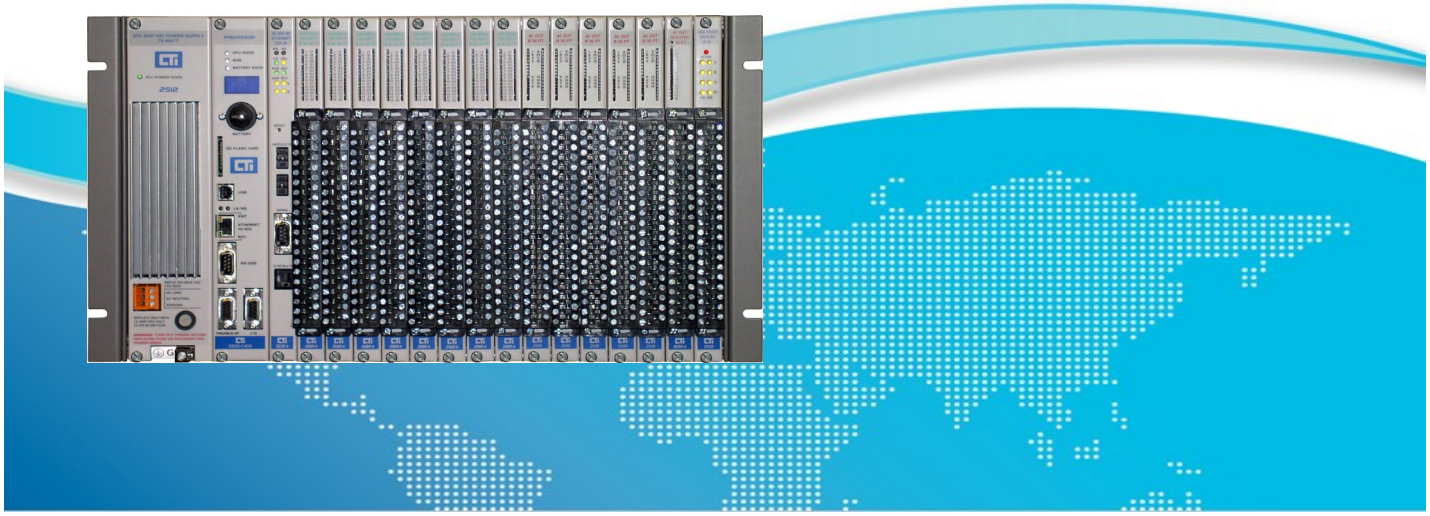
Tech Tips



How to Determine Whether Your CPU Has DSTNI or Altera Profibus Chip

Introduction

CTI processors employ a chip-based solution for operating Profibus networks. Over the course of the product life cycle to date, two different chip solutions have been used.

From 2007 to 2016, we used a “DTSNI” chip on all C200 / C300 / C400 CPUs. C100 CPUs do not have Profibus.

In 2016, we changed to an “Altera” chip due to obsolescence of the DSTNI chip.

CTI has released in October 2023 a new firmware release V9.25 that corrects some issues with the Profibus protocol for the CPU’s that are built with the Altera chip.

Firmware release 9.25 can be installed on all CTI 2500 CPU’s but it will have no effect on CPU’s that are built with the DSTNI Chip.

All CTI 2500 Series **Compact CPU’s** are built with the Altera Chip. Firmware V9.25 can also be applied to the Compact CPU’s.

This paper shows four ways of determining if your CPU is equipped with a DSTNI chip or an Altera chip.

This paper is not applicable to Classic and Compact **JANUS** CPU’s.

1. CPU serial number

If your CPU has a serial number:

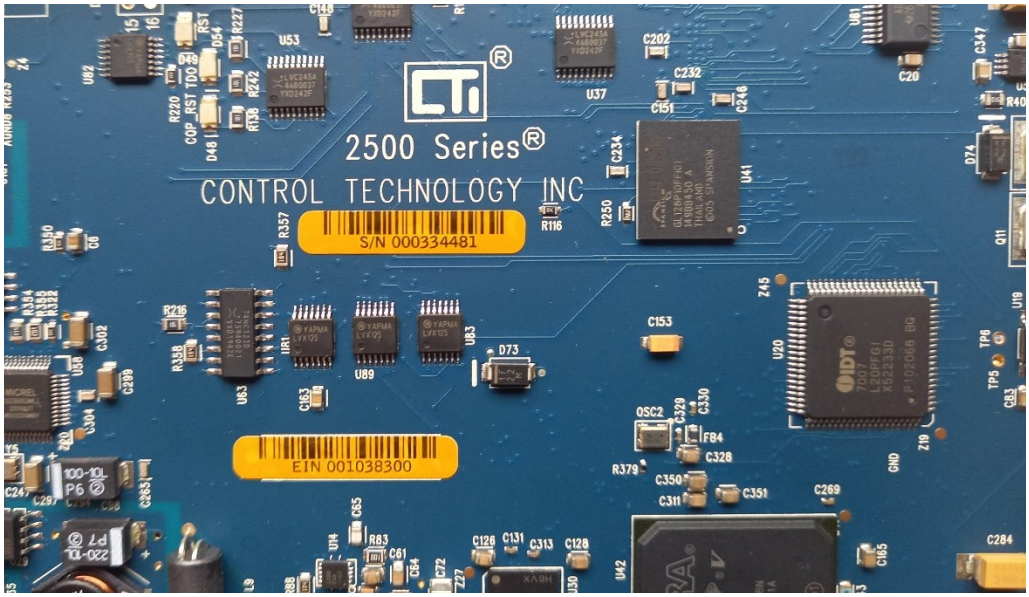
from 279720 to 279727 included

starting from 279869 and all numbers above

then it is built with an Altera chip.

All other serial numbers are built with the DSTNI chip.

You can find the serial number on a yellow label affixed on the PCB board:



The serial number starts with S/N

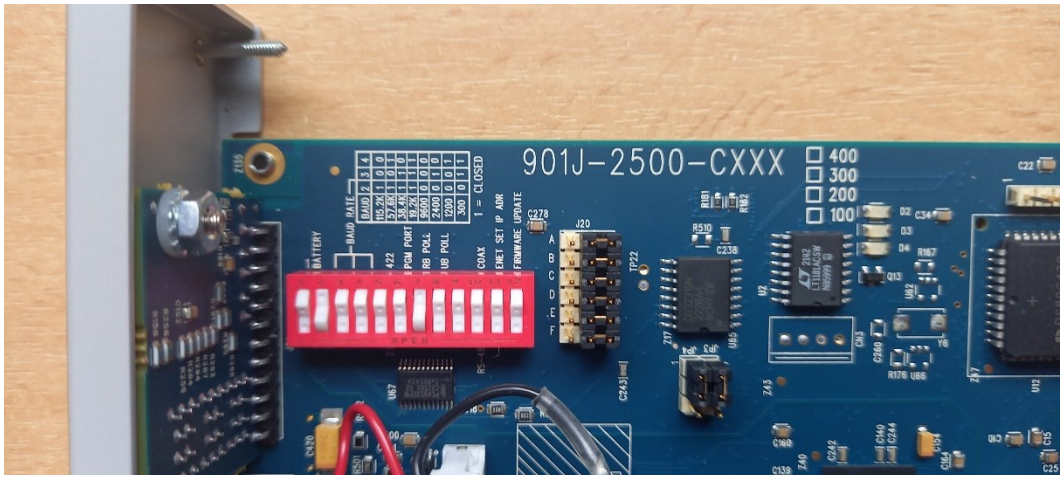
Do not confuse with the EIN number which is on another yellow label and is the Ethernet address.

When the CPU is installed in a base and under power you can also find the serial number in the Product Information web page. See below for an example.

2. Board Revision number

All CTI CPU's have a revision number of the printed circuit board.

The board revision number is printed on the PCB. The board revision number starts by the number 901 followed by a letter. The letter indicates the board revision.



If your CPU has a board revision of 901E or previous letters, then it has a DSTNI chip.

If you CPU has a board revision of 901G or later letters, then it has an Altera chip.

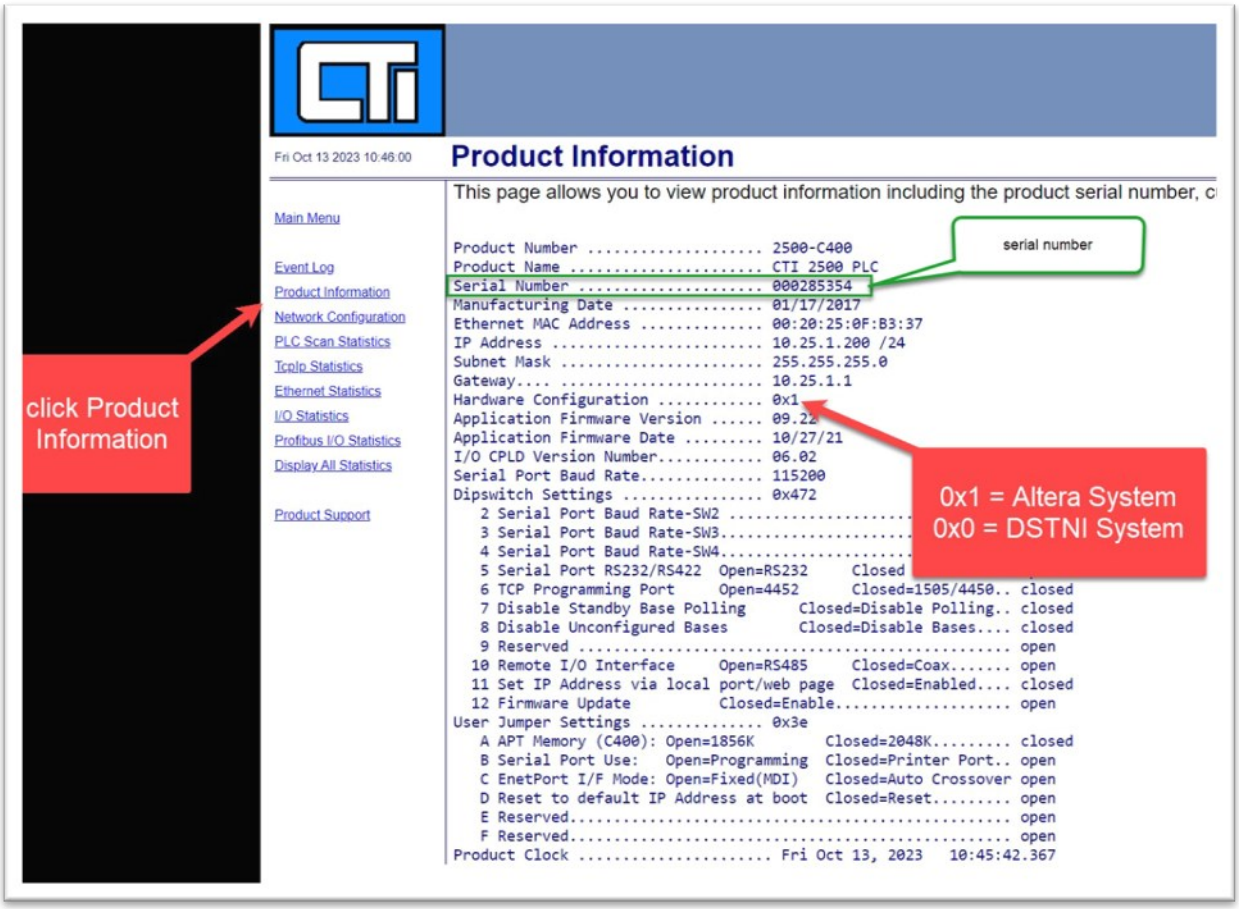
There is no board revision 901F.

3. Hardware configuration in Product Information

When the CPU is installed in a base and under power you can connect to the CPU by typing the IP address of the CPU in a web browser (Edge, Chrome, Firefox..) on a PC.
The PC will display the overview page of the integrated webserver in the CPU.
Click on the page Product Information.
In the Product Information page you will find the line Hardware configuration.

If the value of Hardware configuration is **0x1** then your CPU is equipped with an Altera chip.
If the value of Hardware configuration is **0x0** then your CPU is equipped with an DSTNI chip.

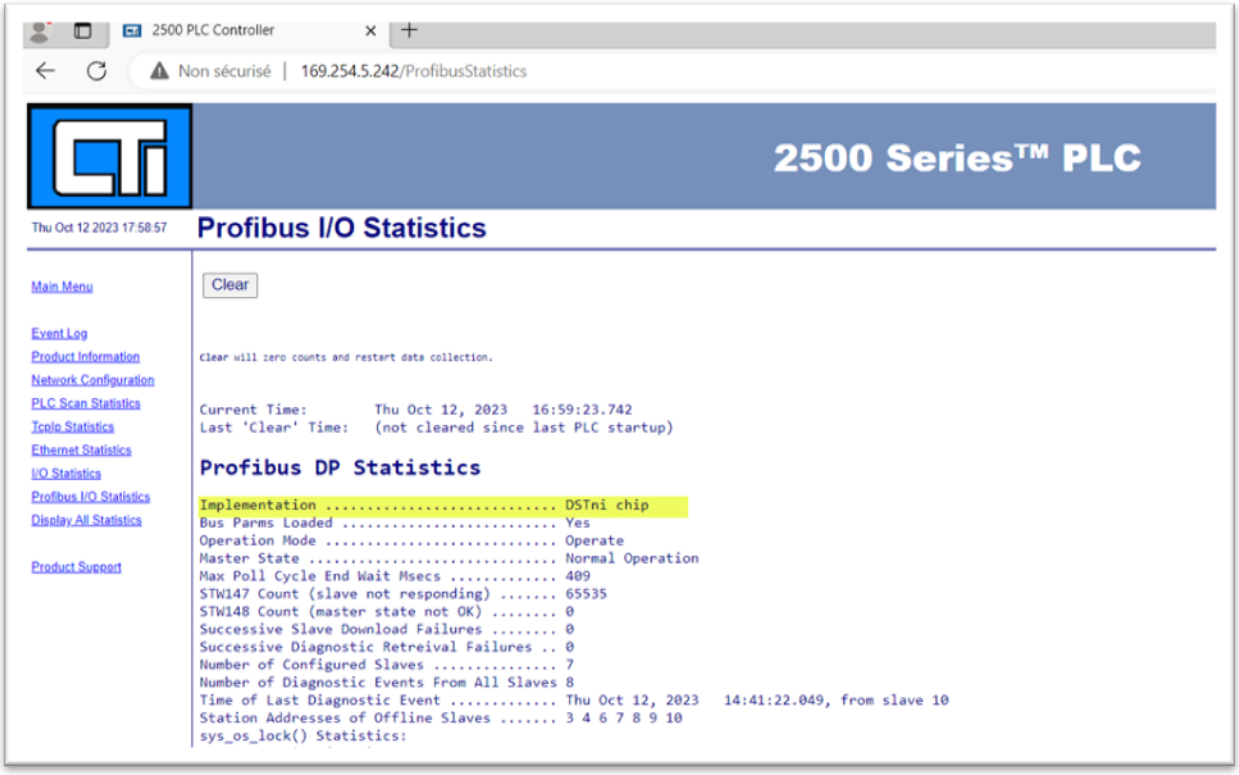
In this page you can also find the serial number of the CPU.



4. Profibus statistics web page

CPU's with a recent Firmware version incorporate a specific Profibus I/O Statistics web page in the Web server.

In the Profibus I/O Statistics Web page under Implementation, you will find the information if your CPU is equipped with a DSTNI chip or Altera chip.



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