

## Readme for 82577 GbE NVM

Care should be taken to use the correct GbE NVM (Non-Volatile Memory) firmware revision for the stepping combination of the Ibex Peak-M and the 82577. The table below lists the NVM revision that is optimized for use with the silicon stepping combination.

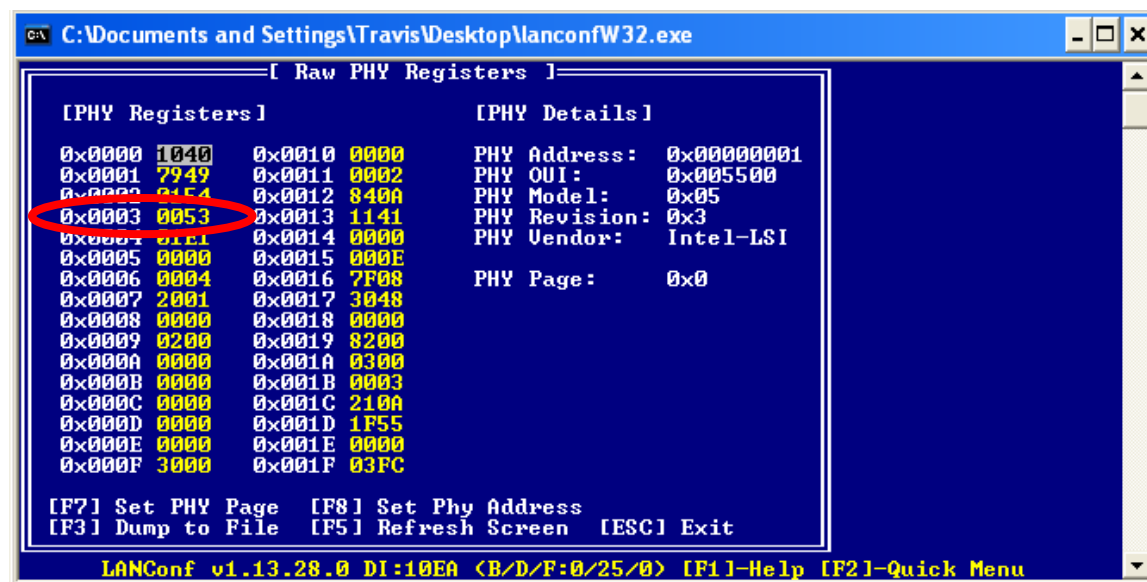
**NOTE:** Using a newer revision NVM with an older silicon stepping or older revision NVM with a newer silicon stepping could cause system instability and unpredictable behavior.

Ibex Peak Stepping	82577 Stepping/PHY-Ver <sup>1</sup>	LAN Switch	Corporate (LM)/ Consumer (LC) Sku	NVM Version	Comments
B1/B2	A3 = 0x53	Yes	LM	0.C1	Design with LAN switch. Please do not forget to upgrade to Release 14.6 Driver version 11.2.19.0
		Yes	LC	0.C4	
		No but support dock	LM	0.C1/0.C3	Design without LAN switch. Please do not forget to upgrade to Release 14.6 Driver version 11.2.19.0
			LC	0.C4/0.C6	
		No & No support for dock	LM	0.C3	
			LC	0.C6	

1. See below for detail on PHY versions.

## How to identify the PHY stepping in the system?

Use the latest version of LANCONF (Intel LAN tool found in the SVK (Sample Validation Kit)). Navigate to *Registers MAC and PHY Registers -> PHY Registers Menu -> Raw PHY Registers*. On the *Raw PHY Registers* screen, reference the value of register 0x0003. A value of 0x51 indicates A-0 stepping, 0x52 indicates A-2 stepping and 0x53 indicates A-3 stepping.



## How to identify the Ibex Peak-M stepping?

Use a PCI tool to read the LPC Device ID D31:f0 offset 08h. If the byte value in the field reads:

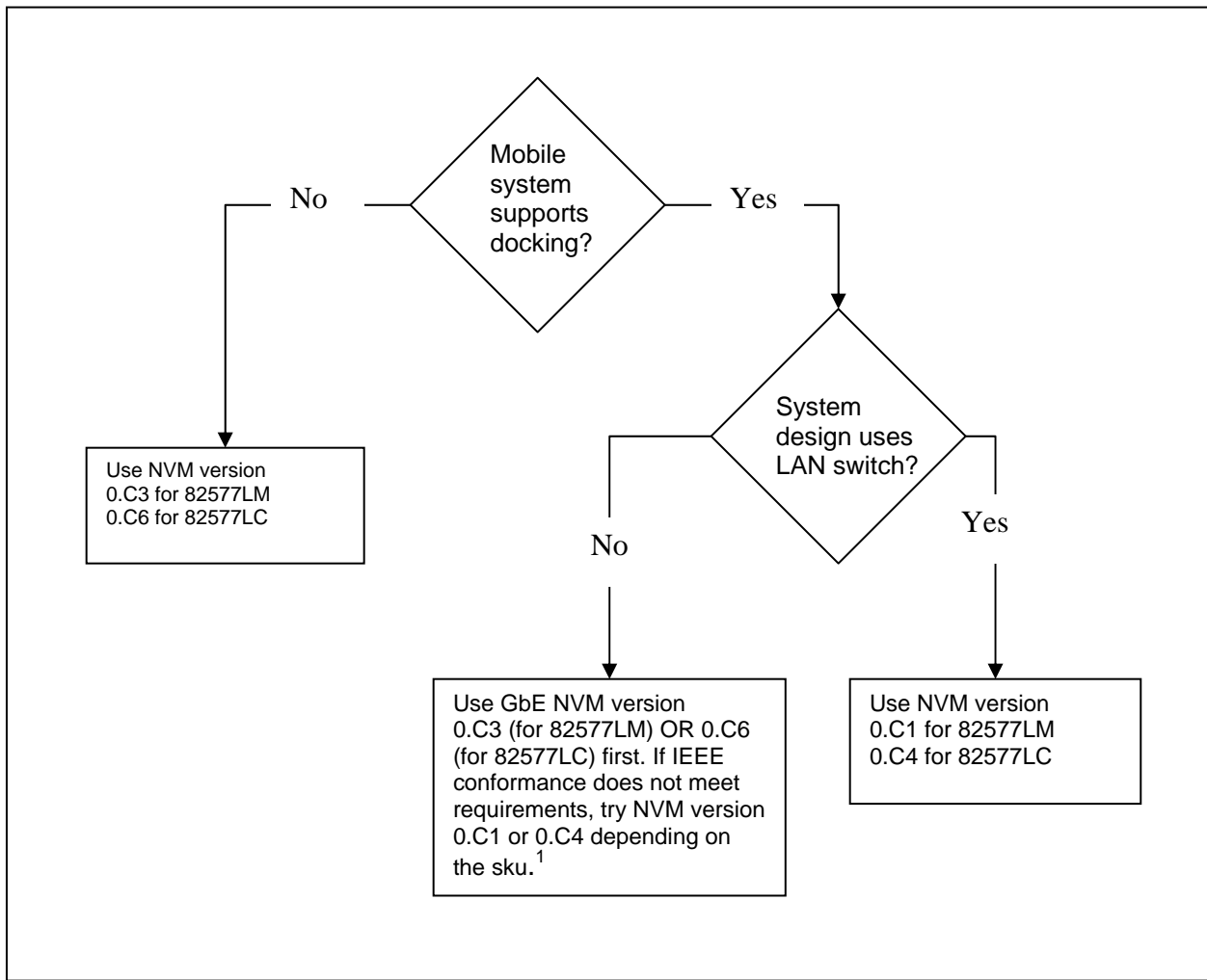
- 02h: IBX A1 stepping
- 03h: IBX B0 stepping
- 04h: IBX B1 stepping
- 05h: IBX B2 stepping

## Deciding between using a LAN switch image and a non-LAN switch image

As shown in the table above, there are two NVM versions for IBX-B1-Hanksville-M-A3 steppings, one for systems with a LAN switch and another for systems without (LAN switch is a chip on board that allows selection between docked/undocked LAN RJ45 ports). There are a variety of Mobile customer systems that may or may not use a LAN switch for supporting a docked wired LAN connection; some designs may not support a docked configuration at all. Please use the following flow chart to determine the correct NVM image to use.

**NOTE:** To determine if your system uses a LAN switch consult the schematics or system hardware specification.

**NOTE:** Use of a non-LAN switch NVM on a system with a LAN switch may adversely affect IEEE conformance. However system level functionality will not be affected.



1. Note that IEEE conformance is impacted by the MDI stub routed to docking connector in non-LAN switch configurations.