

# Service

## HiPath 4000 Troubleshooting

Service Manual

A31003-H3130-S100-4-7620

[www.siemens.com/enterprise](http://www.siemens.com/enterprise)

**SIEMENS**

Copyright © Siemens Enterprise Communications GmbH & Co. KG 2008  
Hofmannstr. 51, D-81359 München

Reference No.: A31003-H3130-S100-4-7620

The information provided in this document contains merely general descriptions or characteristics of performance which in case of actual use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract. Subject to availability. Right of modification reserved. The trademarks used are owned by Siemens Enterprise Communications GmbH & Co. KG or their respective owners.

## **F8000**

**A9000 -- F1000 -- F2000 -- F3000 -- F4000 -- F5000 -- F6000 -- F7000 -- F8000**

**F8000**

**F8001**

**F8010**

**F8011**

**F8012**

**F8013**

**F8014**

**F8015**

**F8016**

**F8017**

**F8018**

**F8019**

**F8020**

**F8021**

**F8022**

**F8023**

**F8024**

**F8025**

**F8026**

**F8027**

**F8028**

**F8029**

**F8030**

**F8100**

**F8101**

**F8102**

**F8103**

**F8104**

**F8105**

**F8106**

**F8107**

**F8120**

**F8121**

**F8203**

**F8204**

**F8205**

**F8250**

**F8251**

**F8252**

**F8253**

**F8254**

**F8255**

**F8256**  
**F8257**  
**F8258**  
**F8259**  
**F8260**  
**F8261**  
**F8262**  
**F8263**  
**F8264**  
**F8265**  
**F8266**  
**F8267**  
**F8268**  
**F8269**  
**F8270**  
**F8271**  
**F8272**  
**F8273**  
**F8274**  
**F8275**  
**F8276**  
**F8277**  
**F8278**  
**F8279**  
**F8280**  
**F8281**  
**F8282**  
**F8283**  
**F8284**  
**F8285**  
**F8286**  
**F8287**  
**F8288**  
**F8289**  
**F8290**  
**F8291**  
**F8292**  
**F8293**  
**F8294**  
**F8300**  
**F8301**  
**F8302**  
**F8303**  
**F8304**

**F8305**  
**F8306**  
**F8307**  
**F8320**  
**F8321**  
**F8384**  
**F8385**  
**F8386**  
**F8387**  
**F8388**  
**F8500**  
**F8501**  
**F8502**



**F8000**  
**CO-LINE**  
**SWITCHED**

*Type:*

Service-specific (Format 00)

*Short text:*

Trunk failure transfer ON

*Cause:*

Trunk failure transfer (TFT/ALUM relay) switched.

*Action:*

Determine reason for trunk failure transfer (e.g. power failure).

**F8001**  
**CO-LINE**  
**SWITCHED BACK**

*Type:* Service-specific (Format 00)

*Short text:* Trunk failure transfer OFF

*Cause:* Trunk failure transfer (TFT/ALUM relay) switched back. See also [F8000](#).

*Action:* Positive acknowledgment, no action.



**F8010**  
**POW FAIL**  
**START**

*Type:*

Service-specific (Format 00)

*Short text:*

Start of power failure

*Cause:*

Start of power failure.

*Action:*

Transfer from AC power supply to battery.

**F8011**  
**POW FAIL**  
**END**

*Type:* Service-specific (Format 00)

*Short text:* End of power failure

*Cause:* End of power failure.

*Action:* Transfer from battery to AC power supply.

**F8012**  
**POW FAIL**  
**CONVERTER ON**

*Type:*

Service-specific (Format 00)

*Short text:*

Converter back in operation

*Cause:*

Converter back in operation (e.g. DCIRA inverter).

*Action:*

Positive acknowledgment of [F8013](#).

**F8013**  
**POW FAIL**  
**CONVERTER OFF**

*Type:* Service-specific (Format 00)

*Short text:* Converter out of service

*Cause:* Converter is not operating (e.g. device switched off or 48V output not supplied).

*Action:* A 24-pin interface for monitoring and control equipment can be found on the front panel of the DCIRA. Check that the positive acknowledgment with [F8012](#) is output. Check whether the converter is switched on or whether the 48V output has failed.

**F8014**  
**POW FAIL**  
**POWER FAIL CC ON**

*Type:* Service-specific (Format 00)

*Short text:* Failure of PSU in CC shelf

*Cause:* At least one power supply unit in the CC shelf has failed.

*Action:* Replace defective power supply unit.

**F8015****POW FAIL****POWER FAIL CC OFF**

*Type:* Service-specific (Format 00)

*Short text:* PSUs in CC shelf in operation

*Cause:* All power supply units in the CC shelf are operational again.

*Action:* Positive acknowledgment, no action.

## **F8016**

### **POW FAIL**

#### **POWER FAIL LTUE ON**

*Type:* Service-specific (Format 00)

*Short text:* LTUE power converter failure

*Cause:* At least one LTUE power supply unit has failed.

*Action:* Replace defective power supply unit.

**F8017**  
**POW FAIL**  
**POWER FAIL LTUE OFF**

*Type:* Service-specific (Format 00)  
*Short text:* End of LTUE power converter failure  
*Cause:* All LTUE power supply units are operational again.  
*Action:* Positive acknowledgment, no action.



**F8018**  
**POW FAIL**  
**POWER FAIL LTU ON**

*Type:* Service-specific (Format 00)  
*Short text:* LTU power converter failure  
*Cause:* At least one LTU power supply unit has failed.  
*Action:* Replace defective power supply unit.

**F8019****POW FAIL****POWER FAIL LTU OFF**

*Type:* Service-specific (Format 00)

*Short text:* End of LTU power converter failure

*Cause:* All LTU power supply units are operational again.

*Action:* Positive acknowledgment, no action.

**F8020**  
**POW FAIL**  
**BATT MGR CARD FAILED**

*Type:* Service-specific (Format 00)

*Short text:* Hardware error

*Cause:* Error in the HW for monitoring the AC/DC power supply.

*Action:* Check battery undervoltage monitor. Replace defective units.

**F8021**  
**POW FAIL**  
**BATT MGR CARD OK**

*Type:* Service-specific (Format 00)

*Short text:* Hardware okay

*Cause:* The HW for monitoring the AC/DC power supply is operational again.

*Action:* Positive acknowledgment, no action.

**F8022****POW FAIL****BATTERY DOWN AC/DC SYS*****Type:***

Service-specific (Format 00)

***Short text:***

No battery power left

***Cause:***

The mains power has failed and the battery capacity will end in 1 minute.

***Action:***

Remove cause of power failure (e.g. switch on power supply unit, check/reset fuse).

**F8023**  
**POW FAIL**  
**START AC/DC SYS**

*Type:* Service-relevant (Format 00)

*Short text:* Power supply failure

*Cause:* Power failure in an AC/DC system.

*Action:* The system switches from the power-supply unit to a battery (if available). Determine the cause of the power failure and report the fault to the responsible power-supply company if required.

Please follow the battery operating and maintenance instructions supplied by the battery vendor.

**F8024**  
**POW FAIL**  
**END AC/DC SYS**

*Type:*

Service-specific (Format 00)

*Short text:*

Power supply functional again

*Cause:*

The failed power supply in an AC/DC system is fully operational again.

*Action:*

Switch back from battery operation to power supply unit.

**F8025**  
**POW FAIL**  
**REDUND LOSS AC/DC SYS**

*Type:* Service-specific (Format 00)

*Short text:* Mains converter failure

*Cause:* A power supply unit failed in a redundant AC/DC system.

*Action:* Check converter and replace if necessary.



**F8026****POW FAIL****REDUND BACK AC/DC SYS**

*Type:* Service-specific (Format 00)

*Short text:* Power supply functional again

*Cause:* The failed power supply in a redundant AC/DC system is operational again.

*Action:* Positive acknowledgment, no action.

**F8027**  
**POW FAIL**  
**START DC/DC SYS**

*Type:* Service-specific (Format 00)

*Short text:* DC/DC converter failure

*Cause:* The power supply units in a DC/DC system have failed.

*Action:* Switch to battery operation, if available.

**F8028**  
**POW FAIL**  
**END DC/DC SYS**

*Type:*

Service-specific (Format 00)

*Short text:*

Power supply functional again

*Cause:*

The power supply in a DC/DC system is fully operational again.

*Action:*

Switch back from battery operation to power supply unit.

**F8029****POW FAIL****REDUND LOSS DC/DC SYS**

*Type:* Service-specific (Format 00)

*Short text:* DC/DC converter failure

*Cause:* A power supply unit has failed in a redundant DC/DC system.

*Action:* Check converter and replace if necessary.

**F8030****POW FAIL****REDUND BACK DC/DC SYS**

*Type:* Service-specific (Format 00)

*Short text:* Power supply functional again

*Cause:* The failed power supply in a redundant DC/DC system is operational again.

*Action:* Positive acknowledgment, no action.

**F8100**  
**TIMEDAT**  
**VALID**

*Type:*

Service-specific (Format 00)

*Short text:*

Time is set

*Cause:*

Valid time is now set

*Action:*

Positive acknowledgment, no action.

**F8101**  
**TIMEDAT**  
**NOT VALID**

*Type:*

Service-specific (Format 00)

*Short text:*

Time invalid

*Cause:*

Set time is not valid.

*Action:*

Set with DATE AMO.

**F8102**  
**TIMEDAT**  
**NOT READY**

*Type:* Service-specific (Format 00)

*Short text:* System clock not ready

*Cause:* System clock is not operating.

*Action:* Check the operating mode selection switches on the board which contains the system clock (IOPAX / DM80).



**F8103**  
**TIMEDAT**  
**READY**

*Type:*

Service-specific (Format 00)

*Short text:*

System clock ready

*Cause:*

System clock is ready for operation once more.

*Action:*

Positive acknowledgment, no action.

**F8104****TIMEDAT****BATTERIE POWER FAILURE**

*Type:* Service-specific (Format 00)

*Short text:* Clock power failure

*Cause:* Failure of power supply of system clock component.

*Action:* Check power supply / support battery of clock component on the board  
IOPAX / DM80. Replace the board if necessary.

**F8105**  
**TIMEDAT**  
**BATTERIE POWER ON**

*Type:* Service-specific (Format 00)  
*Short text:* Clock power okay  
*Cause:* Power supply of clock component okay again.  
*Action:* Positive acknowledgment, no action.

**F8106****TIMEDAT****BATTERIE SWITCHED OFF**

*Type:* Service-specific (Format 00)

*Short text:* Clock battery switch off

*Cause:* System clock component switched off.

*Action:* Switch component back on with DIL switch on the board IOPAX / DM80.

## **F8107**

### **TIMEDAT**

#### **BATTERIE SWITCHED ON**

*Type:* Service-specific (Format 00)

*Short text:* Clock battery switch okay

*Cause:* System clock component is switched on.

*Action:* Positive acknowledgment, no action.

## **F8120 TIMEOUT IDLE LEVEL TASK**

**Type:** Service-specific

**Short text:** Timeout of idle level task monitoring (from SP300-EV2.0)

**Cause:** Endless loop in low-priority tasks

Tasks which are not monitored by the watchdog due to their low priority, are monitored by an error analysis task. The error analysis utility is set to the value 5 hours every 10 minutes. If one of the low-priority tasks is not addressed during a period of 5 hours, an idle level task timeout is triggered.

This error may also be due to an endless loop in the call processing task which triggers watchdog 1.

**Action:** Save diagnosis data. contact your [next level of support](#) and analyze the error. A soft restart should then be triggered manually. If this is not done within 10 hours, a soft restart is triggered automatically and diagnosis data may be lost.

### ***Interpretation of auxiliary data:***

Up to 5 stack messages are output first followed by the actual task information message. The number of task information messages output is restricted to 10.

This applies to tasks waiting for the nucleus region and tasks in the ready queue. The tasks in the ready queue are output according to increasing priority values.

However, the cause of the error must be determined from the interaction of the different tasks.

Meaning of the individual fields:

PROC Physical processor number, not used

CELL PHYS Not used

NMI LOG ADDR Not used

NMI LOG STACK Not used

NMI PHYS ADDR Not used

NMI PHYS STACK Not used

TASK START ADDR Start address of the task or FFFFH:FFFFH

STATIC PRIO Statistical task priority allocated by the user

DYNAMIC PRIO Dynamic task priority allocated by the OS

'READY' Task name

BP, IP, CS, FLAG No meaning here

Other auxiliary data 28 byte internal OS data

MESSAGE-ID All error messages that belong to a single event, have the same message ID.

See also, the section entitled "Interpretation of Stack data".

## **F8121 TIMEOUT JOB TABLE END**

**Type:** Diagnosis-relevant (Format 28)  
**Short text:** End JOTA Timer process (as of SP300E-V3.0/R6.6)  
**Cause:** Job Table processing aborted.

At system startup, the Init tasks of all existing subsystems are started according to the Job Table sequence. This startup is monitored by the JOTA timer. If one of these tasks blocks JOTA processing, the timer expires. Error analysis then identifies the last active job, signals stack and task information and then triggers a hard restart.

**System reaction:** Hard restart

**Action:** Save diagnostic data, Notify the product specialist and analyze fault.

### **Interpretation of auxiliary data:**

First up to 10 stack messages are output, followed by the task information message itself. The task information message contains information concerning the Init task of the job which was last created during Job Table processing. (Information concerning the Init task is also located in the configuration module of the corresponding subsystem).

Meaning of individual fields:

PROC	Physical processor number, is not used
CELL PHYS	Is not used
NMI LOG ADDR	Is not used
NMI LOG STACK	Is not used
NMI PHYS ADDR	Is not used
NMI PHYS STACK	Is not used
TASK START ADDR	Start address of Init task
STATIC PRIO	Static task priority, assigned by the user
DYNAMIC PRIO	Dynamic task priority, assigned by the OS
STATIC and DYNAMIC PRIO	At an earlier stage during startup can also contain the value "Creation Priority". Name of subsystem where the Init task is blocked by JOTA
BP, IP, CS, FLAG, additional 28 bytes of additional data	Not relevant here
MESSAGE-ID	All error messages belonging to an event have the same message ID value.

Refer also to the section [SW/Interrupt/Stack message interpretation](#).

**F8203**  
**SYSLOAD**  
**FWLP ERROR**

**Type:** Service-specific (Format 17H)

**Short text:** Error during QDCL loading

**Cause:** This message is generated by Sysload if errors occur when loading the central I/O processor card QDCL.

Errors can be the result of a defective QDCL card, or of missing or damaged LW files in the APSC/ directory. This directory contains the file CBGDAT00, which specifies the associated general data for the firmware load process (FWLP).

**Action:** Subdirectory APSC/CLW contains the files to be loaded onto the QDCL card. If errors occur, replace the QDCL card or the files in APSC/ and APSC/CLW!

**Interpretation of auxiliary data:** Please supply the following auxiliary data to the developer if above measures do not clear the error:

STATE: X ERROR: Y

where X-, Y-specific FWLP error codes are in the range 0H - FH.

X indicates the position in the FWLP code where the error occurred.

Y indicates the type of error.



**F8204**  
**SYSLOAD**  
**ADVISORY**

*Type:* Diagnosis-specific (Format 17)  
*Short text:* Sysload advisory message  
*Cause:* Plain text advisory message output by sysload.

Example: SAVE POOL INITIALIZED.

Consistency check of SAVE POOL following a restart. If errors are detected, the SAVE POOL is re-initialized and its original contents are lost, which makes the advisory message relevant for diagnosis in some cases.

*Action:* No action necessary.

## **F8205**

### **SYSLOAD**

#### **INFO TEMPORARY SUSY**

**Type:** Diagnosis-specific (Format 17)

**Short text:** Error in temporary subsystem

**Cause:** User exception error caused by temporary subsystem. The auxiliary data indicates the selector and limit of the data and code segments of the subsystem concerned.

**Action:** Save error message data and contact your [next level of support](#).

**Interpretation of auxiliary data:**

The first line under the format output contains the name of the temporary subsystem. This is followed by max. two additional lines consisting of 4-byte blocks. The first word contains the selector of the code or data segment concerned, and the second word contains the appropriate limit. The subsystem mapping function allows you to search for the module which wrote the segment at the time of the error, since the selectors are uniquely assigned to the module names.

## **F8250**

### **TRANSSYS**

#### **ETH PCNET32 DEFECT**

*Type:* Service-specific (Format 3C)

*Short text:* (Re-)initialization of ETHERNET controller failed

*Cause:* Initialization or reinitialization of the ETHERNET controller by the ETHERNET driver was unsuccessful

*Action:* Replace board

**F8251**  
**TRANSSYS**  
**ETH MEM ALLOC ERROR**

*Type:* Service-specific (Format 3B)  
*Short text:* Memory shortage  
*Cause:* Insufficient memory to initialize the ETHERNET driver  
*Action:* Reconfigure memory layout, exit applications.

## **F8252**

### **TRANSSYS**

#### **ETH DRV INTERNAL ERROR**

*Type:* Diagnosis-specific (Format 3B)

*Short text:* Inconsistent data

*Cause:* The ETHERNET driver has detected internal data inconsistencies (software error).

*Action:* If error occurs repeatedly, save the error message data and contact your next level of support.

## **F8253**

### **TRANSSYS**

#### **ETH DRV IP IFACE ERROR**

*Type:* Diagnosis-specific (Format 3B)

*Short text:* TCP/IP socket error

*Cause:* Error at the interface between the ETHERNET driver and the IP part of the TCP/IP (software error).

*Action:* If error occurs repeatedly, save the error message data and contact your next level of support.

## **F8254**

### **TRANSSYS**

#### **ETH DRV CHIP IFACE ERR**

*Type:* Service-specific (Format 3C)

*Short text:* Interface error

*Cause:* Error at the interface between the ETHERNET driver and the ETHERNET controller (chip)

*Action:* Reset or replace board.

## **F8255**

### **TRANSSYS**

#### **ETH PCNET32 ALARMS**

*Type:* Diagnosis relevant (Format 3C)  
*Short text:* Atlantic LAN ETHERNET controller message  
*Cause:* The Atlantic LAN ETHERNET controller (chip) detected an overload.  
*System reaction:* None.  
*Action:* If this error message occurs frequently, save the error message data and contact your [next level of support](#).



**F8256**  
**TRANSSYS**  
**ETH DRV ALARMS**

*Type:* Diagnosis relevant (Format 3B)

*Short text:* Atlantic LAN ETHERNET driver message

*Cause:* The Atlantic LAN ETHERNET driver has detected an overload.

*System reaction:* None.

*Action:* If this error message occurs frequently, save the error message data and contact your [next level of support](#).

**F8257**  
**TRANSSYS**  
**ETH LINK DOWN**

*Type:* Service-specific (Format 3C)

*Short text:* Controller disconnected

*Cause:* The ETHERNET controller detected that it is no longer connected to the ETHERNET.

*Action:* Check whether: HUBC is defective, ETHERNET is cable defective or missing, ETHERNET partner is disconnected, ETHERNET controller is defective

**F8258**  
**TRANSSYS**  
**ETH LINK AGAIN**

*Type:*

Service-specific (Format 3C)

*Short text:*

Controller connected again

*Cause:*

The "TRANSSYS ETH LINK DOWN" ([F8257](#)) error has been cleared.

*Action:*

Positive acknowledgment, no action.

## **F8259**

### **TRANSSYS**

#### **TCP SUSY ERROR FATAL**

*Type:* Diagnosis-specific (Format 3B)

*Short text:* TCP subsystem error

*Cause:* Error in the TCP subsystem (ZOLTCP00) that prevents further functioning of the TCP/IP software (software error).

*Action:* If error occurs repeatedly, save the error message data and contact your next level of support.

## **F8260**

### **TRANSSYS**

#### **TCP SUSY ERROR WARNING**

**Type:** Diagnosis-specific (Format 3B)

**Short text:** TCP subsystem error

**Cause:** Error in the TCP subsystem (ZOLTCP00) that does not prevent further functioning of the TCP/IP software. This error must be analyzed (software error).

**Action:** Error must be analyzed (software error)! Save error message data and contact your [next level of support](#).

## **F8261**

### **TRANSSYS**

#### **TCP SUSY ERROR INFO**

*Type:* Diagnosis-specific (Format 3B)

*Short text:* TCP subsystem analysis

*Cause:* Information for analyzing an error in the TCP subsystem (ZOLTCP00).  
The TCP/IP software is functioning again.

*Action:* Error must be analyzed (software error)! Save error message data and contact your [next level of support](#).

## **F8262**

### **TRANSSYS**

#### **TCP SUSY ERROR DEBUG**

*Type:* Diagnosis-specific (Format 3B)

*Short text:* TCP subsystem analysis

*Cause:* Information for analyzing an error in the TCP subsystem (ZOLTCP00).  
The TCP/IP software is functioning again.

*Action:* Error must be analyzed (software error)! Save error message data and contact your [next level of support](#).

**F8263****TRANSSYS****TCP START UP COMPLETE**

*Type:* Service-specific

*Short text:* Not signaled

*Cause:* Not signaled

*Action:* If error occurs repeatedly, save the error message data and contact your next level of support.



**F8264**  
**TRANSSYS**  
**ON CONN WITH BOOT**

*Type:* Service-specific

*Short text:* Not signaled

*Cause:* Not signaled

*Action:* If error occurs repeatedly, save the error message data and contact your  
next level of support.

**F8265**  
**TRANSSYS**  
**ON CONN LOSS BOOT**

*Type:* Service-specific

*Short text:* Not signaled

*Cause:* Not signaled

*Action:* If error occurs repeatedly, save the error message data and contact your  
next level of support.

**F8266**  
**TRANSSYS**  
**ON CONN LOSS OS**

*Type:* Service-specific (Format 3C)

*Short text:* Connection interrupted

*Cause:* Connection broken between ADP and CC or between two CCs. Restart or power failure of an RMX processor.

*Action:* Determine reason for restart or remove cause of power failure.

**F8267**  
**TRANSSYS**  
**ON CONN OS NEW**

*Type:* Service-specific (Format 3C)

*Short text:* Partner processor connection okay again

*Cause:* The error [F8266](#) has been cleared, i.e., the partner processor can be reached via the RMX-OS again.

*Action:* Positive acknowledgment, no action.

**F8268**  
**TRANSSYS**  
**ON CONN OS AGAIN**

**Type:** Service-specific (Format 3C)

**Short text:** Connection to partner processor restored

**Cause:** The OS detected that the connection to a partner processor (CC or ADP) has been restored without the partner having been started up again.

**Action:** To prevent data inconsistencies, a partner restart is necessary (possible loss of connection in ETHERNET; see [F8257](#)).

**F8269**  
**TRANSSYS**  
**ON CONN REJECTED**

*Type:* Service-specific (Format 3C)

*Short text:* Wrong IP address

*Cause:* Processor on the ETHERNET with an invalid IP address (e.g., UNIX PC attempted to set up connection to RMX-OS, i.e., it used the reserved combination of IP address and TCP port number of the RMX-OS for connection setup)

*Action:* Partner processor on the ETHERNET must be reconfigured or switched off.

## **F8270**

### **TRANSSYS**

#### **ON UNEXP TPI RET CODE**

*Type:* Diagnosis-specific (Format 3B)

*Short text:* Unexpected return code

*Cause:* OS received an unexpected return code when calling TCP (-> software error).

*Action:* If error occurs repeatedly, save the error message data and contact your next level of support.

**F8271**  
**TRANSSYS**  
**ON UNEXP TPI MSG**

*Type:* Diagnosis-specific (Format 3B)

*Short text:* Unexpected message

*Cause:* OS received an unexpected message from TCP (software error).

*Action:* If error occurs repeatedly, save the error message data and contact your  
next level of support.



## **F8272**

### **TRANSSYS**

#### **PARTNER NOT AVAILABLE**

*Type:* Service-specific (Format 3C)

*Short text:* Partner processor not available

*Cause:* While a processor is booting, it becomes apparent that the connection to a partner processor cannot be set up. This may be due to a power failure or the restarting of a partner processor.

*Action:* Find out why the connection could not be set up or restore the power supply.

**F8273**  
**TRANSSYS**  
**ETH DRV STATISTICS**

*Type:* Diagnosis relevant  
*Short text:* LAN-specific statistics data.  
*Cause:* The LAN ETHERNET driver outputs statistics data.  
*System reaction:* None.  
*Action:* No measure required.

(Format 3B)

**F8274**  
**TRANSSYS**  
**ETH LS DEFECT**

*Type:* Service relevant (Format 3C)

*Short text:* Re-/Initialization of second LAN ETHERNET controller unsuccessful.

*Cause:* Initialization or re-initialization of the second LAN ETHERNET controller by the second LAN ETHERNET driver was unsuccessful.

*System reaction:* The hardware is restarted when the error message initially appears. The second LAN is blocked if this message is repeated.

*Action:* Replace the board.

**F8275****TRANSSYS****ETH LS MEM ALLOC ERROR**

*Type:* Diagnosis relevant (Format 3B)

*Short text:* Insufficient memory.

*Cause:* There is insufficient memory available in the TCP subsystem to initialize the second LAN ETHERNET driver (internal TCP error).

*System reaction:* A software restart is initiated.

*Action:* Save error message data and contact your [next level of support](#).

**F8276****TRANSSYS****ETH LS DRV INTERN ERR**

*Type:* Diagnosis relevant (Format 3B)

*Short text:* Data inconsistencies.

*Cause:* The second LAN ETHERNET driver detected internal data inconsistencies (software error).

*System reaction:* A software restart is initiated.

*Action:* If this error message appears frequently, save the error message data and contact your [next level of support](#).

**F8277****TRANSSYS****ETH LS DRV IP IF ERR**

*Type:* Diagnosis relevant (Format 3B)

*Short text:* Interface error.

*Cause:* Error on the interface between the second LAN ETHERNET driver and the IP component of TCP/IP.

*System reaction:* A software restart is initiated.

*Action:* If this error message appears frequently, save the error message data and contact your [next level of support](#).

## **F8278**

### **TRANSSYS**

#### **ETH LS DRV CHIP IF ERR**

*Type:* Service relevant (Format 3C)

*Short text:* Interface error.

*Cause:* Error on the interface between the second LAN ETHERNET driver and the second LAN ETHERNET controller (chip).

*System reaction:* This error is statistically evaluated. A hardware restart is initiated if this error appears too frequently.

*Action:* If this error message appears frequently, save the error message data and contact your [next level of support](#).

**F8279****TRANSSYS****ETH LS CHIP ALARMS**

*Type:* Diagnosis relevant (Format 3C)

*Short text:* Advisory information from second LAN ETHERNET controller.

*Cause:* The second LAN ETHERNET controller (chip) detected an overload.

*System reaction:* None.

*Action:* If this error message appears frequently, save the error message data and contact your [next level of support](#).



## **F8280**

### **TRANSSYS**

#### **ETH LS DRV ALARMS**

*Type:* Diagnosis relevant (Format 3B)

*Short text:* Advisory information from the second LAN ETHERNET driver.

*Cause:* The second LAN ETHERNET driver detected an overload.

*System reaction:* None.

*Action:* If this error message appears frequently, save the error message data and contact your [next level of support](#).

**F8281**  
**TRANSSYS**  
**ETH LS LINK DOWN**

*Type:* Service relevant (Format 3C)

*Short text:* Controller disconnected by second LAN ETHERNET.

*Cause:* The second LAN ETHERNET controller detected that it has been disconnected from the second LAN ETHERNET.

*System reaction:* This does not prompt a response if mono and simplex dual systems are used. If duplex dual systems are used, this prompts a switching process if this error is not present in the standby processor.

*Action:* Check whether the second LAN ETHERNET cable is defective or missing, whether the second LAN ETHERNET partner (HUB, switch, router, ...) was deactivated or whether the second LAN ETHERNET controller is defective.

**F8282**  
**TRANSSYS**  
**ETH LS LINK AGAIN**

*Type:* Service relevant (Format 3C)  
*Short text:* Error eliminated.  
*Cause:* The TRANSSYS ETH SL LINK DOWN ([F8281](#)) error has been eliminated.  
*System reaction:* None.  
*Action:* Positive acknowledgment; no measure, therefore, required.

**F8283**  
**TRANSSYS**  
**ETH LS DRV STATISTICS**

<i>Type:</i>	Diagnosis relevant	(Format 3B)
<i>Short text:</i>	Second LAN-specific statistics data.	
<i>Cause:</i>	The second LAN ETHERNET driver outputs statistics data.	
<i>System reaction:</i>	None.	
<i>Action:</i>	No measure required.	

**F8284**  
**TRANSSYS**  
**ETH LS INIT ERROR**

**Type:** Service-specific (Format 42)

**Short text:** Second LAN module SL100/SL200 initialization error

**Cause:** The SL100/SL200 module could not be initialized because

1. the Second LAN has not been configured with AMO SIPCO,
2. in a mono system an SL100 module is plugged instead of an SL200 module,
3. the SL100/SL200 module has already been initialized once,
4. the SL100/SL200 module initialization failed.

**System reaction:** The AP shelves are not taken into service.

**Action:** Check whether the Second LAN is configured (AMO SIPCO). In a monosystem verify that an SL200 module is plugged. If the SL100/SL200 module is already initialized, a restart is necessary to reinitialize the SL100/SL200 module with new configuration data. If the initialization failed, check whether the SL100/SL200 module is plugged and connected with the Second LAN. If that does not work, replace the SL100/SL200 module.

## **F8285**

### **TRANSSYS**

#### **ETH LS SURVIVAL PATH**

**Type:** Service-specific (Format 0)

**Short text:** Signaling connection with AP switched to survivability path.

**Cause:** The route of the signaling connection with an AP shelf has been changed to the survivability path (ISDN), because the supervisory connection with the AP shelf via the primary path (LAN) has been lost.

**System reaction:** All signaling messages are sent over the survivability path. Payload connections are not available over the survivability path between Hicom Host System and AP shelf.

**Action:** Check the LAN connection between Hicom Host System and AP shelf (LAN cables, HUBs, routers, ...). Negative acknowledgment of [F8286](#).

## **F8286**

### **TRANSSYS**

#### **ETH LS PRIMARY PATH**

**Type:** Service-specific (Format 0)

**Short text:** Signaling connection with AP switched back to primary path.

**Cause:** The route of the signaling connection with an AP shelf has been changed back from the survivability path (ISDN) to the primary path (LAN), because the supervisory connection with the AP shelf via the primary path (LAN) has been established again.

**System reaction:** All signaling messages are sent again over the primary path. Payload connections are again available over the primary path between Hicom Host System and AP shelf.

**Action:** Positive acknowledgment of [F8285](#) no action.

**F8287**  
**TRANSSYS**  
**ETH LS SV NOT AVAIL**

*Type:* Service-specific (Format 0)

*Short text:* Survivability not available.

*Cause:* The supervisory connection between Hicom Host System and AP shelf could not be established, though the signaling connection is established.

*System reaction:* The route of the signaling connection with an AP shelf is not switched to the survivability path. Therefore the AP shelf remains ready, but a loss of the primary path will not be recognized and the signaling connection will not be switched to the survivability path.

*Action:* Check the survivability configuration data in the Hicom Host System and in the AP shelf. If the configuration is correct, reset the AP shelf with AMOs DEACT-USSU and ACT-USSU. If that does not work, correct the missing board data of the NCUI with the CLI.



## **F8288**

### **TRANSSYS**

#### **ETH LS SV CONN NEW**

*Type:* Service-specific (Format 0)

*Short text:* Supervisory connection with AP established.

*Cause:* The supervisory connection has been established that supervises the availability of the LAN between Hicom Host System and the AP shelf.

*System reaction:* Survivability is activated. A loss of the supervisory connection triggers the switching of the signaling connection to the survivability path (see [F8285](#)).

*Action:* No action.

## F8289

### TRANSSYS

#### NET STATISTICS DATA

*Type:* Diagnosis-relevant (Format 49)

*Short text:* Statistical data of the IPDA network

*Cause:* The output of the statistical data for the relevant access point is enabled via the AMO STMIB.

*System reaction:* None.

*Action:* No action required.

*Interpretation of auxiliary data:*

The measured values for the round trip delay (maximum delay) or throughput (minimum throughput) of the last 90 seconds are output. The values shown are indicated after the AP number.

Meaning of individual fields for Round Trip Delay:

AP-NUMBER	Number of access points
CONFIGURED	Configured values in milliseconds
SHORT	Configured value for 15 second interval
LONG	Configured value for 60 second interval
AVERAGE	Average values in milliseconds
SHORT	Average value for 15 second interval
LONG	Average value for 60 second interval
HISTORY	Last 30 values at intervals of 3 seconds each

Meaning of individual fields for Throughput:

AP-NUMBER	Number of access points
CONFIGURED	Configured values in kilobits/second
SHORT	Configured value for 15 second interval
LONG	Configured value for 60 second interval
AVERAGE	Average values in kilobits/second
SHORT	Average value for 15 second interval
LONG	Average value for 60 second interval
HISTORY	Last 30 values at intervals of 3 seconds each

## **F8290**

### **TRANSSYS**

#### **NET WEAKNESS BEGIN**

**Type:** Diagnosis-relevant (Format 49)

**Short text:** Start of poor network quality.

**Cause:** The values for the maximum delay and/or minimum throughput for signaling of the relevant access point are above or below their respective thresholds.

**System reaction:** The system response depends on the set mode for a signaling switchover. If STANDARD is set, a check is performed to determine whether or not the network quality is adequate within 2 minutes.

For EXTENDED, a switchover to the survivability path occurs, and the network quality is then tested. After at least 2 minutes, signaling switches back to the primary path. The network quality is then tested again for a further two minutes to ensure that it remains acceptable.

**Action:** Check the values set using the AMO STMIB.

**Interpretation of auxiliary data:**

The same auxiliary data is output as for [F8289](#)

In addition, the type of poor network quality is shown, i.e., whether the measured values exceed or fall below the set short and/or long interval for the maximum delay or the minimum throughput, respectively.

## **F8291**

### **TRANSSYS**

#### **NET WEAKNESS END**

*Type:* Diagnosis-relevant (Format 49)

*Short text:* End of poor network quality.

*Cause:* The configured values for the maximum delay and/or minimum throughput for signaling of the relevant access point are no longer above or below their respective thresholds.

*System reaction:* None.

*Action:* No action required.

*Interpretation of auxiliary data:*

AP-NUMBER                      Number of access points

**F8292**  
**TRANSSYS**  
**NET BW EXC BEGIN**

*Type:* Diagnosis-relevant (Format 49)

*Short text:* Start of bandwidth exceeded state

*Cause:* The configured bandwidth for the relevant access point has been exceeded for at least 10 seconds.

*System reaction:* The system response depends on the set mode for a signaling switchover. If STANDARD is set, a check is performed to determine whether the exceeded bandwidth state ends within 2 minutes.

For EXTENDED, a switchover to the survivability path occurs and subsequently switches back to the primary path after 5 minutes. A check is then performed to determine whether the exceeded bandwidth state ends within 2 minutes.

*Action:* The bandwidth can be changed via the AMO STMIB.

*Interpretation of auxiliary data:*

AP-NUMBER	Number of access points
LIMIT	Configured value of bandwidth in kilobits/second
SHAPING TIME	Indicates for how long (in seconds) the sent signaling data is restricted by the bandwidth.

**F8293**  
**TRANSSYS**  
**NET BW EXC END**

*Type:* Diagnosis-relevant (Format 49)  
*Short text:* End of bandwidth exceeded state  
*Cause:* The configured bandwidth for the relevant access point is no longer exceeded.  
*System reaction:* None.  
*Action:* No action required.  
*Interpretation of auxiliary data:*

AP-NUMBER                      Number of access points

**F8294**  
**TRANSSYS**  
**NET MSG RUNTIME EXC**

**Type:** Diagnosis-relevant (Format 49)

**Short text:** Message runtime is exceeded.

**Cause:** Bandwidth too low.

**System reaction:** HSR sends a message per AP every 3 minutes to FA when the message runtime from NCUI to HSR is exceeded.

**Action:** The bandwidth can be changed via the AMO STMIB.

**Interpretation of auxiliary data:**

.

AP-NUMBER	Number of access points
TIME STAMP HSR	Local relative time at the host when the message arrives
TIME STAMP MMX	Relative time at the NCUI when the message is sent
ROUND TRIP DELAY LIMIT	Network transport time of the TCP packet + reaction time of recipient + network transport time of the TCP acknowledgment.
MESSAGE DATA	Text of message; max. 220 bytes in length

**F8300**  
**HUBC**  
**INIT ERROR**

*Type:* Diagnosis-specific (Format 3C)

*Short text:* HUBC driver not initialized

*Cause:* HUBC driver reports that it was not initialized (software error).

*Action:* If error occurs repeatedly, save the error message data and contact your  
next level of support.



**F8301**  
**HUBC**  
**NO INTERRUPT**

*Type:*

Diagnosis-specific (Format 3C)

*Short text:*

HUBC driver activated

*Cause:*

The HUBC driver was activated even though there is no interrupt (software error).

*Action:*

If error occurs repeatedly, save the error message data and contact your next level of support.

## **F8302**

### **HUBC**

#### **INTERFACE ERROR**

*Type:* Service-specific (Format 3C)

*Short text:* Internal socket error

*Cause:* The HUBC driver reports that an internal interface is defective

*Action:* Power off/on on the HUBC board, or replace board.

**F8303**  
**HUBC**  
**ERROR**

*Type:*

Service-specific (Format 3C)

*Short text:*

HUBC out of service

*Cause:*

The HUBC board is not plugged in or is not functioning

*Action:*

Install or replace HUBC board.

**F8304**  
**HUBC**  
**INVALID PORT**

*Type:* Diagnosis-specific (Format 3C)

*Short text:* Invalid port number for HUBC

*Cause:* The HUBC driver was called with an invalid port number (software error).

*Action:* If error occurs repeatedly, save the error message data and contact your  
next level of support.

**F8305**  
**HUBC**  
**PLAUS ERROR**

*Type:* Diagnosis-specific (Format 3C)

*Short text:* Implausible return values

*Cause:* The HUBC driver supplies invalid return values (software error).

*Action:* If error occurs repeatedly, save the error message data and contact your  
next level of support.

**F8306****HUBC****FAULT STATISTIC**

**Type:** Diagnosis-specific (Format 3B)

**Short text:** HUBC deterioration

**Cause:** These three statistical messages report the status of the HUBC connections. The server dependability statistics detected a deterioration of the HUBC connections.

**Action:** This error must be analyzed based on the data. Save error message data and contact your [next level of support](#).

## **F8307**

### **HUBC**

#### **STATISTIC DATA**

*Type:* Diagnosis-specific (Format 3B)

*Short text:* HUBC status

*Cause:* These three statistical messages report the status of the HUBC connections. These messages are usually suppressed.

*Action:* If error occurs repeatedly, save the error message data and contact your next level of support.

**F8320**  
**BOOT**  
**STATUS INFO**

*Type:* Diagnosis-specific (Format 17)  
*Short text:* Boot version loaded into flash memory  
*Cause:* This message is generated by the boot firmware if a boot version was successfully loaded from the disk into flash memory.  
The following is displayed:  
FWLP: xxxx-x-xxx successfully loaded.  
xxxx-x-xxx is the firmware version of the loaded boot version.  
*Action:* Positive acknowledgment, no action.



## **F8321 BOOT ERROR INFO**

**Type:** Diagnosis-specific (Format 17)

**Short text:** Fatal error in boot module

**Cause:** This message is generated by the boot firmware if fatal errors were detected in the boot modules:

during processing of the LAN connection when the SWU is being loaded.

The following is output in this case:

LAN-ERROR 31xxH

yyyyy.....

during loading of the boot into the flash memory.

The following is output in this case:

FWLP-ERROR 32xxH

yyyyy.....

**Action:** If error occurs repeatedly, save the error message data and contact your [next level of support](#).

**Interpretation of auxiliary data:**

xx is a specific LAN error code in the range 00H - 0FFH,

yyyyy is a stream of auxiliary data intended for the developer.

**F8384**  
**TRANSSYS**  
**ETH SL INIT ERROR**

*Type:* Service-specific (Format 42)

*Short text:* Second LAN module SL100/SL200 initialization error

*Cause:* The SL100/SL200 module could not be initialized because

1. the Second LAN has not been configured with AMO SIPCO,
2. in a mono system an SL100 module is plugged instead of an SL200 module,
3. the SL100/SL200 module has already been initialized once,
4. the SL100/SL200 module initialization failed.

*System reaction:* The AP shelves are not taken into service.

*Action:* Check whether the Second LAN is configured (AMO SIPCO). In a monosystem verify that an SL200 module is plugged. If the SL100/SL200 module is already initialized, a restart is necessary to reinitialize the SL100/SL200 module with new configuration data. If the initialization failed, check whether the SL100/SL200 module is plugged and connected with the Second LAN. If that does not work, replace the SL100/SL200 module.

## **F8385**

### **TRANSSYS**

#### **ETH SL SURVIVAL PATH**

**Type:** Service-specific (Format 0)

**Short text:** Signaling connection with AP switched to survivability path.

**Cause:** The route of the signaling connection with an AP shelf has been changed to the survivability path (ISDN), because the supervisory connection with the AP shelf via the primary path (LAN) has been lost.

**System reaction:** All signaling messages are sent over the survivability path. Payload connections are not available over the survivability path between Hicom Host System and AP shelf.

**Action:** Check the LAN connection between Hicom Host System and AP shelf (LAN cables, HUBs, routers, ...). Negative acknowledgment of [F8386](#).

## **F8386**

### **TRANSSYS**

#### **ETH SL PRIMARY PATH**

**Type:** Service-specific (Format 0)

**Short text:** Signaling connection with AP switched back to primary path.

**Cause:** The route of the signaling connection with an AP shelf has been changed back from the survivability path (ISDN) to the primary path (LAN), because the supervisory connection with the AP shelf via the primary path (LAN) has been established again.

**System reaction:** All signaling messages are sent again over the primary path. Payload connections are again available over the primary path between Hicom Host System and AP shelf.

**Action:** Positive acknowledgment of [F8385](#), no action.

**F8387****TRANSSYS****ETH SL SV NOT AVAIL**

**Type:** Service-specific (Format 0)

**Short text:** Survivability not available.

**Cause:** The supervisory connection between Hicom Host System and AP shelf could not be established, though the signaling connection is established.

**System reaction:** The route of the signaling connection with an AP shelf is not switched to the survivability path. Therefore the AP shelf remains ready, but a loss of the primary path will not be recognized and the signaling connection will not be switched to the survivability path.

**Action:** Check the survivability configuration data in the Hicom Host System and in the AP shelf. If the configuration is correct, reset the AP shelf with AMOs DEACT-USSU and ACT-USSU. If that does not work, correct the missing board data of the NCUI with the CLI.

**F8388**  
**TRANSSYS**  
**ETH SL SV CONN NEW**

*Type:* Service-specific (Format 0)  
*Short text:* Supervisory connection with AP established.  
*Cause:* The supervisory connection has been established that supervises the availability of the LAN between Hicom Host System and the AP shelf.  
*System reaction:* Survivability is activated. A loss of the supervisory connection triggers the switching of the signaling connection to the survivability path (see [F8385](#)).  
*Action:* No action.

## F8500

### TERM

#### L2 BS LOAD ERROR

**Type:** Service-specific (Format 22)

**Short text:** Load error of base station

**Cause:** Base station not loaded by cordless board or load canceled.

**Action:** - Service center: Load base station with EXEC-DSSU command.

- On-site: Try unplugging / replugging line to base station in order to start automatic loading.

**Interpretation of auxiliary data:**

Byte 0 = 5F Number of bytes max. 95

Byte 1 = Error type (DB\_M\_QF\_CIR\_L2\_ERR\_SET)

11 Load error of base station



See also [Chapter , "Device names"](#).

## **F8501**

### **TERM**

### **L2 BS NO RESPONSE**

*Type:* Service-specific (Format 22)

*Short text:* Base station not responding

*Cause:* Cordless board has no access to base station.

*Action:*

- Service center: Load base station with EXEC-DSSU command.
- On-site: Check line to base station. Try unplugging / replugging in order to start automatic loading.

*Interpretation of auxiliary data:*

Byte 0 = 5F Number of bytes max. 95

Byte 1 = Error type (DB\_M\_QF\_CIR\_L2\_ERR\_SET)

12 Base station not responding



See also [Chapter , "Device names"](#).



**F8502**  
**TERM**  
**RESTORED**

*Type:*

Service-specific (Format 18)

*Short text:*

Terminal reset after blocking

*Cause:*

ISDN terminal remained in NPR state following restore procedure and was reset.

*Action:*

No action required, since terminal has been put back in service by dependability.

*Interpretation of auxiliary data:* No auxiliary data output



See also [Device names](#).