



# CDM-570A Packet Processor

## Release 1.5.6

### Software Release Notification

#### CDM-570A Packet Processor Option Card 1.5.6 Release

| Applicability   |
|---|
| Release 1.5.6 (FW-0020781P) for the CDM-570A Packet Processor Card. |

| Rev # | Description                                  | Date       |
|-------|--|------------|
| -     | Release Version 1.1.1                        | 09/11/2014 |
| A     | Release Version 1.1.2                        | 10/15/2014 |
| B     | Release Version 1.2.1                        | 11/18/2014 |
| C     | Release Version 1.3.1                        | 04/06/2015 |
| D     | Release Version 1.3.2                        | 05/20/2015 |
| H     | Release Version 1.4.1                        | 08/12/2015 |
| J     | Release Version 1.4.2                        | 11/23/2015 |
| K     | Release Version 1.4.3                        | 07/12/2016 |
| L     | Release Version 1.5.1 (Not a Public Release) | 10/13/2016 |
| M     | Release Version 1.5.2                        | 01/04/2017 |
| N     | Release Version 1.5.5                        | 11/19/2018 |
| P     | Release Version 1.5.6                        | 06/19/2019 |
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FSCM No. 4J515

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## This Release

This Packet Processor release has the following change:

### 1.5.6 Features

- Save Configuration To Backup PARAM Slot, along with autosave option.
- Support for configuring Dedicated Management Port Ethernet Modes (10H/10F/100H/100F/Auto)

**NOTE:** Needs Base modem 1.5.6 for above features to work properly.

### 1.5.6 Fixes

- Pings failing while in DM-Enabled mode with IGMP enabled.
- TT# 13711 - misaligned CLI menu items on Ethernet Menu when DM-Enabled/Disabled.
- Traffic Port not working in Manual Ethernet Modes (100-Half/Full).

## Valid Configurations of Modem Firmware

The tables below identify the valid configurations of CDM-570A base modem and Packet Processor Firmware. Modems that are configured with firmware that does not match these configurations may not function as expected.

### Compatible Bulk Versions

| CDM-570A Packet Processor Bulk | CDM-570A Modem Bulk  | VMS version       |
|--------------------------------|----------------------|-------------------|
| FW-0020781- (v1.1.1)           | FW-0020683B (v1.2.0) | 3.12.4            |
| FW-0020781A (v1.1.2)           | FW-0020683C (v1.2.1) | 3.12.4            |
| FW-0020781B (v1.2.1)           | FW-0020683C (v1.2.1) | 3.12.4            |
| FW-0020781C (v1.3.1)           | FW-0020683E (v1.3.1) | 3.13.0            |
| FW-0020781D (v1.3.2)           | FW-0020683F (v1.3.2) | 3.13.0            |
| FW-0020781H (v1.4.1)           | FW-0020683G (v1.4.1) | 3.13.0            |
| FW-0020781J (v1.4.2)           | FW-0020683H (v1.4.2) | 3.13.0 and 3.12.x |
| FW-0020781K (v1.4.3)           | FW-0020683J (v1.4.3) | 3.13.0 and 3.12.x |
| FW-0020781L (v1.5.1)           | FW-0020683K (v1.5.1) | 3.13.0 and 3.12.x |
| FW-0020781M (v1.5.2)           | FW-0020683L (v1.5.2) | 3.14.0 and 3.13.x |
| FW-0020781N (v1.5.5)           | FW-0020683P (v1.5.5) | 3.14.0 and 3.13.x |
| FW-0020781P (v1.5.6)           | FW-0020683R (v1.5.6) | 3.14.0 and 3.13.x |

### Compatible SNMP MIB

| MIB Name                      | Filename              | Date       |
|-------------------------------|-----------------------|------------|
| CDM-570A Packet Processor MIB | FW-0020786E_1_5_6.mib | 12/21/2018 |

*Note: The SNMP MIB files are not needed for upgrading the unit; they are only needed if using an SNMP NMS / browser for SNMP monitor and control of the CDM-570A modem.*

## Change History

This section shows the change history over previous versions.

### 1.5.5 Features

None.

### 1.5.5 Fixes

- Statistics counters going negative on Web/SNMP.
- 570A Redundancy Communications break when route table has 24+ route entries.
- Status-Unit Info displays the datarate wrongly or blank.
- Fix IGMP Not Working.
- In QoS Min/Max on Web, the Destination IP Mask is displayed incorrectly as '0'.
- When processing switch commands, adjust Tx Power for Remote units only. Hub Units will now use the power value sent by VMS. This change applies to all switches, not just CnC.
- Fix in ACM Mode, 570A updates PARAM file on flash very often. Fills up CLI/Event log continuously and caused customer traffic issues.
- Release unused/accumulated flows in the system.

- Access List is not enforced in Router-Vipersat Mode.

#### 1.5.2 Features

- Added Support for new VersaFEC-2 Hardware module's modcodes
- Carrier ID Option – 570A can now embed ID Carrier. Available through FAST Option.
- VMS Support for Carrier ID and VersFEC-2.
- VMS Support for CnC Connection configuration. Supports both ACM and APC/AUPC modes.
- CLI - Vipersat menu for CnC configuration now supports CNC\_ACM\_OFF, CNC\_ACM\_ONLY and CNC\_ACM\_AUPC
- Dynamic Power Control (DPC) Improvements
  - Use (and display) Es/N0, rather than Eb/N0
  - Support VersaFEC-2
  - Target Es/No is now based on selected modcod, rather than user configured.
  - Timing changes to make DPC more responsive

**NOTE:** DPC is not supported in ACM or CnC modes.

#### 1.5.2 Fixes

- Packet Performance improvements
- Display Local & Remote SNR on Modem Information Page.
- Adjust Minimum configurable symbol rate to 37,000 for ACM Modes.
- Streamload enhancements to accomodate bigger base modem images (1.5.2 and later).  
(Needs vLoad 4.5 or Later versions)
- CLI - User now selects code rate value only for VersaFEC modes, Modulation & FEC are updated automatically. For VersaFEC-2, default is Short Block.
- CLI - Set Current Configuration on Vipersat Home State Menu now works for all VersaFEC codes.
- Fix for failure of TOS Switching after a revert to STDMA/ECMv2
- Fix Issue(#12382): When Dedicated Management Port is Enabled, Traffic IP Address is lost and defaulted (intermittently) during the firmware upgrade process, while transitioning the base modem firmware from 1.4.3 to 1.5.1.
- Fix Issue (#12365) While in IP-ACM and CnC, with redundancy enabled, the off-line modem intermittently does not acquire lock

#### 1.4.3 Fixes

- Router task stalls while parsing response of FTP command PASV, due to data exception.
- Support VMS redundancy, through updation of PARAM file save counts.
- Support up to 255 Filter Routes, instead of 20, which is the total size of the route table.
- Fix for system reboot when Rx RF Cable connected to KST, with 570A in Viterbi mode.
- Fix Jammer problem with STDMA LRS (Last Remote Standing), if a remote was removed from the Burst Map when it was in LRS state it would continue to burst.

#### 1.4.2 Features

- Supports VMS version 3.12.x or greater when the modem is in 570 compatibility mode.

#### 1.4.2 Fixes

- Fixed the bug which RIPv2 does not function in Router Vipersat Mode, with Dedicated Management Port Enabled.

## Software Release Notification

- Fix web and snmp cannot set traffic port to 100M and Auto in Managed Switch mode. (TT# 11800)
- Redundancy switch over now supported on Vipersat Remote with Redundancy and Dedicated Management Port Enabled.

### 1.4.1 Features

- RADIUS
- Add number of active flows to CLI menu and SNMP
- Add SNMP Configuration to the CLI menu, TT#11376

### 1.4.1 Fixes

- Restrict Max Ethernet Packet size that could get through 570A to 1578 Bytes, TT#11403  
Vipersat Fixes
- Fix CDM570 Compatibility mode FlowID issue. The FlowIDs are exceeding number of available system flows.
- Support for Remote Route Label Feature in Router Vipersat Mode on Hub Outbound Side
- Improve System performance under high traffic flows in Router vipersat Mode, by spreading CPU intensive flow cleanup over time.
- Improve Header compression performance by reducing memory fragmentation.
- Change processing of Route updates from VMS to work better under heavy load conditions.
- Add protections to prevent a remote from putting an SCPC carrier in the ECM/STDMA Channel. TT#11375

### 1.3.2 Fixes

- Add support for logging call stack during exceptions.
- CDM570A does not send Streamload configuration file change feedback.
- Misalignment of "Base Modem Boot from" selection through vLoad App.
- Reset the Base Rule on CLI for VLAN QoS Mode.
- Restrict Web user from changing Traffic IP, while Dedicated Management is Disabled.
- Reduce configuration change updates from base modem while unit has redundancy and CnC Enabled.
- Send feedback response for config file pushed through streamload

### 1.3.1 Features

- Full Vipersat support with VMS 3.13.0
- Dedicated Management Port

### 1.3.1 Fixes

- Updated MIB descriptions
- Restrict user from configuring Traffic IP/Subnet bits while in Managed Switch Mode
- Event Log gets erased during soft reset
- Web does not allow user to add route in pt-to-pt mode without setting HDLC Address
- Telnet user is not able to add a route entry due to CR <-->CRLF issue
- Allow Web/SNMP user to VLAN ID when Brouter mode is disabled.
- Events logs reports exception stack trace.

### 1.2.1 Features

- Full Vipersat support (570 compatibility mode).
- Supports 64K system flows.

### 1.2.1 Fixes

- CLI baud rate is changed to 38400. It was 1152000.
- Fixed Telnet CLI does not put line feed.
- Fixed Telnet does not work if CLI cable is removed after its bootup.
- Bootrom auto recover when boot parameters got corrupted.
- Fixed CPU utilization.
- Added LANtoLAN, Payload Comp Type and Number Of System Flows to SNMP and Web.
- Fixed "Receive HDLC Addresses" in the web page.

#### 1.1.2 Features

- Added Vipersat support

#### 1.1.1

- Initial release

## Known Issues

### Functional Issues

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If Vipersat Home State uses a VersaFEC-1 modcod, after the upgrade to 1.5.2 or above, configuration may become invalid.

**Workaround:** Re-enter the Home State values and save the param file.

Resizing a CnC link from VMS is not supported.

**Workaround:** Tear down the existing link and create a new one.

### User Interface Issues

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None