LED Descriptions for Avaya Aura® Communication Manager Hardware Components

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- Within the United States, click the Escalation Contacts link that is located under the Support Tools heading. Then click the appropriate link for the type of support that you need.
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Providing Telecommunications Security

Telecommunications security (of voice, data, and/or video communications) is the prevention of any type of intrusion to (that is, either unauthorized or malicious access to or use of) your company's telecommunications equipment by some party.

Your company's "telecommunications equipment" includes both this Avaya product and any other voice/data/video equipment that could be accessed via this Avaya product (that is, "networked equipment").

An "outside party" is anyone who is not a corporate employee, agent, subcontractor, or is not working on your company's behalf. Whereas, a "malicious party" is anyone (including someone who may be otherwise authorized) who accesses your telecommunications equipment with either malicious or mischievous intent.

Such intrusions may be either to/through synchronous (time-multiplexed and/or circuit-based), or asynchronous (character-, message-, or packet-based) equipment, or interfaces for reasons of:

- Utilization (of capabilities special to the accessed equipment)
- Theft (such as, of intellectual property, financial assets, or toll facility access)
- Eavesdropping (privacy invasions to humans)
- Mischief (troubling, but apparently innocuous, tampering)
- Harm (such as harmful tampering, data loss or alteration, regardless of motive or intent)

Be aware that there may be a risk of unauthorized intrusions associated with your system and/or its networked equipment. Also realize that, if such an intrusion should occur, it could result in a variety of losses to your company (including but not limited to, human/data privacy, intellectual property, material assets, financial resources, labor costs, and/or legal costs).

Responsibility for Your Company's Telecommunications Security

The final responsibility for securing both this system and its networked equipment rests with you - Avaya's customer system administrator, your telecommunications peers, and your managers. Base the fulfillment of your responsibility on acquired knowledge and resources from a variety of sources including but not limited to:

- Installation documents
- System administration documents
- Security documents
- Hardware-/software-based security tools
- Shared information between you and your peers
- Telecommunications security experts

To prevent intrusions to your telecommunications equipment, you and your peers should carefully program and configure:

- Your Avaya-provided telecommunications systems and their interfaces
- Your Avaya-provided software applications, as well as their underlying hardware/software platforms and interfaces
- Any other equipment networked to your Avaya products

TCP/IP Facilities

Customers may experience differences in product performance, reliability and security depending upon network configurations/design and topologies, even when the product performs as warranted.

Product Safety Standards

This product complies with and conforms to the following international Product Safety standards as applicable:

- IEC 60950-1 latest edition, including all relevant national deviations as listed in the IECEE Bulletin—Product Category OFF: IT and Office Equipment.
- CAN/CSA-C22.2 No. 60950-1 / UL 60950-1 latest edition.

This product may contain Class 1 laser devices.

- Class 1 Laser Product
- Luokan 1 Laserlaite
- Klass 1 Laser Apparat

Electromagnetic Compatibility (EMC) Standards

This product complies with and conforms to the following international EMC standards, as applicable:

- CISPR 22, including all national standards based on CISPR 22.
- CISPR 24, including all national standards based on CISPR 24.
- IEC 61000-3-2 and IEC 61000-3-3.

Avaya Inc. is not responsible for any radio or television interference caused by unauthorized modifications of this equipment or the substitution or attachment of connecting cables and equipment other than those specified by Avaya Inc. The correction of interference caused by such unauthorized modifications, substitution or attachment will be the responsibility of the user. Pursuant to Part 15 of the Federal Communications Commission (FCC) Rules, the user is cautioned that changes or modifications not expressly approved by Avaya Inc. could void the user's authority to operate this equipment.

Federal Communications Commission Part 15 Statement:

For a Class A digital device or peripheral:

Note:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

For a Class B digital device or peripheral:

Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Equipment With Direct Inward Dialing ("DID"):

Allowing this equipment to be operated in such a manner as to not provide proper answer supervision is a violation of Part 68 of the FCC's rules.

Proper Answer Supervision is when:

1. This equipment returns answer supervision to the public switched telephone network (PSTN) when DID calls are:
   - answered by the called station,
   - answered by the attendant,
   - routed to a recorded announcement that can be administered by the customer premises equipment (CPE) user
   - routed to a dial prompt
2. This equipment returns answer supervision signals on all (DID) calls forwarded back to the PSTN.

Permissible exceptions are:

- A call is unanswered
- A busy tone is received
- A reorder tone is received

Avaya attests that this registered equipment is capable of providing users access to interstate providers of operator services through the use of access codes. Modification of this equipment by call aggregators to block access dialing codes is a violation of the Telephone Operator Consumers Act of 1990.

Automatic Dialers:

When programming emergency numbers and (or) making test calls to emergency numbers:

- Remain on the line and briefly explain to the dispatcher the reason for the call.
- Perform such activities in the off-peak hours, such as early morning or late evenings.

Toll Restriction and least Cost Routing Equipment:

The software contained in this equipment to allow user access to the network must be upgraded to recognize newly established network area codes and exchange codes as they are placed into service.

Failure to upgrade the premises systems or peripheral equipment to recognize the new codes as they are established will restrict the customer and the customer's employees from gaining access to the network and to these codes.

For equipment approved prior to July 23, 2001:

This equipment complies with Part 68 of the FCC rules. On either the rear or inside the front cover of this equipment is a label that contains, among other information, the FCC registration number, and ringer equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.

For equipment approved after July 23, 2001:

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the Administrative Council on Terminal Attachments (ACTA). On the rear of this equipment is a label that contains, among other information, a product identifier in the format

US:AAAEQ##TXXX. If requested, this number must be provided to the telephone company.

The REN is used to determine the quantity of devices that may be connected to the telephone line. Excessive RENs on the telephone line may result in devices not ringing in response to an incoming call. In most, but not all areas, the sum of RENs should not exceed 5.0.

L'indice d'équivalence de la sonnerie (IES) sert à indiquer le nombre maximal de terminaux qui peuvent être raccordés à une interface téléphonique. La terminaison d'une interface peut consister en une combinaison quelconque de dispositifs, à la seule condition que la somme d'indices d'équivalence de la sonnerie de tous les dispositifs n'excède pas cinq.

To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company. For products approved after July 23, 2001, the REN for this product is part of the product identifier that has the format US:AAAEQ##TXXX. The digits represented by ## are the REN without a decimal point (for example, 03 is a REN of 0.3). For earlier products, the REN is separately shown on the label.

Means of Connection:

Connection of this equipment to the telephone network is shown in the following table:

Manufacturer's Port Identifier	FIC Code	SOC/ REN/A.S. Code	Network Jacks
Off premises station	OL13C	9.0F	RJ2GX, RJ21X, RJ11C
DID trunk	02RV2.T	AS.2	RJ2GX, RJ21X, RJ11C
CO trunk	02GS2	0.3A	RJ21X, RJ11C
	02LS2	0.3A	RJ21X, RJ11C
Tie trunk	TL31M	9.0F	RJ2GX
Basic Rate Interface	02IS5	6.0F, 6.0Y	RJ49C
1.544 digital interface	04DU9.BN	6.0F	RJ48C, RJ48M
	04DU9.1KN	6.0F	RJ48C, RJ48M
	04DU9.1SN	6.0F	RJ48C, RJ48M
120A4 channel service unit	04DU9.DN	6.0Y	RJ48C

If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

If trouble is experienced with this equipment, for repair or warranty information, please contact the Technical Service Center at 1-800-242-2121 or contact your local Avaya representative. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant.

Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.

Installation and Repairs

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. It is recommended that repairs be performed by Avaya certified technicians.

FCC Part 68 Supplier's Declarations of Conformity

Avaya Inc. in the United States of America hereby certifies that the equipment described in this document and bearing a TIA TSB-168 label identification number complies with the FCC's Rules and Regulations 47 CFR Part 68, and the Administrative Council on Terminal Attachments (ACTA) adopted technical criteria.

Avaya further asserts that Avaya handset-equipped terminal equipment described in this document complies with Paragraph 68.316 of the FCC Rules and Regulations defining Hearing Aid Compatibility and is deemed compatible with hearing aids.

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This Class A (or B) digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A (ou B) est conforme à la norme NMB-003 du Canada.

This product meets the applicable Industry Canada technical specifications/Le présent materiel est conforme aux specifications techniques applicables d'Industrie Canada.

European Union Declarations of Conformity

CE

Avaya Inc. declares that the equipment specified in this document bearing the "CE" (Conformité Europeénne) mark conforms to the European Union Radio and Telecommunications Terminal Equipment Directive (1999/5/EC), including the Electromagnetic Compatibility Directive (2004/108/EC) and Low Voltage Directive (2006/95/EC).

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Chapter 1: LED descriptions

LEDs are important status indicators during on-site installation, maintenance, troubleshooting, and repair. A number of Avaya Aura® Communication Manager system components use LEDs. This document describes the different LEDs.

Attendant console LEDs

The attendant console has two red LEDs, ALM and ACK. When the switch cabinet has a major or minor alarm, the system turns on the ALM LED. If the alarm is successfully reported, the ACK LED shows a steady light. If the system is unable to report the alarm, the LED flashes. A flashing LED is a signal to the attendant to call the Avaya alarm receiving system and report the alarm.

Circuit pack LEDs

Typically, each circuit pack has three LEDs that you can see on the front of the carrier. Some circuit packs are exceptions, for example, the DS1 and IPSI circuit packs. Table 1 explains the meaning of different LEDS when lit up. Exceptions to these indications are explained in subsequent sections.

Table 1: LED indicators

LED color	State	Description
Red	Alarm	The system detects a fault on this circuit pack. The alarm log must either contain an on-board alarm for this circuit pack or one of the maintenance objects associated with the alarm log. The red LED also lights up briefly when you insert or reset a circuit pack. If the circuit pack passes the initialization tests, the LED remains in the turned off state. If the system detects a fault, the LED remains lit.
Green	Testing	The system is currently running tests on this circuit pack as part of background maintenance or demand testing. This LED also lights up briefly during initialization tests when you insert or reset a circuit pack.
Yellow	Busy	The circuit pack is currently in use by the system.

LED alarms without alarm log entry or with Error Type 1

When you insert or reset a circuit pack, the red and green LEDs briefly turn on. When you turn the power on, the LEDs might remain lit until the system administers the circuit pack. Ignore these alarms until administration is completed.

Downloading firmware of LED board

About this task

Boards with a P suffix have downloadable firmware. Lit up green and yellow LEDs on a P board indicate that a download is in progress, and the system does not appear to recognize the board.

Procedure

1. If for any reason you believe you have a bad board, reset the board and watch the LEDs.
2. If after 15 seconds you notice that only the red LED is lit, return the board.
3. If you notice the red and green LEDs are lit, wait for 30 seconds.
4. If after a total of 45 seconds the red and green LEDs are still on (with temporarily blinking off during this period), the board is requesting a firmware download.
   - Use **`change circuit pack`** to add the board to the port network, if necessary.
   - Use **`test firmware download`** to clear any firmware download alarms.
   - Use **`change firmware download`** to download the board and **`status firmware download`** to monitor the status of the download. Do not reset or reset until status firmware download indicates that the download is aborted, failed, or completed.

   When the download is complete, the board should be recognized by the system.
5. To verify this condition, use the **`status firmware download`** or **`status firmware download last`** command.

Post-initialization

After a circuit pack has been initialized, a red LED associates an alarm in the alarm log. A single fault can sometimes trigger alarm LEDs on several circuit packs. Some examples are:

- A TDM bus problem: Causes several port circuit packs to display red LEDs.
- A Maintenance circuit pack: Prevents an Expansion Interface (EI) circuit pack from initializing.
- Extensive interactions in the Center Stage Switch (CSS): Causes multiple alarms from single faults in DS1C, SNI and SNC circuit packs and fiber links.
- Tone-Clock or ipserver-interface problems: Causes other circuit packs to report alarms.
- Optical fiber cables which are not connected correctly: Causes several circuit packs to alarm.
- Packet bus faults: Causes several port circuit packs to display red LEDs.
- More than five minutes delay in initializing the circuit pack: Causes loss of communication between the circuit pack and the system. In such cases, the red LED is lit without any associated alarm in the alarm log.
- Error Type 1 logged against a successfully administered circuit pack: Causes several port circuit packs to display red LEDs.

Determining the fault

About this task

To determine the fault that triggered alarm LEDs on circuit packs:

Procedure

1. Enter the **`list configuration board`** *location* command.

   If the system fails to detect the circuit pack, the system displays one of the following status:

   ```
   identifier not assigned
   ```

   ```
   no board
   ```

   If the documentation associated with the maintenance object does not include special instructions for this situation, proceed to the Step 2.
2. To check the hardware error log for TONE-BD or TDM-BUS errors, enter the **`display errors`** command . If the board has a P suffix, use the **`reset board`***location* command. Otherwise, use the **`test tdm`**, **`test tone-clock`**, **`test ipserver-interface`** command. Use the appropriate maintenance procedures to resolve any identified faults. If this step does not resolve the problem, proceed to the step 3.
3. Reset the suspect circuit pack.

Caution:

Resetting the circuit pack can cause a partial or total service outage. Before you proceed, see the documentation associated with the maintenance object and note any suggested precautions and procedures.

4. Check the backplane connectors for bent pins.
5. If the system functions correctly but the circuit pack in question does not communicate with the system, replace the circuit pack.

Expansion interface circuit pack LEDs

The Expansion interface (EI) TN570 circuit pack consists of the standard red, green, and yellow LEDs. The red LED indicates an alarm condition, the green LED indicates testing in progress, and the yellow LED displays various flashing patterns. These patterns provide status information for isolating faults in the fiber link and other components connected to the fiber link. The table on page 11 illustrates the flashing codes of the EI yellow LED.

Expansion Interface yellow LED flashing codes

Table 2: Expansion Interface yellow LED flashing codes

LED on	LED off	Condition
0.1 sec	0.1 sec	Fiber Out-of-Frame: Indicates a failure of Test #989. Cause of this state: Absence of an opposite end EI or Switch Node Interface (SNI), a broken or missing fiber, or a missing lightwave transceiver on either endpoint.
0.5 sec	0.5 sec	In Frame — No Neighbor. Indicates a failure of Test #237. Cause: A failure of this EI or of the EI or SNI at the other end of the fiber.
2 sec	0.2 sec	EI Active: Indicates the normal state of an active EI that is an archangel of an EPN.
solid on		EI Active: Indicates the normal state of an active EI that is not an EPN archangel. This condition includes EPN EIs connected to other EPN EIs in direct connect configurations and EIs located in the processor port network.
	solid off	EI Standby: Indicates the normal state of a standby EI in systems with a duplication option.

Maintenance circuit pack LEDs

TN775D PN maintenance circuit packs have seven LEDs on their front panels.

- The first group of top three LEDs are the standard group of red, green, and yellow LEDs that indicate the status of the circuit pack. The green LED on TN775Ds blinks faintly once per second, indicating continual self testing.
- The second group of three LEDs, labeled ALARMS, displays the maintenance conditions of the system. These LEDs also display the alarms generated for other components.

Table 3: Maintenance circuit pack LED description on page 13 provides the description of the Maintenance circuit pack LEDs.

Maintenance circuit pack LED description

Table 3: Maintenance circuit pack LED description

LED color	State	Level/ Function	Description
Red	flashing	MAJOR	Major alarm for a component in the same cabinet.
	solid	MAJOR	Major alarm for a component in another cabinet.
	solid	MINOR	Minor alarm for a component in another cabinet.
	flashing	MINOR	Minor alarm for a component in the same cabinet.
Yellow	flashing	WARNING	Warning alarm for a component in the same cabinet.
	solid	WARNING	Warning alarm for a component in another cabinet.
Green	on	ACK	Acknowledged. The alarm has been reported.
Red	on	EMERGENCY TRANSFER	Emergency transfer has been invoked. The red light turns on when power is turned on or during disabling failures.

TN775 circuit pack LEDs on the faceplate

This figure displays the location of the circuit pack LEDs on the faceplate.

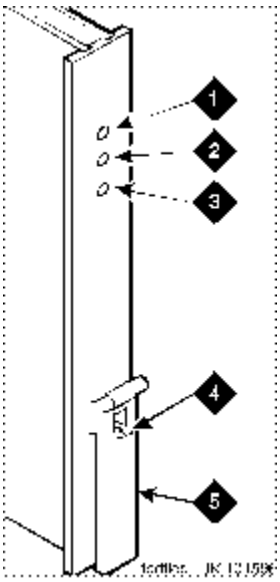

Figure 1: TN775 circuit pack LEDs on the faceplate

Number	Description
1	Red: Alarm LED
2	Green: Test LED
3	Yellow: Busy LED
4	Latch pin
5	Locking lever

DS1/UDS1 (TN767/TN464) circuit pack LEDs

The DS1 (TN767) and UDS1 (TN464) circuit packs have four status LEDs on the faceplate in addition to the three standard faceplate LEDs. These four status LEDs are associated with the 120A Channel Service Unit (CSU) Module. You can connect the 120A Channel Service Unit (CSU) Module to the TN767 or TN464 circuit pack through the I/O connector panel on the back of the port carrier.

The TN464 circuit pack, combined with the 120A CSU module or the 401A T1 sync splitter, forms an Integrated CSU (I-CSU).

This figure displays the DS1/UDS1 circuit pack LEDs.

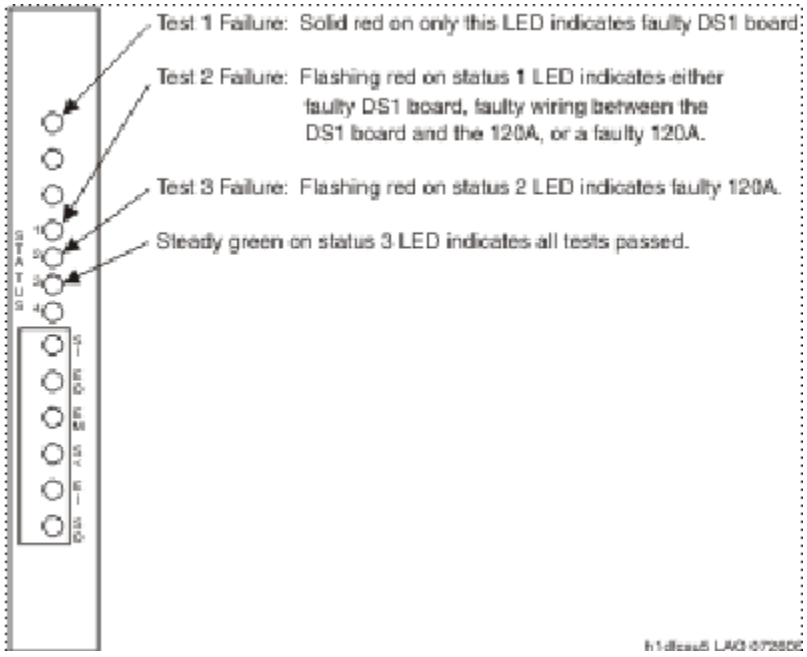

Figure 2: TN767/TN464 LEDs

Table 4: TN767/TN464 circuit pack LED description on page 15 provides the description of the TN767/TN464 circuit pack LEDs. In the table, DS1 refers to both DS1 and UDS1.

The table describes the facility alarms indicated by the LEDs.

Note:

The LEDs on the TN767/TN464 circuit pack faceplate indicate the status of both the loopback and the alarms. However, the loopback indications take priority over the alarm indications. When the loopback indications are active, you must disregard the alarm indications. For example, if the status 2 LED is yellow, indicating a loopback problem, disregard status 3 and status 4 alarm indications.

TN767/TN464 circuit pack LED description

Table 4: TN767/TN464 circuit pack LED description

LED	Color	Condition	Notes
Solid red only on top circuit pack LED	Red	Faulty DS1 circuit pack	
STATUS 1	Green	Far-end line loopback (LLB) active	A line loopback initiated by a near-end DS1 circuit pack is active at the far end CSU.

LED	Color	Condition	Notes
	Yellow	Bit error rate (BER) alarm active	Error rate from the network exceeds 10^{-4}.
	Solid red	Loss of signal (LOS) from DS1 circuit pack	If the DS1 circuit pack fails to send a signal to the CSU module, the top LED on the circuit pack turns red.
	Steady flashing red	Failed equipment loopback (ELB) test	Flash rate is 0.5 seconds on and off. This status indicates either a bad DS1 circuit pack or a bad CSU model. The problem arises between the circuit pack loopback and the edge of the circuit pack due to bad wiring between the DS1 and the CSU module.
	Off	Normal operation	
STATUS 2	Green	CSU repeater loopback RLB or ELB active	
	Yellow	Near end CSU module LLB or PLB active	
	Solid or randomly flashing red	Span alarm indicated by STATUS 3 or STATUS 4 is active	
	Flashing red	Failed RLB test	Flash rate is 0.5 seconds on and off. Replace the 120A.
	Off	Normal operation	
STATUS 3	Green	Pulses present	If this LED is off, the STATUS 4 LED is red, indicating LFA or LOS from the span. STATUS 3 or STATUS 4 is always on if 120A is present. If the pulses from the span are intermittent, the LED can go off for several seconds, then turn back on. During the time the LED is off, other status LEDs indicate alarms.
	Yellow	Bipolar violation (BPV) received from span	This LED flashes each time the system receives a BPV from the network. B8ZS BPVs are not reported.
	Red	CRC or frame bit error from span	This LED flashes each time the system receives a CRC or bit error from the network.
	Off	No pulses	Triggers the STATUS 4 red LED.

LED	Color	Condition	Notes
STATUS 4	Green	Alarm indication signal (AIS) received from span	A green alarm indicates that the equipment is down on the far end.
	Yellow	Remote frame alarm (RFA) received from span	A yellow LED indicates that the far end cannot frame on the DS1 circuit pack signal.
	Red	Loss of frame alignment (LFA) from span	
	Off	Normal operation	

Facility Alarms

Table 5: Facility Alarms

Alarm	Description
Cyclic Redundancy Check (CRC) Errors	Occurs by marginal or faulty line repeaters, network circuit terminating equipment (NCTE), noise on the transmission line, circuitry that generates the framing pattern, or CRC at the transmit end. You can detect bit errors in a DS-1 signal through CRC errors when you use Extended Super Frame (ESF).
Loss of Frame (LOF) Alarm, Red Alarm	Occurs when the near-end interface cannot frame up on the DS-1's signal. A red LED lights on D4-channel banks when this alarm is on. A frequent cause is an incorrect setting of the framing option at one end of the transmission facility or within the network. This scenario will cause LFA at both ends of the transmission link. Other possible causes are an intermittent cable, broken cable, and a rain-attenuated signal with microwave transmission facilities. This alarm trips after detecting a continuous loss of framing, and clears after restoring the in-frame condition. The end of the span with the LFA sends an RFA to the other end to indicate that the LFA cannot frame on the other signal.
Remote Frame Alarm (RFA) Yellow Alarm	Occurs when the far end is unable to frame up on the signal sent by the near end. The far-end interface is in an LFA state. If there is a fault with the part of the transmission facility that transmits the DS1's signal from the near end to the far end, a yellow LED is lit on D4-channel banks. The cause of this problem is a broken conductor in the transmission cable wiring or within the network.
Loss of Signal (LOS) Alarm	Occurs when there is no bipolar signal at the receiver input. Occurs in parallel with the LFA alarm. The cause can be

Alarm	Description
	cable-related problems such as a broken pair inside a cable, an intermittent cable at a cross-connect point, or a cable connector that is not completely seated.
AIS, Blue Alarm	Occurs when the maintenance activities are in progress and the out-of-service condition exists for the DS1 facility. You can recognize the alarm as a continuous stream of 1s with no framing bit. This alarm condition may be treated differently depending on the particular network circuit terminating equipment (NCTE) used. It may result in the NCTE automatically looping the signal back to the switch. If the looped facility is providing synchronization, then the synchronization subsystem must detect that the facility is looped and deal with that condition. Otherwise, synchronization problems will occur.

DS1C (TN574/TN1654) circuit pack LEDs

The TN574 and the TN1654 LEDs provide an indication of the state of the DS1 converter and facilities.

Note:

DS1 converters are used exclusively with a Center Stage Switch (CSS).

TN574 circuit pack LEDs

Seven LEDs indicate the state of the DS1 converter (DS1C-BD) TN574 circuit pack and the DS1 facilities. The top group has the standard red, green, and yellow LEDs. The red and green LEDs have the traditional meaning, where red indicates an alarm condition and green indicates testing in progress. The four green LEDs on the bottom indicate the status of the DS1 facilities which is explained in the following section.

The yellow LED indicates the state of the fiber interface, the fiber channel, and the DS1 channel as listed in Table 6: DS1C yellow LED flashing states on page 19 in order of priority.

DS1C yellow LED flashing states

Table 6: DS1C yellow LED flashing states

LED on	LED off	Condition
0.1 sec	0.1 sec	Fiber Out-of-Frame or Fiber Loss of Signal
0.5 sec	0.5 sec	In Frame, fiber channel down. The fiber channel communicating between the DS1C and the other fiber endpoint (EI or SNI) is down.
1 sec	1 sec	In Frame, DS1 channel down. The channel between the two DS1Cs in the DS1C complex is down.
2 sec	0.2 sec	No response from the server. The server is not acknowledging messages from the DS1C or the communications link to the server is down.
solid on		DS1C active. This is the normal state for an active DS1C.
	solid off	DS1C standby. This is the normal state for a standby DS1C in critical-reliability systems (duplicated PNC).

DS1 facility LEDs

The four green LEDs below the three standard LEDs on the DS1C circuit pack indicate whether a receive signal is present for each of the four DS1 facilities. Figure 3: TN574 DS1 Converter circuit pack LEDs on page 20 shows which facility corresponds to each LED. The facility can be A, B, C, or D. If a green LED is off, there is a Loss of Signal condition on the DS1 facility associated with that LED. The presence of a signal does not guarantee that the signal is using the correct framing format or line coding. An Alarm Indication Signal indicating that the opposite end of the DS1C complex is out of service may be present.

TN574 DS1 Converter circuit pack LEDs

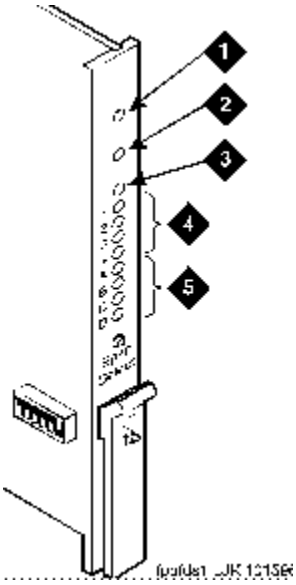

Figure 3: TN574 DS1 Converter circuit pack LEDs

Number	Description
1	Red: Alarm LED
2	Green: Test LED
3	Yellow: Busy LED
4	STATUS LEDs
5	SPAN LEDs

TN1654 circuit pack LEDs

The TN1654 DS1C circuit pack has 11 LEDs on its faceplate as shown in the figure on page 21.

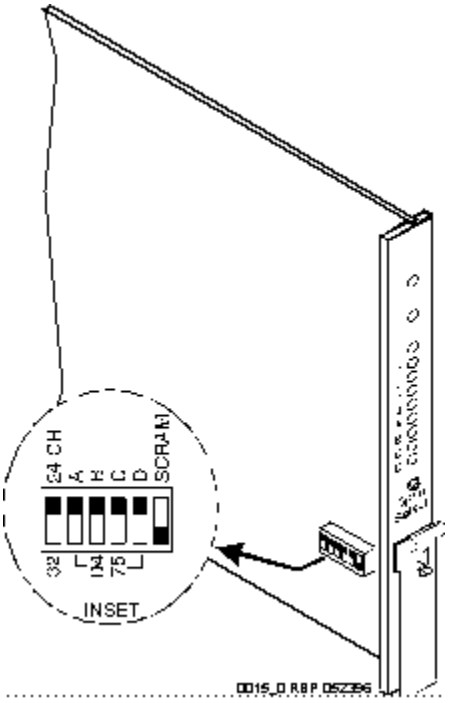

Figure 4: TN1654 DS1C circuit pack

The top three LEDs have the traditional meaning, where red indicates an alarm condition and green indicates testing in progress. The red and green LEDs are also turned on during circuit pack initialization. When the control link to the circuit pack is lost, the red LED turns on to indicate an alarm condition.

The yellow LED indicates the state of the physical fiber interface, the Fiber Channel that is a link to EI or SNI, the DS1 Control Channel that is a link to the opposite DS1C circuit pack, and the server communications link in the following manner and order of priority. The yellow LED remains on for longer periods of time as the DS1C complex comes closer to becoming fully operational.

1. If the fiber is Out-of-Frame or a Fiber Loss of Signal condition exists, the yellow LED flickers at a 5-Hz rate. The yellow LED remains on for 100 ms and off for 100 ms.
2. If the fiber channel is nonfunctional between the DS1 Converter circuit pack or the fiber endpoint communications, the yellow LED flashes at a 1-Hz rate (on for 500 ms, off for 500 ms).
3. If the DS1 control channel is down between the two DS1Cs in the DS1C complex, the yellow LED pulse is at 0.5-Hz rate (on for 1 second, off for 1 second).
4. If the server communications link is down, the yellow LED winks off every 2 seconds for 200ms (2 sec on, 200 msec off).
5. If all is well with the fiber interface and every communications channel, the yellow LED remains on continuously in a standard-reliability or high-reliability system configuration. In critical-reliability systems (duplicated PNC), an active DS1C circuit

pack has its yellow LED on continuously, and a standby DS1C circuit pack has its yellow LED off.

The next four LEDs on the TN1654 DS1C circuit pack are labeled STATUS LEDs and are for future use. These LEDs are not lit up.

The bottom four LEDs on the TN1654 board are labeled SPAN LEDs. These LEDs indicate whether a receive signal is present for each DS1 facility. If the facility is not administered, the LED is not lit. The LED is lit amber if the facility is running alarm free. If the facility detects a red alarm (loss-of-signal or loss-of-frame), a yellow alarm (remote frame alarm) or a blue alarm (AIS signal), the red LED lights up. The SPAN SELECT switch on the TN1654 faceplate is for future use. Pushing the switch has no effect on the board. See the figure on page 21 for a view of the faceplate on the TN1654 DS1C circuit pack.

Switch Node Interface LEDs

The Switch Node Interface (SNI) TN573 circuit pack has the standard red, green, and yellow LEDs. The red and green LEDs have the traditional meaning where red indicates an alarm condition and green indicates testing in progress.

The yellow LED displays various flashing patterns to provide status information useful in isolating faults in the fiber link and other components connected to the fiber link. The table illustrates the SNI yellow LED states.

Switch Node Interface yellow LED flashing states

Table 7: Switch Node Interface (SNI) yellow LED flashing states

LED on	LED off	Condition
0.1 sec	0.1 sec	Fiber Out-of-Frame. This state indicates a failure of Test #238, which may be caused by the absence of the opposite end EI or Switch Node Interface, a broken or missing fiber, or a missing lightwave transceiver on either endpoint.
0.5 sec	0.5 sec	In Frame — No Neighbor. This state corresponds to a failure of test #237, usually due to a failure of this SNI, or the EI or SNI at the opposite of the fiber. This condition may also be due to a faulty Switch Node Clock (SNC).
solid on		SNI Active. This is the normal state for an active SNI.
	solid off	SNI Standby. This is the normal state for a standby SNI in systems with a duplication option.

Tone-Clock circuit pack LEDs

The Tone-Clock circuit packs found in non-IPSI connected port networks have the standard red, green, and yellow LEDs. The red LED has the traditional meaning. The yellow and green LEDs flash in specific patterns to indicate the status of the circuit pack. The standby status applies only to systems with the duplication option.

Maintenance/Test circuit pack LEDs

The TN771DP maintenance/test circuit pack has the standard red, green, and yellow LEDs. The red and green LEDs have the traditional meaning where red indicates an alarm condition, and green indicates testing in progress.

The yellow LED can be off, on continuously, or flashing, depending on the mode of operation of the TN771DP and whether or not the circuit pack has detected errors. The yellow LED is on steady when the TN771DP's analog test port or digital test ports are being used to test trunks or line circuits. The yellow LED is also used to indicate packet bus status. The table illustrates the yellow LED states when the yellow LEDs indicate the packet bus activity.

TN771DP Maintenance/Test yellow LED states

Table 8: TN771DP Maintenance/Test Yellow LED States

LED state[1]	TN771DP mode	Condition
Solid off	Normal	The Maintenance/Test circuit pack detects no packet bus faults.
Solid on[2]	Normal	The Maintenance/Test packet bus port has successfully reconfigured the packet bus around a fault.
Flashing (1 Hz)	Normal	The Maintenance/Test packet bus port is unable to reconfigure the packet bus around a fault.
Solid off	Standalone[3]	The Maintenance/Test detects no packet bus faults.
Solid on	Standalone	This condition does not normally occur. The LED is always either off or blinking in standalone mode.
Flashing (1 Hz)	Standalone	The Maintenance/Test packet bus port detects a packet bus fault.

LED state[1]	TN771DP mode	Condition
[1]The yellow LED takes 5 to 10 seconds to respond to a change in the state of the packet bus. [2]When the digital and analog test ports on the circuit pack are in use, the yellow LED on the Maintenance/Test circuit pack can also be steady. To know the exact description of the yellow LED, the technician must busy out the analog and digital test ports or examine the error and alarm logs for PKT-BUS errors and alarms. [3]Standalone refers to the TN771DPs capability to operate autonomously as a troubleshooting aid.		

Avaya Ethernet Switch LEDs

The following three LEDs are the primary indicators:

- SYS shows whether this module is the Avaya P330 stack master or not.
- OPR shows CPU boot status.
- PWR is lit when power is on.

For all other LEDs, refer to the quick start guide and user guide that came with the Avaya Ethernet switch.

Figure 5 displays the Avaya Ethernet switch LEDs.

Ethernet switch LED description

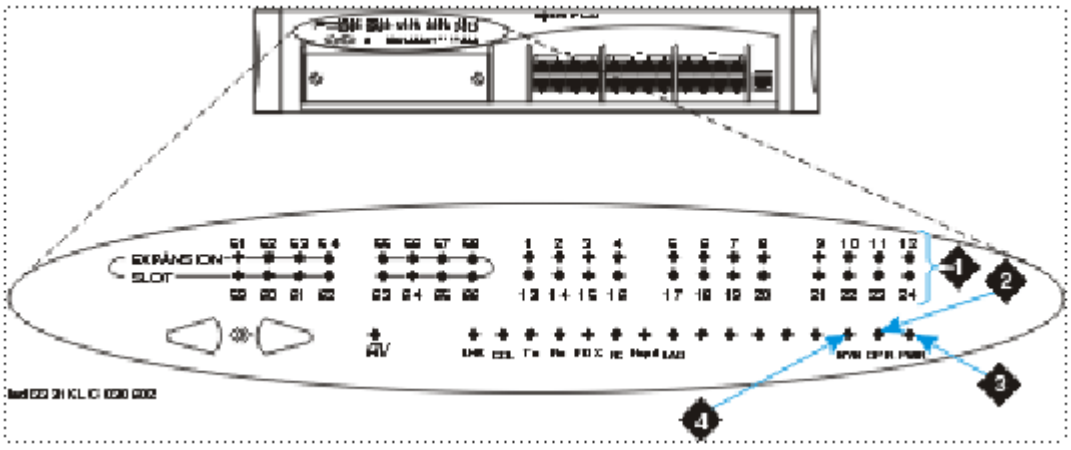

Figure 5: Avaya Ethernet switch LEDs

Number	Description

1	Ports in use
2	CPU boot status
3	Power
4	Lights if this module is the Avaya P33x stack master

UPS LEDs

All Ethernet hubs and Uninterruptible Power Supplies (UPSs) have LEDs to indicate the switched on or off status. A lighted LED indicates that the device is switched on.

When the Normal mode LED is steady green, the UPS has power. If the LED is flashing, the UPS is in standby mode.

For information on the other LEDs, see the UPS user's guide that came with the Powerware UPS unit.

Figure 6: UPS LED on page 25 displays the Powerware front panel LEDs.

UPS LED description

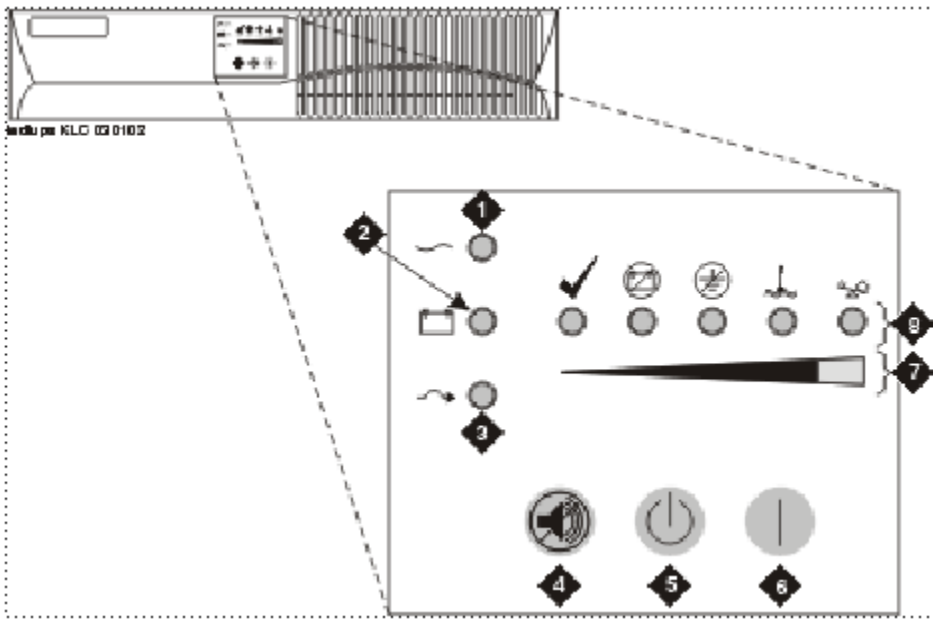

Figure 6: UPS LED

Name	Description
1	Normal mode indicator
2	Battery mode indicator
3	Bypass mode indicator
4	Test/Alarm reset button
5	Off button
6	On button
7	Bar graph indicators
8	Alarm indicators

IPSI LEDs

The TN2312AP IP server Interface (IPSI) faceplate has four LEDs, and the TN2312BP IPSI and TN8412AP SIPI faceplates have five LEDs. The top three are the standard LEDs found on most TN circuit packs. The fourth LED indicates that the Tone/Clock function is active and imitates the TN2182B Tone-Clock's amber LED. The archangel flashes the yellow LED when active, 2 seconds on and 200 ms off. In addition, the TN2312BP and TN8412AP have a fifth LED that displays the emergency transfer control status.

Table 9: TN2312 IPSI LED States on page 26 describes the LED status on an IPSI circuit pack.

Figure 7: IPSI display with static address on page 27 shows the display on a TN2312AP IPSI circuit pack which is using a static IP address.

Figure 8: IPSI Board Display using DHCP addressing on page 28 shows the display on a TN2312AP IPSI circuit pack which is using Dynamic Host Control Protocol (DHCP). This protocol dynamically assigns TCP/IP addresses for use in an IP network and reduces the total number of IP addresses required in enterprises.

IPSI display connectivity status on page 29 explains the different connectivity states of an IPSI circuit pack which is using DHCP.

TN2312 IPSI LED states

Table 9: TN2312 IPSI LED States

LED color	State	Condition
Red	ON	Power turn on/Failure

LED color	State	Condition
Amber	ON	Circuit pack is in use
Green	ON	Maintenance diagnostics/testing
Amber	ON	Clock function active
Red	ON	TN2312BP/TN8412AP - Emergency Transfer invoked

IPSI display with static address

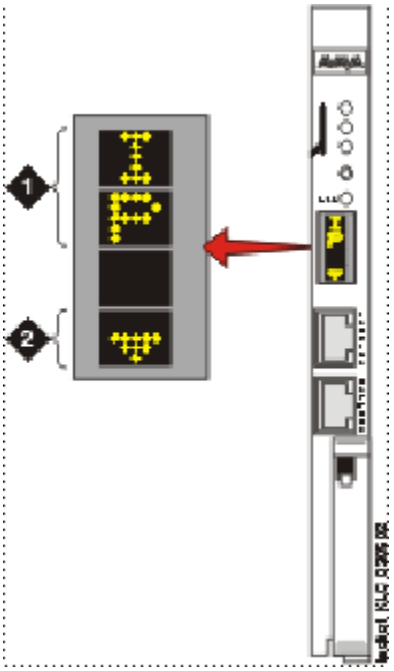

Figure 7: IPSI display with static address

Number	Description
1	IPSI using DHCP
2	IPSI has connectivity and a static IP address

IPSI board display using DHCP addressing

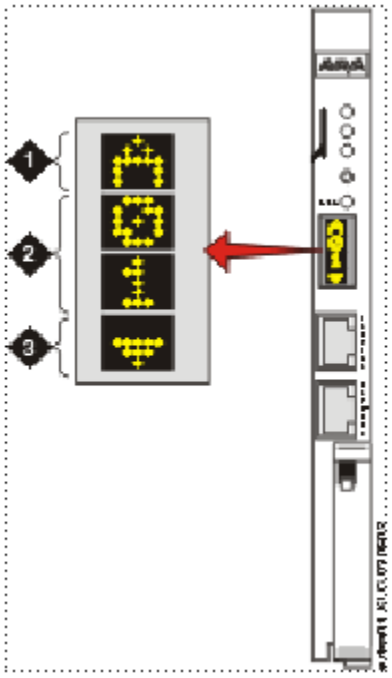

Figure 8: IPSI Board Display using DHCP addressing

Number	Description
1	Switch identifier
2	Cabinet number
3	IPSI has connectivity and a DHCP address

IPSI display connectivity status

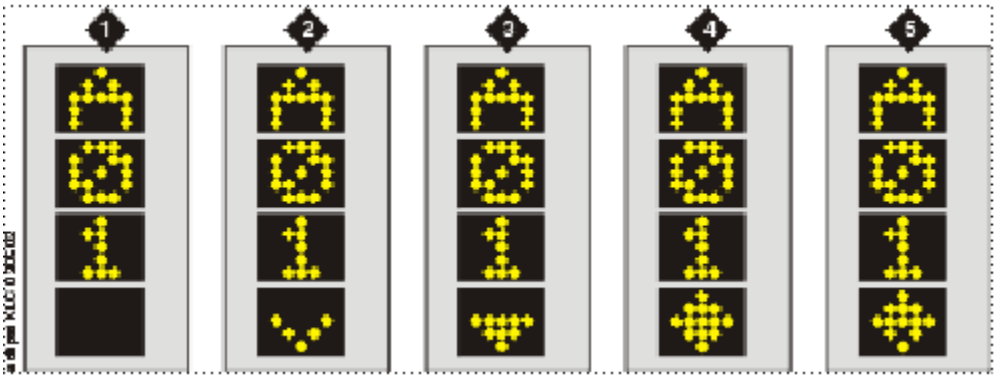

Figure 9: IPSI display connectivity status

Connectivity status	1	2	3	4	5
IPSI is connected to an Avaya Ethernet switch	no	yes	yes	yes	yes
IPSI has an IP address	no	no	yes	yes	no
Laptop computer is connected to IPSI services port	no	no	no	yes	yes

TN2501 LEDs

The Voice Announcements over the LAN (VAL) TN2501AP provides per-pack announcement storage time of up to one hour, up to 31 playback ports. VAL also offers announcement file portability over a LAN. The VAL circuit pack can also be used for LAN backup and restore of announcement files and the use of user-provided (.WAV) files. The circuit pack also provides the ability to download new versions of the firmware to itself.

The figure on page 30 shows the nine LEDs on the TN2501AP faceplate for hardware versions HV1 - HV11.

The figure on page 31 shows the seven LEDs on the TN2501AP faceplate for hardware versions HV12 and greater.

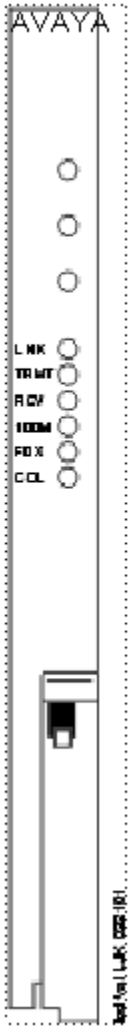

Figure 10: TN2501AP faceplate LEDs HV1-HV11

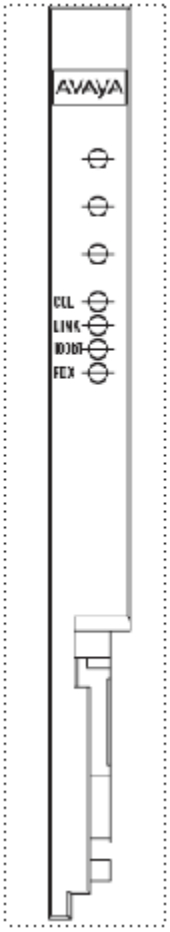

Figure 11: TN2501AP faceplate LEDs HV12 and later

Table 10: TN2501AP LEDs on page 31 lists the TN2501AP faceplate LEDs, the type of behavior (on, off, flashing, or intermittent), and a description of the condition.

TN2501AP LEDs

Table 10: TN2501AP LEDs

LED	Behavior	Description
Red	On solid	Circuit pack failure or a major or minor on-board alarm
Green	On solid	Power turned on self testing in progress, firmware is self-downloading to the circuit pack, or testing in progress.
Amber	On solid	Firmware is self-downloading to the circuit pack.

LED	Behavior	Description
		Caution: You can lose the resident firmware image file if you reset the circuit pack during firmware download. If the reset happens, a new firmware FTP image file is added to the VAL circuit pack and the Firmware download procedure is performed again.
Amber	Fast flash (100 ms on/ 100 ms off)	Occurs during circuit pack insertion or circuit pack reset when the announcement files are being copied from FLASH to RAM. If you reset the circuit pack during this time, your announcement files remain intact.
Amber	Slow flash (200 ms on/ 200 ms off)	Flashes during autosave while copying announcement files from RAM to FLASH. **Caution:** You can lose the announcements on the circuit pack if you reset it during an autosave.
LINK	On/off	Active Ethernet link
TRMT	Intermittent	Transmitting data
RCV	Intermittent	Receiving data
100M or 100bT	On/off	Off = 10-Mbps Ethernet connection
		On = 100-Mbps Ethernet connection
FDX	On/off	Off = half-duplex connection
		On = full-duplex connection
COL	On/off	Off = no collisions detected
		On = collisions detected

650A Power Supply LEDs

The table on page 32 shows the LED and alarm conditions for the 650A Power Supply. Ring voltage and neon bus output do not activate alarm status.

Table 11: LED and alarm conditions

Condition	LED status	Alarm state	Fan alarm
Normal	Red off Yellow on	Open	Normal
No input power	Red off Yellow off	Closed	No input power

Condition	LED status	Alarm state	Fan alarm
DC output not present (except Neon)	Red on Yellow off	Closed	DC output not present (except Neon)
Fan alarm	Red on Yellow on	Closed	Fan alarm

655A Power Supply LEDs

The gateway normally has two 655A power supplies. Each has a set of five LEDs, the function of which is indicated in the table on page 33.

Table 12: 655A Power Supply LEDs

LED	Color	Function
1	Red	Failure of power supply or fan
2	Yellow	Status of power supply OK
3	Green	AC input voltage applied
4	Green	DC input voltage applied
5	Green	Power supply providing ring voltage

Normally, the ring voltage LED (#5) on the left power supply is ON and the ring voltage LED on the right power supply is OFF. This changes momentarily when the ringer interchange test is run. The ring voltage LED only remains lit on the right power supply during a power supply failure or removal of the left hand supply.

LED indicators of serial bus commands to the power supply

Operation of the 655A power supply LED indicators for visual indication of serial bus commands to the power supply involve power supply shutdown and ringing shutdown.

Power supply shutdown

You can shutdown the power supply of 655A for resetting the G650 chassis remotely. The 655A power supply can be shut for a period of time selectable from 1 to 255 seconds. The yellow LED indicating correct operation of the 655A power supply is on for normal power supply operation. When the power supply is commanded off, the yellow LED blinks at a rate of 1 second on and 100ms off, indicating that the power supply is operational but commanded off by the serial bus.

Master ringer failure

The left hand power supply in the G650 cabinet is the master ringer. If the master ringer fails, ringing is transferred to the redundant power supply, if present. The red LED on the left hand power supply turns on and the yellow LED turns off, indicating failure of the power supply.

The serial bus can command the ringer off for a period of 1 to 255 seconds. The purpose of this command is to verify redundant ringer operation through the serial bus remotely from the G650 chassis. The red LED blinks at a rate of 1 second on and 100ms off, indicating that the power supply is operational but commanded off by the serial bus.

A second command relating to ringer operation is the command to turn off the master ringer. This command shuts down the master ringer and transfers control to the redundant power supply. This command is used to permanently transfer ring voltage to the redundant power supply through the serial bus, to resolve a problem with the master ringer. The red LED blinks at a rate of 1 second on and 100ms off, indicating that the power supply is operational but commanded off by the serial bus.

Duplication Memory Board LEDs

Warning:

The DAJ1, DAL1, and DAL2 Duplication Memory boards are not interchangeable. The DAJ1 only functions in the S8700 server. The DAL1 functions in an S8710 server and an S8720 server with standard configuration. The DAL2 functions in an S8720 server running Communication Manager 4.0 or later with the extra large configuration.

The Duplication Memory Board is a circuit board that plugs into the processor. You cannot insert the memory board from the maintenance perspective. There are no SAT screens or Linux commands for administration of this board.

The Duplication Memory board has four LEDs which indicate the state of the fiber link and the mode (transmit or receive) that the Duplication Memory board is currently programmed as. The faceplate also has a cutout for the fiber optic transceiver.

Figure 12: DAJ1 Faceplate on page 35 shows the DAJ1 faceplate and LEDs.

Figure 13: DAL1/DAL2 Faceplate on page 36 shows the DAL1/DAL2 faceplate and LEDs. DALX refers to DAL1 and DAL2. Both DAL1 and DAL 2 have the same faceplate except for the DAL designation.

DAJ1 Faceplate

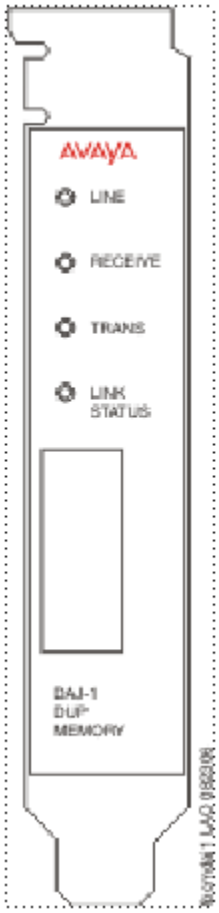

Figure 12: DAJ1 Faceplate

LED	Description
Line	Indicates the On or Off line status of the server. Green indicates an online status
Receive	Indicates green when transceiver is in receive mode.
Trans	Indicates a bi-color, red or green, where the red LED is turned on at reset or when power is turned on, and the green LED is turned on when the transceiver is in the transmit mode.
Link Status	Indicates green when a light signal is sensed on the fiber.

On the active server, the Trans LED is green and the Receive LED is dark. On the standby server, the Receive is green and the Trans LED is dark.

DAL1/DAL2 Faceplate

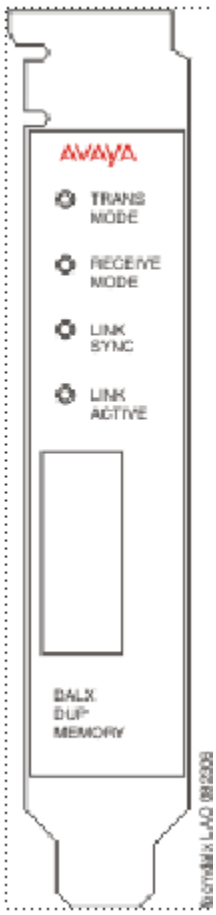

Figure 13: DAL1/DAL2 Faceplate

LED	Description
Trans Mode	Indicates green when you enable the Duplication Memory board to transmit.
Receive Mode	Indicates green when you enable the Duplication Memory to receive.
Link Sync	Indicates green when the LED receives characters.
Link Active	Indicates green when the LED senses a light signal on the fiber.

On the active server, the Trans Mode LED will be green and the Receive Mode LED will be dark. On the standby server, the Receive Mode will be green and the Trans Mode LED will be dark.

All server and Duplication Memory board LEDs are in the “off” state but still powered “on” when the server is shut down.

Pattern of the LEDs in the Duplication Memory board

When testing the LEDs, the Duplication Memory board LED must blink according to the following pattern:

1 second red on, 1 second red off, 1 second green on, 1 second green off

This pattern must continue for one minute.

An LED that shows any of the following flashing patterns indicates an abnormal condition. The following events describe the condition and the recommend actions to resolve the condition.

Green element burned out

LED Color Red

Behavior Flashes on 1 second, off 3 seconds, in a repeating pattern

Indication The green element is burned out.

Resolving the problem of the green element burning out

Procedure

Replace the server.

Red element burned out

LED Color Green

Behavior Flashes on 1 second, off 3 seconds, in a repeating pattern

Indication The red element is burned out.

Resolving the problem of the red element burning out

Procedure

Replace the server.

Duplication Memory Board not receiving power

Behavior LED remains off continuously

Indication The Duplication Memory board is not getting power, or the server is hung.

Resolving the problem of the duplication memory board not receiving power

Procedure

1. If the server hangs, the server must automatically reboot.
2. If the server does not reboot, reboot manually.

Server is hung

LED Color	Green or Red
Behavior	Flashed continuously
Indication	The server is hung.

Resolving the problem of a hung server

Procedure

1. If the server hangs, the server must automatically reboot.
2. If the server does not reboot, reboot manually.

Server LEDs

Systems running Communication Manager Release 5.2.1 and later require the following servers. The following sections guide you to the link that provides more information on the LED description of each of the respective server.

S8800 Server LEDs

For information on the LED description for the S8800 server, see *Maintaining the Avaya S8800 server for Avaya Aura® Communication Manager* at http://support.avaya.com.

HP DL360 G7 Server LEDs

For information on the LED descriptions for the HP DL360 G7 server, see *Installing the HP DL360 G7 server* at http://support.avaya.com.

Dell R610 Server LEDs

For more information on the LED descriptions for the Dell R610 server, see *Installing the Dell™ PowerEdge™ R610 server* at http://support.avaya.com.

S8300D Server LEDs

The S8300D Server is a replacement for the S8300C server and provides a Services Ethernet port, three USB ports, 4 LEDs (Alarm, Application up/Test, Active, OK-to-Remove), and a Shut Down button.

Figure 14: S8300D Server LEDs

S8300D Server LEDs description

The table on page 39 describes the meanings and functions of the LEDs.

Table 13: S8300D LEDs

LED	Color	Description
ALM	RED	ON when power is turned on or when a major alarm is present
APP	Green	ON when Communication Manager is running or a test is in progress.

LED	Color	Description
ACT	Yellow	ON when a gateway, an IP station, or an IP console registers with the S8300D. It turns off when none of the IP endpoints are registered with the S8300D.
OK TO REMOVE	Green	FLASH when shutdown is in progress ON when shutdown complete and you can remove S8300D server.
Compact Flash in Use (only if CF slot is implemented)	Yellow	ON when compact flash is in use
Services Ethernet (RJ45 jack, left side)	Green Yellow	ON when data rate is 10 MBON when data rate is 100 MB
Services Ethernet (RJ45 jack, right side)	Green	FLASHING when data is being transmitted or received over the Ethernet link

S8510 Server LEDs

The S8510 is a replacement for the S8500C server. The S8510 server is supported by Communication Manager Release 5.1 and later.

Figure 15: S8510 Server (front) on page 41 describes the LEDs on the front of the S8510 server.

Figure 16: S8510 Server (back) on page 41 describes the LEDs on the back of the S8510 server.

Figure 17: S8510 Server (drive status or activity) on page 42 shows the drive status/activity LEDs.

Table 14: S8510 Server LED indicator conditions on page 43 describes the LED indicator patterns, functions, and conditions.

Front view of S8510 Server

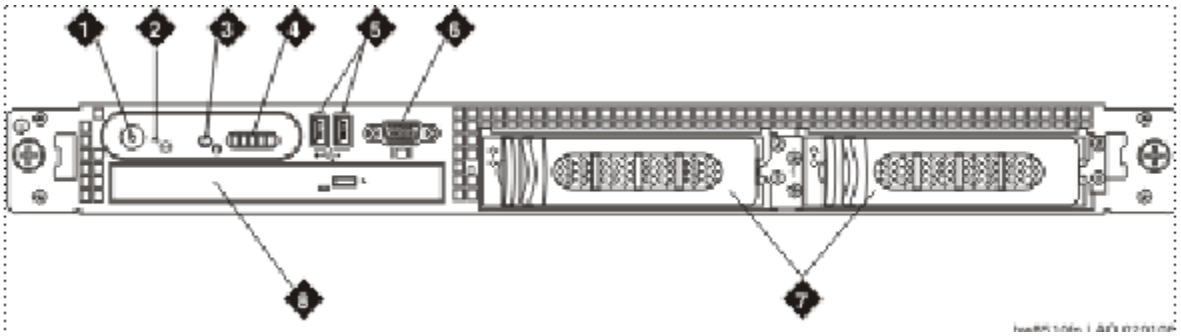

Figure 15: S8510 Server (front)

Number	Description
1	Power turned on LED
2	NMI button (not used)
3	System ID button
4	LCD display
5	USB ports
6	Video connector (not used)
7	Hard disk drives
8	Optical DVD/CD drive

Rear view of S8510 Server

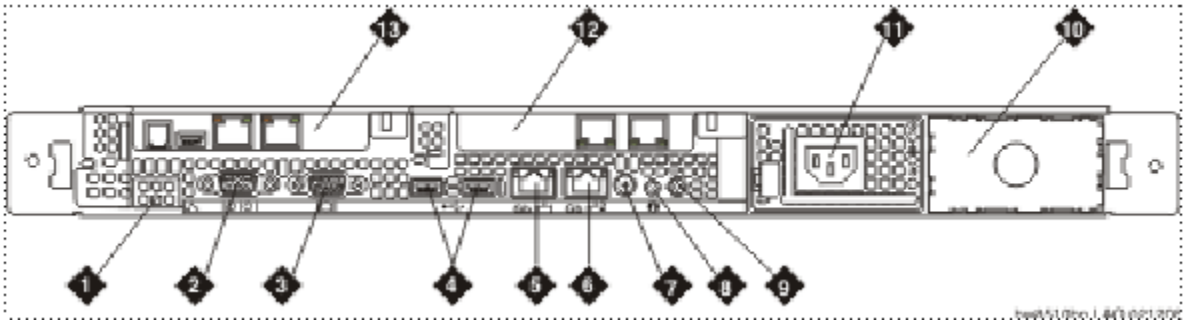

Figure 16: S8510 Server (back)

Number	Description
1	Remote access controller (not used)

Number	Description
2	Serial connector (not used)
3	Video connector (not used)
4	USB ports (not used)
5	NIC-1 (Eth0)
6	Services port - NIC-2 (Eth1)
7	Services status indicator connector
8	System ID button
9	System Status LED
10	Bay for optional redundant power supply
11	Power supply
12	Dual NIC
13	Remote maintenance board (SAMP)

Drive status or activity of S8510 Server

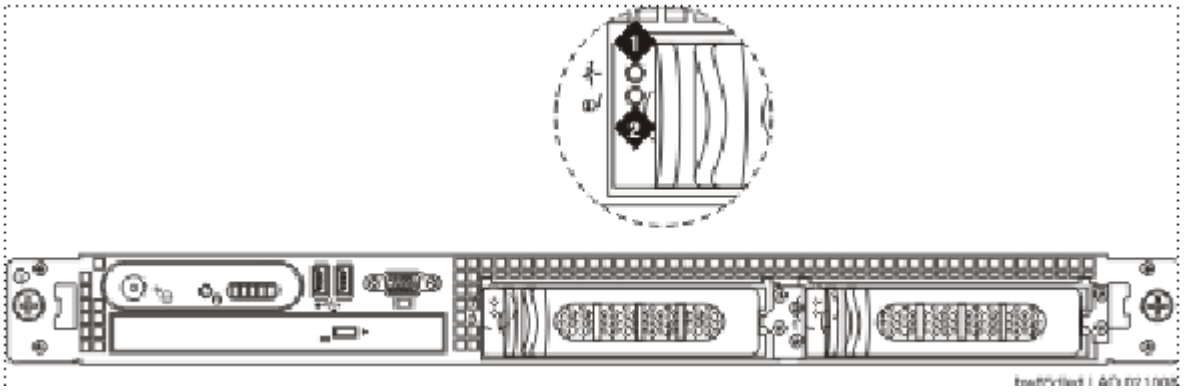

Figure 17: S8510 Server (drive status or activity)

Number	Description
1	Drive status
2	Drive activity

S8510 Server power supply LEDs

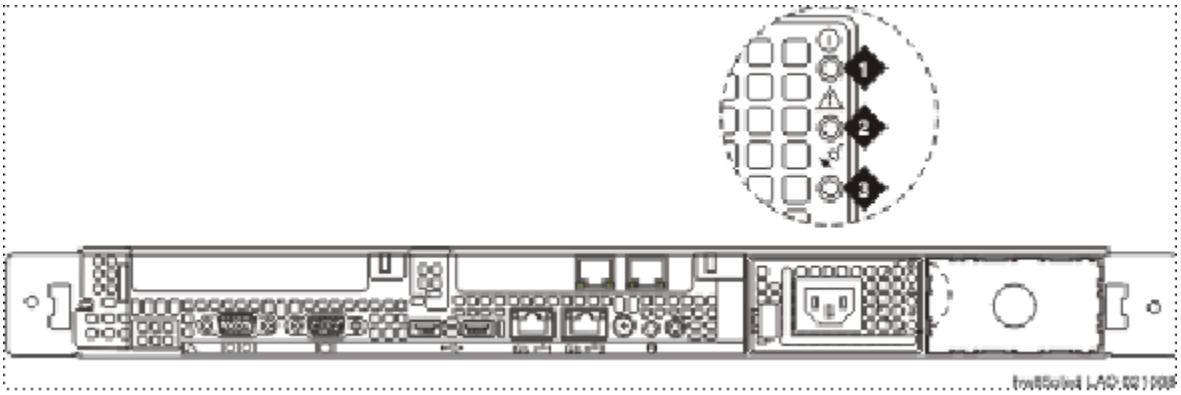

Figure 18: S8510 Server (back)

Number	Description
1	Power supply status
2	Power supply fault
3	AC line status

S8510 Server LED indicator conditions

Table 14: S8510 Server LED indicator conditions

LED	Indicator/Pattern	Function/Condition
Power status	On	System has power and is operational
	Off	System has no power.
Power supply	Green	Power supply is operational.
	Amber	Power supply has problems.
AC line status	Green	Power supply is connected to a valid AC power source.
Drive status	Steady green	Drive online.
	Blinks green, then amber, then off	Drive predicted failure.
	Blinks amber 4 times per second	Drive failed.
	Blinks green 2 times per second	Identify drive or prepare for removal.

LED	Indicator/Pattern	Function/Condition
	LED off	Drive ready for insertion or removal.
	Blinks green slowly	Drive rebuilding.
	Blinks green for 3 seconds, blinks amber for 3 seconds, off for 6 seconds	Rebuild aborted.

Media module LEDs

For a description of the media module LEDS, click the associated link in the following table:

Media Module	LED description
MM710	MM710 E1/T1 media module LEDs on page 45
MM710B	Same as the MM710. See MM710 E1/T1 media module LEDs on page 45
MM711	Standard media module LEDs on page 45
MM712	Standard media module LEDs on page 45
MM714	Standard media module LEDs on page 45
MM714B	MM714B analog media module on page 45
MM716	Standard media module LEDs on page 45
MM717	Standard media module LEDs on page 45
MM720	MM720 BRI media module LEDs on page 47
MM722	Standard media module LEDs on page 45
MM760	Standard media module LEDs on page 45
MM312	Standard media module LEDs on page 45
MM314	MM314 LAN media module LEDs on page 47
MM316	MM316 LAN media module LEDs on page 48
MM340	MM340 E1/T1 data WAN media module LEDs on page 49
MM342	MM342 USP Data WAN media module LEDs on page 50

Standard media module LEDs

Figure 19: Standard media module LEDs

LED	Color	Description
ALM	Red	When turned ON, this LED indicates a media module failure or media module mismatch. This LED is also turned ON when the media module is inserted. It turns OFF after the media module passes initialization tests.
TST	Green	This LED turns ON when power is turned on during self-testing and maintenance testing.
ACT	Yellow	This LED is turned ON when the media module or one or more ports on the media module are in use.

MM714B analog media module

Figure 20: MM714B analog media module

The MM714B analog media module provides all the features of the MM714. See Standard media module LEDs. The MM714B also provides an emergency transfer relay (ETR). In the event of a system failure, the MM714B provides ETR services by connecting trunk port 5 and line port 4.

MM710 E1/T1 media module LEDs

Figure 21: MM710 E1/T1 media module LEDs

The MM710 E1/T1 Media Module has four LEDs on its faceplate.

LED	Color	Description
ALM	RED	This LED indicates a media module failure or mismatch, a loss of signal, or a nonfuctional D-Channel. This LED is also turned ON when the media module is inserted and turns OFF after initialization.
TST	GREEN	This LED is turned on during start up, self-testing, and maintenance testing.
ACT	YELLOW	This LED indicates that the clock is synchronized with a source, usually the Central Office. The LED blinks ON for 2.8 seconds and OFF for 300ms.This is the most common condition. The opposite blinking of the yellow LED is 300 ms ON and 2.8 seconds OFF. This is an error condition, and indicates that the MM710 T1/E1 media module is not synchronized with a clock. The LED is ON steadily. This is an infrequent occurrence. This indicates in-use activity only when clock synchronization is set to local.
SIG	GREEN	This LED indicates the presence of a valid signal on the T1/E1 line.

For ISDN operation, the yellow ACT LED turns on if ANY port has an active TDM connection including the D-channel.

Synchronization

The yellow ACT LED displays the synchronization status of the MM710 media module.

- If the ACT LED is solidly ON or OFF, the ACT LED is *not* been defined as a synchronization source. If the ACT LED is ON, at least one channel is active. If the facility is an ISDN facility, the D-Channel will count as an active channel and will cause the ACT LED to be ON.
- When the MM710 is driving a clock sync source line to the main clock, the ACT indicates that the MM710 is the sync source by flashing a regular 3-second sequence:
  - If the MM710 has been specified as a sync source and is receiving a signal that meets the minimum requirements for the interface, the ACT LED will flash ON for 2.8 seconds and will be OFF for 300 ms.
  - If the MM710 has been specified as a sync source and is not receiving a signal, or is receiving a signal that does not meet minimum requirements for the interface, the ACT LED will be OFF for 2.8 seconds and will flash ON for 300 ms.

E1/T1 initialization

The MM710 E1/T1 media module LEDs function in the following manner during initialization:

- The yellow ACT LED is OFF while the red ALM and green TST LEDs remain ON during the entire initialization sequence.
- If only the red ALM LED turns ON when power is turned on or reset, either the media module processor is dead or the media module is being held permanently in reset.
- The green TST LED turns OFF on completion of the diagnostic and initialization sequences.
- If the initialization tests fail, the red ALM LED remains ON.
- If the tests all pass, then all LEDs are turned OFF until Communication Manager starts using the media module.

MM720 BRI media module LEDs

Figure 22: MM720 BRI media module LEDs

LED	Color	Description
ALM	Red	This LED indicates a media module failure, an incorrect media module in the slot, or the B-Channel is down. This LED is also turned ON when the media module is inserted and must turn OFF after the media module initializes.
TST	Green	This LED is turned ON when power is turned on, self-testing, and maintenance testing.
ACT	Yellow	This LED is turned ON when one or more ports are in use on the media module.

MM314 LAN media module LEDs

Figure 23: MM314 LAN media module LEDs

MM314 alarm LED

A MM314 media module alarm (ALM) LED that is ON indicates a problem with the power supply or that the media module is initializing. The ALM LED turns off after diagnostic tests are complete and the power supply is active. A MM314 media module ALM LED that is blinking

indicates that Communication Manager has the slot administered for a voice media module. Blinking indicates is a mismatch between Communication Manager and this media module.

MM314 port LEDs

The MM314 front panel has numbered LEDs which correspond to each of the network ports. Underneath these LEDs is a row of LEDs that indicate particular functions. The function LED that is lit indicates which function the network port LEDs are reporting. For example, if the LNK LED is lit, the port LEDs indicate whether the network links for the specific ports are functioning properly.

To the right of the function LEDs are two push buttons. Use these buttons to select which function the port LEDs must report. For example, if the COL LED is lit, all the port LEDs are reporting the Collision status of their respective port. Table 15 describes each of these functions:

Table 15: MM314 Port LEDs

LED	Name	Description
LNK	Link status	ON: System enables the port and the link starts working.
COL	Collision	OFF: No collision on line. If this LED is flashes, collisions occur.
TX	Transmit to line	ON: System transmits data.
RX	Receive from line	ON: System receives data from the line.
FDX	Full Duplex	ON: Full-duplex mode
FC	Flow Control	ON: Port is in Full Duplex and in Flow Control mode. OFF: System disables the Port Flow Control mode or the Port Flow Control mode operates in half duplex mode.
HSPD	High Speed	ON: Port is operate at the higher possible speeds.
LAG	Link Aggregation	ON: Port is a member of a LAG.
PoE	Power over Ethernet	ON: Port is operating in PoE mode.

MM316 LAN media module LEDs

The MM316 media module has the following LEDs:

- A red ALM LED
- 40 dual-colored (yellow/green) faceplate port LEDs, one for each port
- A yellow LED for the 100/1000 Base-T Ethernet Port (LED 51)

The blinking rate is proportional to the traffic rate. All LEDs are turned on during a reset.

Figure 24: MM316 LAN media module LEDs

Name	Color	Description
ALM	Red	OFF: Initialization tests are successful. ON: A problem is detected. BLINKING: An administration mismatch between Communication Manager and this Media Module.
Port LED	Green	ON: Link is up, port is enabled, no traffic, PoE delivered. BLINK: Ethernet traffic with PoE being delivered.
Port LED	Yellow	ON: Link is up, port is enabled, no traffic, no PoE delivered. BLINK: Ethernet traffic without PoE being delivered.
51	Yellow	ON: Link is up, port is enabled, no traffic, no PoE delivered. BLINK: Ethernet traffic without PoE delivered.

MM340 E1/T1 data WAN media module LEDs

Figure 25: MM340 E1/T1 data WAN media module LEDs

LED	Name	Color	Description
ALM	Alarm	Red	ON: The media module is initializing, an alarm exists on an interface, or there is an administration mismatch between Communication Manager and this media module. The media module is inserted in a slot administered for a voice media module. OFF: Successful media module initialization, media module functioning properly, no alarm conditions on an interface.
TST	Test	Green	ON: Port is being initialized or loopback is active. OFF: Port initialization complete and loopback is not active.
ACT	Active	Yellow	ON: At least one PPP/Frame Relay session is active. OFF: No active PPP/Frame Relay session.
SIG	Signal	Green	ON: A signal is detected on the port. OFF: No signal is detected on the port.

MM342 USP Data WAN media module LEDs

Figure 26: MM342 USP Data WAN media module LEDs

LED	Name	Color	Description
ALM	Alarm	Red	ON: Indicates that the media module is initializing, an alarm exists on an interface, or an administration mismatch occurred between Communication Manager and this media module, that is, this media module is inserted in a slot administered for a voice media module. OFF: Indicates successful media module initialization and functioning and absence of alarm conditions on an interface.
TST	Loop	Green	ON: Indicates that there is a local or remote loop signal in connector (RL/LL).
ACT	Active	Yellow	ON: Indicates PPP or FR is defined on this interface. OFF: Indicates PPP or FR is not defined on this interface.
CON	Connection	Green	ON: Indicates interface is up. OFF: Indicates interface is shutdown.

Note:

The production of the MM342 USP Data WAN media module is discontinued.

G250 LEDs

The G250 LEDs are explained in the following sections. Follow the links in the Figure Notes to see the explanation of the LEDs on a particular G250 Branch Gateway. The G250 only supports the S8300D server and the WAN media modules (MM340 and MM342).

- G250-Analog: Includes four analog trunk ports, two analog line ports, a Fast Ethernet WAN port, and eight PoE LAN ports.
- G250-BRI: Includes two ISDN BRI trunk ports, one analog trunk port, two analog line ports, a Fast Ethernet WAN port, and eight PoE LAN ports.

- G250-DCP: Provides twelve DCP (Digital Communications Protocol) ports, four analog trunk ports, two analog line ports, a Fast Ethernet WAN port, and two LAN ports.
- G250-DS1: Provides a T1/E1 and a PRI trunk port, enabling support of fractional T1/E1 and PRI. It also includes one analog trunk port, two analog line ports, a Fast Ethernet WAN port, and eight PoE LAN ports.

G250-Analog

Figure 27: G250-Analog Branch Gateway Chassis

Name	Description
1	V1: ICC/Survivable Remote server slot
2	V2: WAN Media Module Slot
3	Analog Port LEDs
4	Analog trunks
5	Analog line ports
6	System LEDs
7	Console port
8	USB port
9	Contact Closure (CCA) port
10	Ethernet WAN (ETH WAN) port
11	PoE LAN (ETH LAN PoE) ports
12	Reset (RST) button
13	Alternate Software Bank (ASB) button

G250-BRI

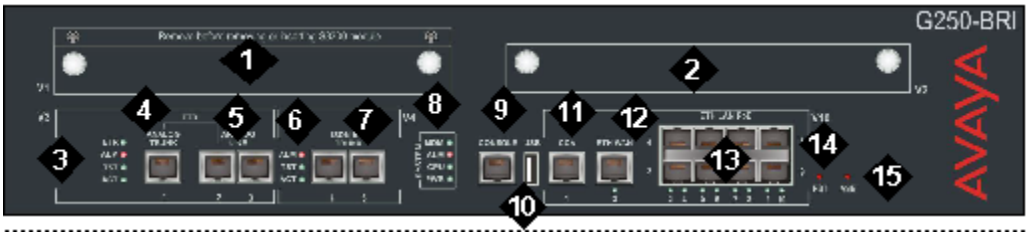

Figure 28: G250-BRI Branch Gateway Chassis

Name	Description
1	V1: ICC/Survivable Remote server slot
2	V2: WAN Media Module Slot
3	Analog Port LEDs
4	Analog trunk
5	Analog line ports
6	ISDN BRI LEDs
7	ISDN BRI trunks
8	System LEDs
9	Console port
10	USB port
11	Contact Closure (CCA) port
12	Ethernet WAN (ETH WAN) port
13	PoE LAN (ETH LAN PoE) ports
14	Reset (RST) button
15	Alternate Software Bank (ASB) button

G250-DCP

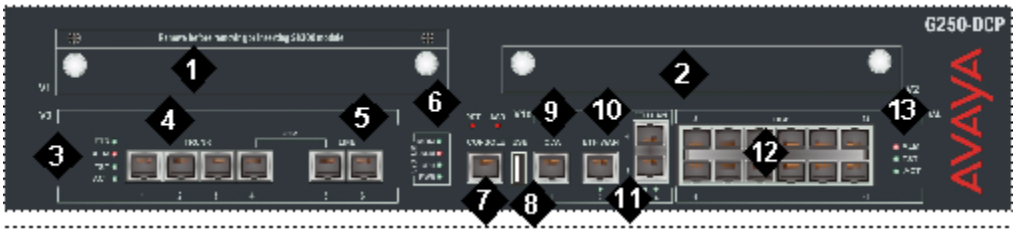

Figure 29: G250-DCP Branch Gateway Chassis

Name	Description
1	V1: ICC/Survivable Remote server slot
2	V2: WAN Media Module Slot
3	Analog Port LEDs
4	Analog trunks
5	Analog line ports
6	System LEDs
7	Console port
8	USB port
9	Contact Closure (CCA) port
10	Ethernet WAN (ETH WAN) port
11	ETH LAN port
12	DCP ports
13	DCP port LEDs

G250-DS1

Figure 30: G250-DS1 Branch Gateway Chassis

Name	Description
1	V1: ICC/Survivable Remote server slot
2	V2: WAN Media Module Slot
3	Analog Port LEDs
4	Analog trunk
5	Analog line ports
6	T1/E1/PRI trunk interface LEDs
7	T1/E1 interface
8	Service
9	System LEDs
10	Console port
11	USB port
12	Contact Closure (CCA) port
13	Ethernet WAN (ETH WAN) port
14	PoE LAN (ETH LAN PoE) ports
15	Reset (RST) button
16	Alternate Software Bank (ASB) button

Analog port LEDs

The analog ports are standard RJ-45 telephone network ports.

- The TRUNK ports are analog trunk ports.
- The LINE ports are analog telephone ports.

An analog relay provides Emergency Transfer Relay. The analog port LEDs show the status of the ports. The following table describes the meaning of lighted analog LEDs:

Table 16: Analog Port LEDs

LED	Name	Color	Description
ETR	Emergency Transfer	Green	ON: Indicates that the Emergency Transfer Relay (ETR) is active and no connection to any call controller is present.
ALM	Alarm	Red	ON: Indicates initialization is in process, the presence of a problem, or an external compact flash is removed from the G450 gateway that has the enable

LED	Name	Color	Description
			announcement-board field set to y on SAT. OFF: Indicates that self-tests are complete. The alarm turns off also after you replace or de-administer the compact flash within a set interval of at least 30 seconds.
TST	Test	Green	ON: Indicates a test is in progress.
ACT	Activity	Yellow	ON: Indicates a call is in progress.

System LEDs

The system LEDs show the status of the gateway.

Table 17: System LEDs

LED	Name	Color	Description
MDM	Modem Detected	Green	ON: A modem (either serial or USB-modem) detected and modem initialization has passed without errors.
ALM	General Alarm	Red	ON: The gateway lost connection to an external call controller (Communication Manager or ICC). In survivability mode, it will be turned ON as it is in survivable remote server mode.
CPU	CPU Operation	Green	OFF: CPU is in boot operation or is running power-up built-in tests. ON: Normal operation BLINKING: Self test failed, gateway is in error mode.
PWR	Power Management	Green	OFF: Power is off or power supply unit is broken. BLINKING: Problem with power. With one PSU, the LED will blink when any of the DC-to-DC circuits fails. If the system is running with two PSUs, one good and one bad, the PWR LED blinks indicating that one of the PSUs is bad. ON: Normal operation.

ISDN BRI LEDs

These LEDs represent the status of the integrated BRI circuitry.

LED	Name	Color	Description
ALM	Alarm	Red	There is a problem with the ISDN BRI trunk.
TST	Test	Green	This LED is turned on during power-up self-testing and maintenance testing of the ISDN BRI trunk.
ACT	Activity	Yellow	A call is in progress

DCP port LEDs

These LEDS represent the status of the integrated DCP circuitry.

LED	Name	Color	Description
ALM	Alarm	Red	This LED is turned ON during boot-up and turned OFF after self-tests pass. It is turned ON when an alarm is present.
TST	Test	Green	This LED is turned ON during power-up self-testing and maintenance testing.
ACT	Activity	Yellow	ON: One or more ports are in use.

T1/E1/PRI trunk interface LEDs

These LEDs represent the status of the integrated E1/T1 circuitry.

LED	Name	Color	Description
ALM	Alarm	Red	ON: Indicates a DS1 failure.
TST	Test	Green	This LED is turned ON during power-up self-testing and maintenance testing.
ACT	Sync/Activity	Yellow	ON: at least one call or ISDN signaling D-channel is active and the DS1 port is not a synchronization source clock (i.e., source is local). BLINK: the DS1 port is a synchronization source clock for the G250. The flashing rate indicates the status of the recovered clock: longer ON period indicates a good clock while longer OFF period indicates bad received clock quality (inadequate as acting as clock source).
SIG	Signal	Green	ON: indicates the presence of a signal on the T1/E1 line.

PoE LAN (ETH LAN PoE) ports

Each Ethernet RJ45 jack of a PoE 10/100 port has one LED located below the RJ45 connector. The blinking rate is proportional to the traffic rate. Note that PoE fault scenarios do not have special LED indications but simply indicate as no PoE delivered.

Color	State	Description
Green	STEADY ON	Link is up, port is enabled, no traffic, PoE delivered.
Green	BLINKING	Ethernet traffic with PoE being delivered.
Yellow	STEADY ON	Link is up, port is enabled, no traffic, no PoE delivered.
Yellow	BLINKING	Ethernet traffic without PoE being delivered.

Ethernet WAN (ETH WAN) port

The ETH WAN10/100 port has one LED located below the RJ45 connector. The blinking rate is proportional to the traffic rate.

Color	State	Description
Yellow	STEADY ON	Link is up, port is enabled, no traffic.
Yellow	BLINKING	Ethernet traffic.

ETH LAN port

The Ethernet LAN port has one LED located below the RJ45 connector.The blinking rate is proportional to the traffic rate.

Color	State	Description
Yellow	STEADY ON	Link is up, port is enabled, no traffic.
Yellow	BLINKING	Ethernet traffic.

G350 LEDs

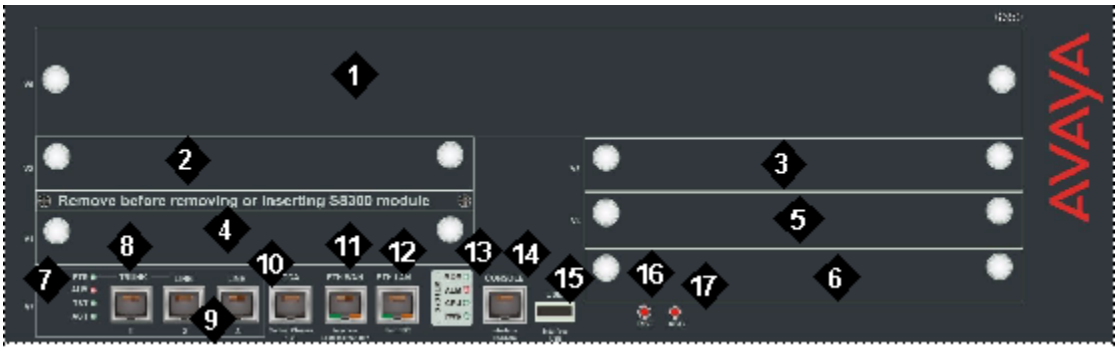

Figure 31: G350 Branch Gateway Chassis

Name	Description
1	V6: High-density media module slot
2	V2: Standard media module slot
3	V5: Standard media module slot
4	V1: Slot for standard media module or S8300D server
5	V4: Standard media module slot
6	V3: Standard media module slot
7	Analog Port LEDs
8	Analog trunk
9	Analog line ports
10	Contact Closure (CCA) port
11	Ethernet WAN (ETH WAN) port
12	ETH LAN port
13	System LEDs
14	Console port
15	USB port
16	Reset (RST) button
17	Alternate Software Bank (ASB) button

G430 LEDs

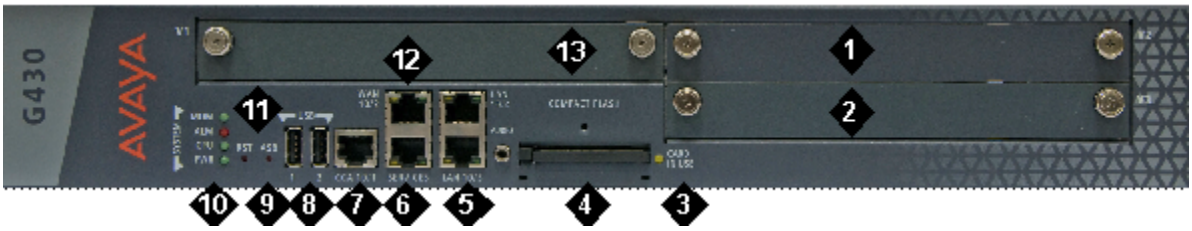

Figure 32: G430 Branch Gateway front panel ports, slots, and LEDs

Name	Description
1	V2 - standard media module slot
2	V3 - standard media module slot
3	Compact Flash CARD IN USE LED
4	Compact Flash slot
5	ETH LAN port
6	Services port
7	Contact Closure (CCA) port
8	USB ports
9	ASB (Alternate Software Bank) button
10	System LEDs
11	RST (Reset) button
12	Ethernet WAN (ETH WAN) ports
13	V1 - slot for standard media module or S8300D server

LED lighting sequence for G430

The LED lighting sequence for the G430 is as follows:

1. The PWR LED on the front panel turns on, indicating the status of the power supply unit.
2. The CPU LED turns on if the firmware is running.
3. At least one LED on each media module turns on, then turns off after about 20 seconds.

The yellow Card In Use LED indicates the status of the flash card:

- If the LED is flashing, the Compact Flash is in use.

  Warning:

  To prevent corruption of data on the Compact Flash, Avaya recommends that you do not remove the Compact Flash when a backup of the G430 announcements files is in progress. Doing so may corrupt the data on the Compact Flash.

- If the LED is OFF, no Compact Flash is inserted
- If the LED is flashing, do not remove the Compact Flash.

G450 LEDs

G450 has two hardware versions: G450 1.x with hardware suffix 1 and G450 2.x. with hardware suffix 2. The hardware suffix of the G450 is printed on the label displayed on the rear of the G450 chassis. The port and LED functions are identical unless otherwise indicated.

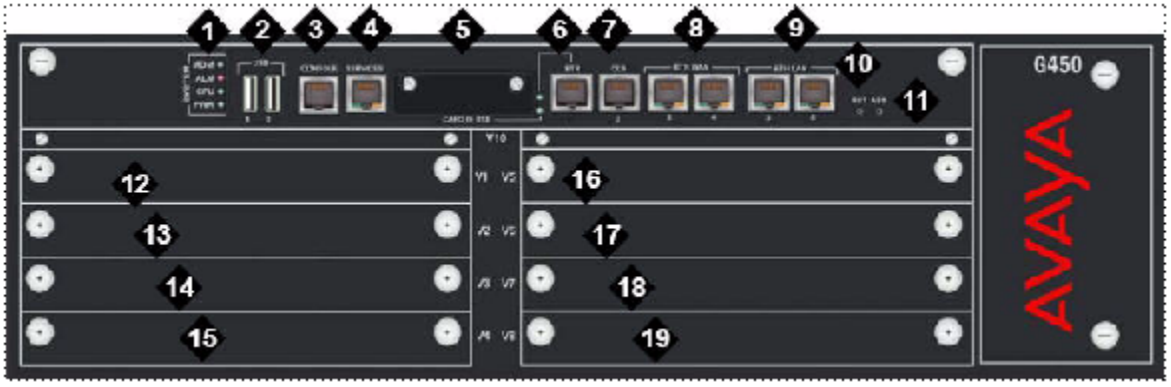

Figure 33: G450 Branch Gateway version 1.x front panel ports, slots, and LEDs

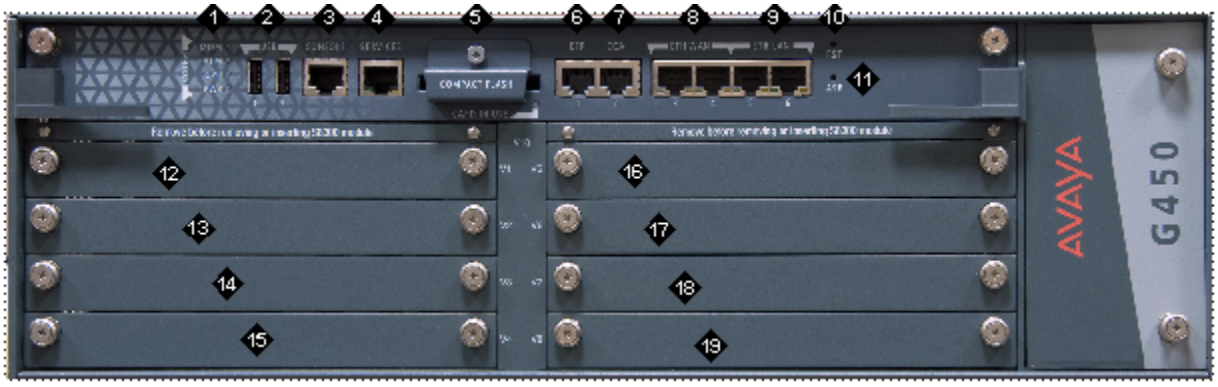

Figure 34: G450 Branch Gateway version 2.x front panel ports, slots, and LEDs

Name	Description
1	System LEDs
2	USB ports
3	Console port
4	Services port
5	Compact Flash slot
6	ETR (Emergency Transfer Relay) port
7	CCA (Contact Closure) port
8	Ethernet WAN (ETH WAN) ports
9	ETH LAN ports
10	RST (Reset) button
11	ASB (Alternate Software Bank) button
12	V1 - slot for standard media module or S8300D server
13	V2 - standard media module slot
14	V3 - standard media module slot
15	V4 - standard media module slot
16	V5 - standard media module slot
17	V6 - standard media module slot
18	V7 - standard media module slot
19	V8 - standard media module slot

LED lighting sequence for G450

The LED lighting sequence for the G450 is as follows:

1. The PWR LED on the front panel turns on, indicating the status of the power supply unit.
2. The CPU LED turns on if the firmware is running.
3. At least one LED on each media module turns on, then turns off after about 20 seconds.

The yellow Card In Use LED indicates the status of the flash card:

- If the LED is ON steady, the Compact Flash is inserted but is not being used.
- If the LED is flashing, the Compact Flash is in use.

Warning:

Do not remove the Compact Flash when the backup of the G450 announcements files is in progress. Doing so may corrupt the data on the Compact Flash.

- If the LED is OFF, no Compact Flash is inserted or you can remove the Compact Flash (G450 2.x only).
- If the LED is OFF or ON steady, you can remove the Compact Flash (G450 1.x only).
- If the LED is flashing, do not remove the Compact Flash.

G700 LEDs

The G700 LEDs are the same as those on the Avaya P333T, with the following exceptions:

- Slight modifications to two of the LEDs (OPR and SYS)
- Addition of the Alarm LED to the LED Panel to display prominently any error condition

For a complete listing of the Avaya P330 LEDs, see *Avaya P333T Stackable Switch Software User Guide, Version 3.12*.

LED panel location on the G700

As shown in the figure on page 62, the LED panel is located on the top left corner of the G700. Media module slot V1 is directly below the LED panel. Any type of media module can fill this slot. However, the S8300D server can reside only in this particular slot because of height restrictions.

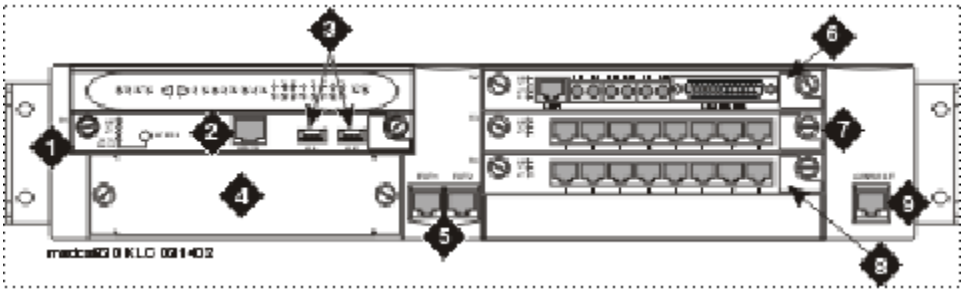

Figure 35: G700 LED Panel Location

Number	Description
1	Media module Slot #1 (V1)
2	S8300D Services Port. This port is used with cross-over ethernet cable.

Number	Description
3	S8300D USB Series Modem connection
4	Avaya Expansion Module Slot
5	10/100 BaseT Ethernet Ports (EXT1, EXT2)
6	Media module Slot #2 (V2)
7	Media module Slot #3 (V3)
8	Media module Slot #4 (V4)
9	Console Interface. Use this with serial cable.

The figure on page 63 shows an expanded view of the G700 LED panel.

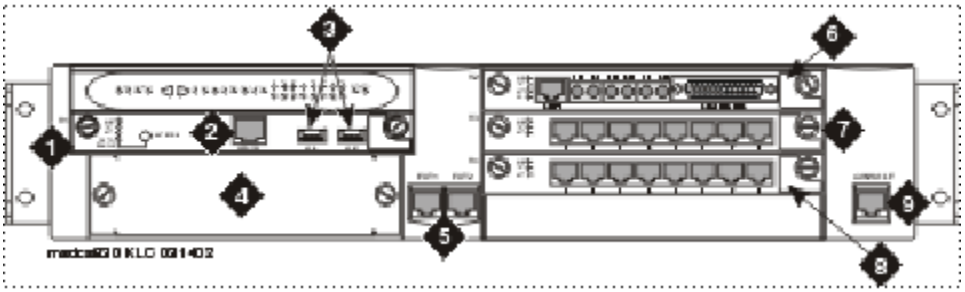

Figure 36: G700 LED Panel

Number	Description
1	Media module Slot #1 (V1)
2	S8300D Services Port. This port is used with cross-over ethernet cable.
3	S8300D USB Series Modem connection
4	Avaya Expansion Module Slot
5	10/100 BaseT Ethernet Ports (EXT1, EXT2)
6	Media module Slot #2 (V2)
7	Media module Slot #3 (V3)
8	Media module Slot #4 (V4)
9	Console Interface. Use this with serial cable.

G700 front panel LEDs

The front panel includes the following LEDs as shown in the figure on page 64:

- Four LEDs in the Voice or Data Module zone: ALM, PWR, CPU, MSTR.
- 16 LEDs representing the Data Ports associated with the Personality Module or Data Expansion Ports
- Eight LEDs in the Data Function zone: LNK, COL, Tx, Rx, FDX, FC, Hspd, LAG.
- 2 LEDs for two 10/100 Mb data ports on the chassis. The LEDs are EXT 1 and EXT 2

Figure 37: G700 Front Panel LEDs

The bottom G700 in a stack of ten G700s with the same version firmware is always elected master, therefore, its MSTR LED is lit. If the firmware versions are not the same, the G700 with the latest firmware version is elected master and its MSTR LED is lit. If there is only one G700 in a stack, its MSTR LED is always lit.

Navigation using the front panel LEDs

Navigation using the front panel LEDs on the G700 is the same as that of the Avaya P330 series. For more information, see *Avaya P333T Stackable Switch Software, Version 3.12*. For example, arrow keys can be used to move left and right between the LEDs to check the following:

- LNK (link)
- Col (collision)
- Tx (send)
- Rx (receive)

In addition, the status of the ports can be queried using 51-66 in the LED panel.

Use the push buttons provided on the right and left of data mode LEDs for selecting the function to be reported simultaneously by all 16 of the Port data expansion LEDs. The function selected is indicated by a lit LED in that Function zone. Each time the right or left push button is pressed, the function currently lit moves by one position to the right or to the left accordingly.

For example, if the COL LED is lit, all 16 Ports associated with the data expansion module LEDs report the collision status of their respective port. To select the LAG function, press 6 times on the right push-button. Afterwards, to select the Rx function, press 4 times on the left push-button.

For the G700, the LEDs display the information of ports 2 External 10/100Base-T Ethernet links and data expansion ports 51-66. When power is turned on, the LEDs indicate the Link status of ports 51-66, EXT 1, and EXT 2. Push the right button once to move the indication to

Collision status of ports 51-66, EXT 1, and EXT 2. Push the left button to move the indication backwards.

Note:

Eight pushes in one direction complete a full cycle of display.

If the right and the left push buttons are pushed simultaneously for:

- 1.5 seconds: The module resets the Layer 2 Switching Processor but not the gateway Processor.
- 4 seconds: The whole stack resets and performs slot renumbering.
- 18 seconds: The module enters the debug mode and the module is disabled for data traffic.

Note:

Currently, there is no physical button or sequence of button presses defined to reset the gateway Processor or G700. Perform software resets by using the Command Line Interface (CLI) for the Device Manager of the G700.

Red ALM or alarm LED

The red ALM or Alarm LED is in the top left corner of the LED panel next to other important system LEDs such as PWR, CPU, MSTR, as shown in Figure 37: G700 Front Panel LEDs on page 64. The presence of this red ALM LED is primarily for on-site service technicians or dispatches. Most major G700 components that the motherboard controls can cause the failure, for example, the VoIP Media Module but not other media modules.

Note:

The red ALM LED lights for motherboard problems only. Check for a red ALM LED for problematic G700s. Also check all of the media module LEDs for any media module-specific red ALM LEDs.

Note:

If the red ALM LED is lit on a non-VoIP media module, check the G700 alarm screens and the Communication Manager alarm screens to determine to determine the source of the fault.

The red ALM LED indicates the condition of the G700 by turning on under two distinct circumstances:

- G700 hardware failure
  - Impaired functions of the Layer 2 Switching Processor, gateway processor, or VoIP engine

- Power supply voltage out of bounds
- Unit overheating

• The G700 communication failure

The following are a few examples:

• The red ALM LED is lit when two or more fans have failed.

Various warnings, alarms, and a graceful shutdown are performed based on the fan and thermal sensor conditions.

• The red ALM LED is lit from the time power is applied until diagnostics end.

• The red ALM LED turns “OFF” when:

- Physical conditions such as temperature are rectified and return to normal or acceptable operating ranges.
- The alarm is cleared manually.

EXT 1 LED

EXT 1 LED is displayed on the LED Panel (Figure 37: G700 Front Panel LEDs on page 64), which reports the status of the first 10/100 MB/sec port. These LEDs report the 8 different functional statuses dictated by the left and right arrow buttons.

EXT 2 LED

EXT 2 LED is displayed on the LED Panel (Figure 37: G700 Front Panel LEDs on page 64), which reports the status of the second 10/100 MB/sec port. These LEDs report the 8 different functional statuses dictated by the left and right arrow buttons.

G700 LED panel definitions

The table on page 66 illustrates the LED definitions for the G700 LED Panel.

Table 18: LED Definitions

Number	LED name	Description	LED states
1	ALM	Alarm Status RED	OFF: No alarms exist. ON: Alarm exists on the chassis itself.
2	PWR	Power Status GREEN	OFF: Power is down. ON: Power is up. Blinking: Every 1.2 seconds (400ms on, 800ms off) when 5 volts power is not

Number	LED name	Description	LED states
			available to the riser board and the media modules.
3	CPU	CPU Operation GREEN	OFF: CPU is in boot operation or is running BIST ON: CPU boot operation and BIST completed.
4	MSTR	Master/Slave StatusGREEN	OFF: Slave box of the stack. ON: Master of the stack and redundant cable is not present or not active. One Blink every 1.5 sec: Master of the stack and active redundant cable.
5 a	LNK port 51-66, Ext 1-2	Port Status GREEN	OFF: Port disabled or not existent. At phase 1, or link fail of Giga ports. ON: Port is enabled and link is OK. 1 Blink every 1.5 sec: Link test fail (of 10/100M ports only at phase 1) 2 Blinks every 1.5 sec: Partition.
5 b	COLPort 51-66, Ext 1-2	CollisionGREEN	OFF: No collision or FDX port. ON: Collision occurred on line.
5 c	Tx Port 51-66, Ext 1-2	Transmit to lineGREEN	OFF: No transmit activity. ON: Data transmitted on line.
5 d	RxPort 55-66, Ext 1-2	Receive from lineGREEN	OFF: To receive activity. ON: Data received from the line.
5 e	FDX Port 51-66, Ext 1-2	Half/Full DuplexGREEN	OFF: Half Duplex mode of operation. ON: Full Duplex mode of operation, or for 10/100Base-T ports when link test fail with auto-negotiation enabled.
5 f	FC* Port 51-66, Ext 1-2	Symmetric Flow ControlGREEN	OFF: Port is in Asymmetric Flow control mode, or in Flow Control mode disabled, or it is in half duplex. ON: Port is in full duplex and in a symmetric Flow Control mode.
5 g	HSpdPort 51-66, Ext 1-2	High SpeedGREEN	OFF: 10Base-T or for an expansion port that does not exist. ON: 100Base-T, 100Base-F, 1000Base-X, and OC-12, or for 10/100Base-T ports when link test fail with auto-negotiation enabled.
5 h	LAGPort 51-66, Ext 1-2	Link Aggregation TrunkingGREEN	OFF: No LAG defined with this port. ON: Port belongs to a LAG.
6	Data	16 data expansion ports 51-66GREEN	OFF: See notes on No. 5 a-h. ON: See notes on No. 5 a-h.

Number	LED name	Description	LED states
7	EXT 1	RJ 45 to Non-Avaya equipmentGREEN	OFF: See notes on No. 5 a-h. ON: See notes on No. 5 a-h.
8	EXT 2	RJ 45 to Non-Avaya equipmentGREEN	OFF: See notes on No. 5 a-h. ON: See notes on No. 5 a-h.
* For Giga ports, when auto-negotiation is enabled and the link is down, FC LED reflects the last mode If the user resets the module or stack, all LEDs of the modules or stacks turn on the test lamp for 150 ms. The COL, Tx, and Rx LED signals must be on for at least 150 ms.			

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