * lineMgt |

**ECS5520 SERIES Private Enterprise MIB Support:**

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| --- | --- |
| **Title** | Version |
| ECS4130.mib | 202104080000Z |

**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) |

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