

# DEC LANcontroller 601



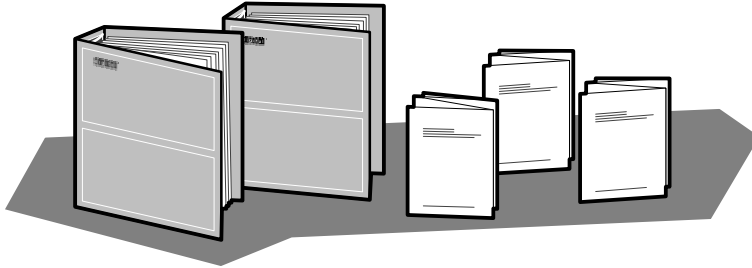
## Problem Solving

Part Number: EK-A0554-PS.001

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## DEC Network Integration Server Problem Solving

### DECNIS Problem Solving Manuals



*DEC Network Integration Server Problem Solving*: outlines NCL commands for checking software problems.

*DECNIS Installation and Service Manual*: includes a problem solving section which describes procedures for checking hardware problems.

*Network Interface Card (NIC) Problem Solving cards*: are supplied with each NIC. The cards outline procedures for checking possible problems with NICs, their cables, distribution panels and modems. Start problem solving with the flowchart.



*DEC Network Integration Server Event Messages*: this is an on-line text file. The file lists event messages that can indicate faults with hardware and software. The event message describes the meaning of each event and what action to take.








### Loopback Connectors

Loopback Connector	Part Number	Component
Ethernet loopback connector	H4080	NIC and Ethernet cable

## Line Card LED States

The LED display shows the state of the NIC when the module self-test or system self-test was last run: see the *Installation and Service Manual* for your DECNIS for more details.

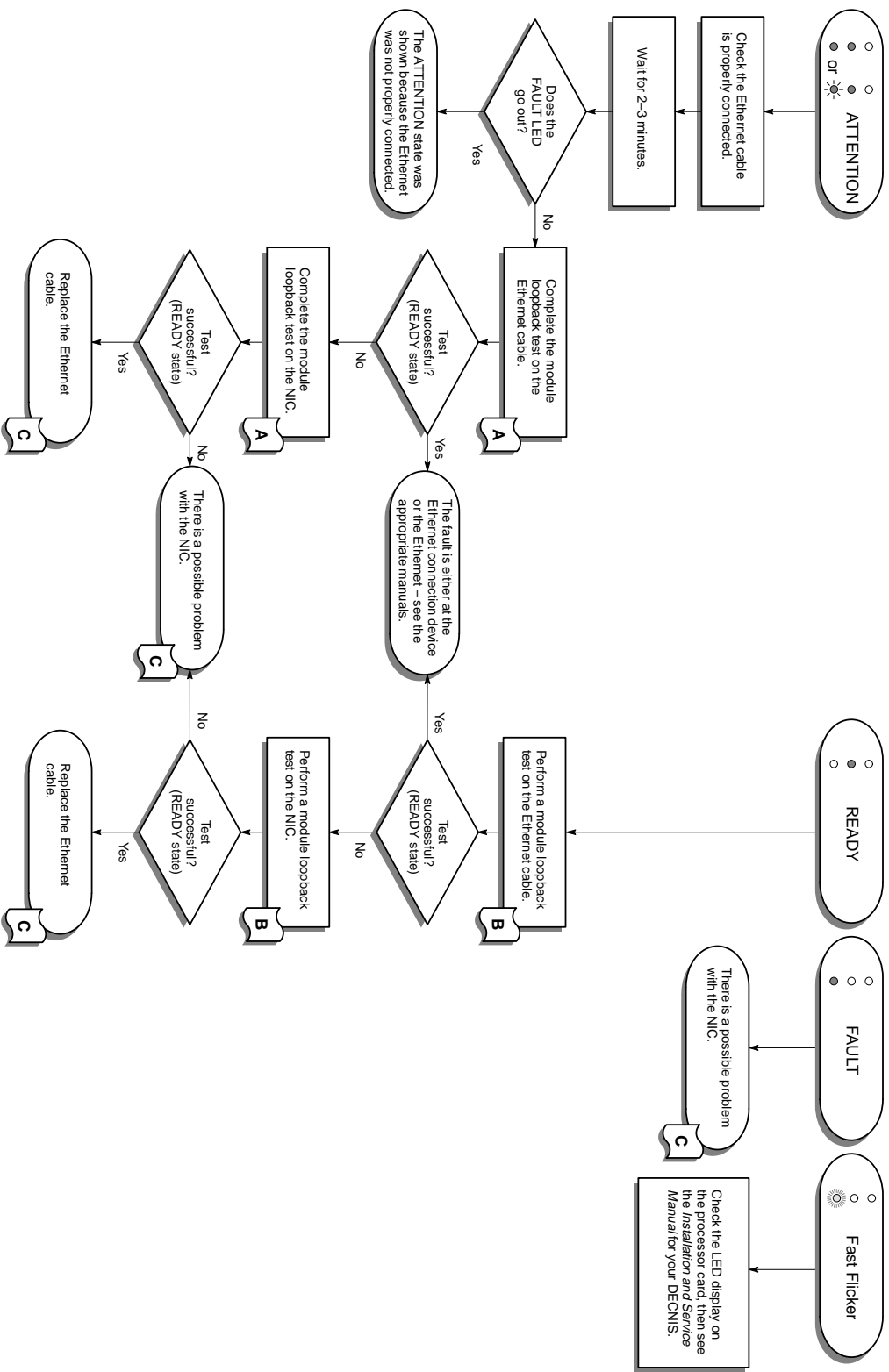
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	Slow flash	Module self-test in progress.
	Fast flicker	The NIC is either waiting to load or is loading software.
	READY	The NIC has passed its module self-test and has successfully loaded the software.
	HOTSWAP	The NIC is disabled. (The NIC switch is set down.)
	FAULT	The NIC has failed its module self-test.
	ATTENTION	This indicates one of the following: 1. The Ethernet is not connected. 2. The NIC is faulty.
		A flickering RUN LED indicates that the NIC software is waiting to load.

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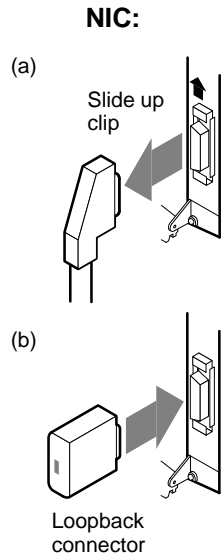
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**Problem Solving Flowchart – note the NIC LED state and follow the procedure indicated**

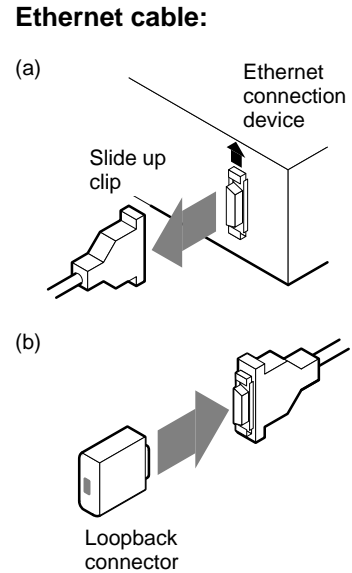


For details of tests and procedures, refer to the panel with the matching flag (see overleaf).

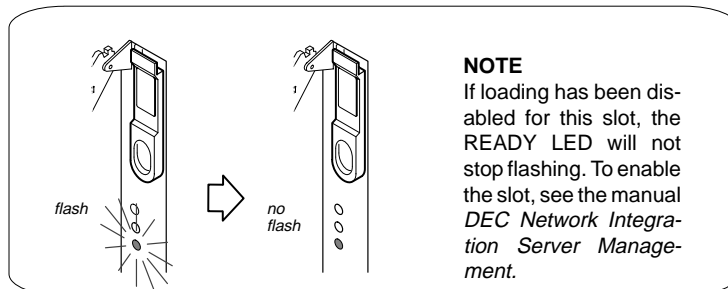
## A Completing the Module Loopback Test



1. Attach the Ethernet loopback connector (H4080) to the NIC port or Ethernet cable.



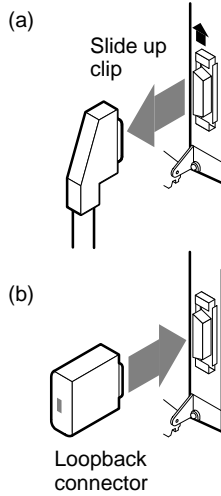
2. Wait until the FAULT LED goes out (approx. 2 min). Observe the test result on the LED display.



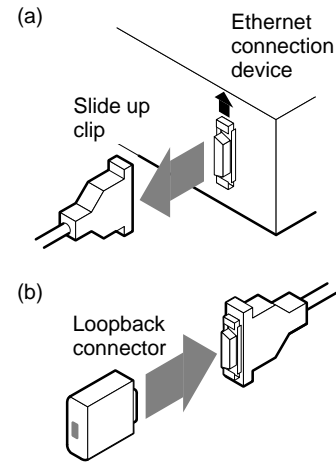
3. If the test passes, the LEDs will show the READY state. If the test fails, the LEDs will show the ATTENTION or FAULT state.

## B Performing a Module Loopback Test

### NIC:



### Ethernet cable:



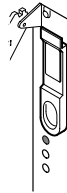
1. Attach the Ethernet loopback connector (H4080) to the NIC port or Ethernet cable.

2. Run the module loopback test:

1. Move the NIC switch down.



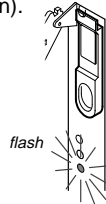
2. Wait until the hot-swap LED lights up (approx. 2 s).



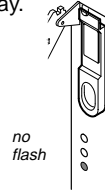
3. Move the NIC switch up.



4. Wait until the READY LED stops flashing (max. 2 min).



5. Observe the test result on the LED display.



#### NOTE

If loading has been disabled for this slot, the READY LED will not stop flashing. To enable the slot, see the manual *DEC Network Integration Server Management*.

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3. If the test passes, LEDs show the READY state.  
If the test fails, LEDs show the ATTENTION or FAULT state.

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## **C** Replacing Faulty Components

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<b>Faulty Components</b>	<b>Action</b>
NIC	Install a new NIC. Refer to the <i>Installation and Service Manual</i> for your DECNIS: DO NOT do this unless you are a service person.
Ethernet cable	Refer to the panel for attaching cables in the <i>DEC LANcontroller 601 Cabling Information and Specifications</i> card.

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**If replacing the faulty component does not solve the problem,** check the *Installation and Service Manual* for your DECNIS: do not perform any procedures in the manual unless you are a service person (see the *Installation and Service Manual* for your DECNIS).

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