



Product Bulletin No. 3234

Field Notice: Cisco VG224 Requires Software Upgrade Because of Replacement of End-of-Sale Parts

PRODUCTS AFFECTED

Product	Top Assembly		Printed Circuit Assembly	
	Part No.	Rev.	Part No.	Rev.
Cisco VG224	800-24228-05	-A0	73-9343-05	-A0

PROBLEM DESCRIPTION

Because of end of sale components on the Cisco® VG224 Voice Gateway board, Cisco VG224 voice gateways manufactured beginning July 1, 2006, require a Cisco IOS® Software upgrade. Customers running Cisco IOS Software releases older than the following releases are affected:

- 12.3(11)T10
- 12.3(14)T6
- 12.4(2)T3
- 12.4(4)T1
- 12.4(5a)

BACKGROUND

Because of the end of sale of parts by Cisco Systems® component vendor, a component of Cisco VG224 voice gateways manufactured beginning July 1, 2006, needs to be replaced with a next-generation component by the same vendor. The specific component affected is the Subscribe Line Interface Chip (SLIC). Cisco VG224 platforms with the new component require an upgrade of Cisco IOS Software release that provides coefficients to tune the new component to behave as previous component. There is no change in feature function. Usually component changes do not require software upgrades; the new component is pin-for-pin compatible, but needs firmware changes that are integrated in Cisco IOS Software. The new software is compatible with both the old and new component. Platforms with old and new components are completely interoperable.

Beginning on July 1, 2006, Cisco VG224 platforms will be orderable only with new software.

For the Cisco VG224 gateways with the new component, customers must upgrade to one of the following Cisco IOS Software release branches or later:

- 12.3(11)T branch (12.3(11)T10 rebuild has the new component changes)
- 12.3(14)T branch (12.3(14)T6 rebuild has the new component changes)
- 12.4(2)T branch (12.4(2)T3 rebuild has the new component changes)
- 12.4(4)T branch (12.4(4)T1 rebuild has the new component changes)
- 12.4(5a)

PROBLEM SYMPTOMS

The Cisco VG224 with the new component is not backward-compatible with Cisco IOS Software releases older than release trains specified. The Cisco VG224 with the new component loaded with Cisco IOS Software releases older than the specified Cisco IOS Software trains will demonstrate the following behaviors:

- The new SLIC can be checked in detail also at boot up. The bootup will show Version 1.3. A sample of bootup shown with the SLIC version highlighted in bold follows:

```
Router#show version
Cisco IOS Software, VG224 Software (CVG224-I6S-M)
ROM: System Bootstrap, Version 12.4(4)T2, RELEASE SOFTWARE (fc1)
Router uptime is 4 days, 17 hours, 15 minutes System returned to ROM by reload System image file
is "slot0:cvg224-i6s-mz"
Cisco VG224 (R527x) processor (revision 2.2) with 119808K/11264K bytes of memory.
Processor board ID
R527x CPU at 225MHz, Implementation 40, Rev 3.1
1 On-Board Twenty-Four FXS Analog Voice Module V1.3
2 FastEthernet interfaces
DRAM configuration is 64 bits wide with parity disabled.
63K bytes of non-volatile configuration memory.
System fpga version is 250027
System readonly fpga version is 15001C
Option for system fpga is 'system'.
0K bytes of ATA System CompactFlash (Read/Write) 31360K bytes of ATA Slot0 CompactFlash
(Read/Write)
Configuration register is 0x0
```

- Platform problems will result in the following bootup error message using earlier Cisco IOS Software releases with new the SLIC component:

```
voice-port 2/0
^
% Invalid input detected at '^' marker.
ring dc-offset 30-volts
^
% Invalid input detected at '^' marker.
loss-plan plan5
^
% Invalid input detected at '^' marker.
idle-voltage low
^
% Invalid input detected at '^' marker.
compand-type a-law
^
% Invalid input detected at '^' marker.
```

```

impedance complex1
^
% Invalid input detected at '^' marker.
:
:

voice-port 2/23
^
% Invalid input detected at '^' marker.
ring dc-offset 30-volts
^
% Invalid input detected at '^' marker.
loss-plan plan5
^
% Invalid input detected at '^' marker.
idle-voltage low
^
% Invalid input detected at '^' marker.
compand-type a-law
^
% Invalid input detected at '^' marker.
impedance complex1
^
% Invalid input detected at '^' marker.

```

- The Cisco VG224 with the old component is compatible with any Cisco IOS Software release.

WORKAROUND OR SOLUTION

Identify if the hardware platform revision or version contains the old or new component. If the platform contains the new component, upgrade the Cisco IOS Software to specified releases or later releases on the same branch.

Customers have the following deployment options:

- Customers with existing Cisco VG224 platforms can:
 - Maintain Cisco VG224 platforms with the old component running any software release while deploying Cisco VG224 platforms with the new component running new software releases.
 - Upgrade all Cisco VG224 platforms with the old component onto same software that Cisco VG224 platforms with the new component are running.
- New customers of Cisco VG224 platforms can:
 - Order platforms with software branches indicated previously; software downgrade will cause the platform to have bootup error messages as listed previously in the section “Problem Symptoms.”

HOW TO IDENTIFY HARDWARE LEVELS

Example:

```
Router#sh diag
```

```
VG224 Backplane EEPROM:
```

```
    PCB Serial Number      : XXXXXXXXXXXX
    Processor type         : XX
    Top Assy. Part Number   : 800-XXXXX-05
    Board Revision         : A0
    Fab Part Number        : XX-XXXX-XX
    Deviation Number       : XXXXX-XXXX
    Manufacturing Test Data : XX XX XX XX XX XX XX XX
    RMA Number             : 0-0-0-0
    RMA Test History       : 00
    RMA History            : 00
    Chassis Serial Number  :
    Chassis MAC Address    :
    MAC Address block size :
    Field Diagnostics Data :
    Hardware Revision      :
    Number of Slots        :
    EEPROM format version 4
```

Verify that the Top Assy. Part Number field has 800-XXXXX-05 under the Cisco VG224 Backplane EEPROM: The number after the second “-” should be 05 or higher.

Engineering Change Orders (ECO) will be issued when the new components are implemented in manufacturing which is targeted for early July 2006.

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