

# PLX51-DNPS Product Launch Customer Presentation

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# What will we be talking about?

- More reliable and accurate data from remote sites
- Determine what happened when and at what time
- Get notified of alarm conditions as a priority.
- Verify that a remote asset is working before triggering a control action



# Solve by using...

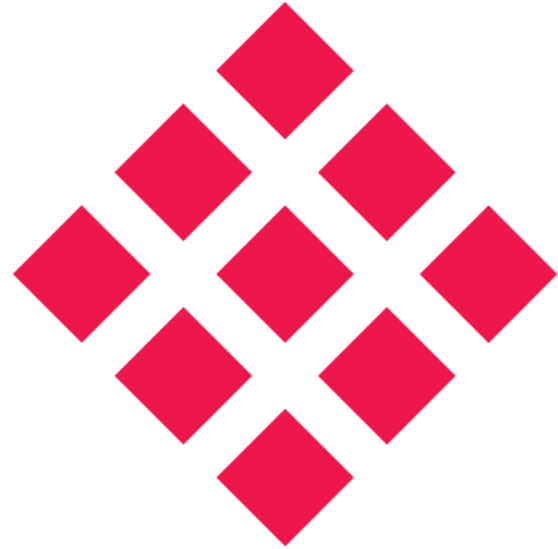
- Distributed Network Protocol
  - Open standard
  - Scalable
  - Secure authentication
  - Time-stamping at the source
  - Support for push and pull
  - Supports slow networks



## Of DNP3...

- Developed by Westronix in the late 80s
- Open standard since 1993, controlled by the DNP3 users group
- Standard for NA power utilities
- Proven protocol, globally

# Product Details



# Feature-Rich Solution

RS232 and RS485

Protocol Analyzer

Micro SD Card

Direct-To-Tag

Device Level Ring  
(DLR)



DNP3 Secure  
Authentication v5

Webserver

USB Connectivity

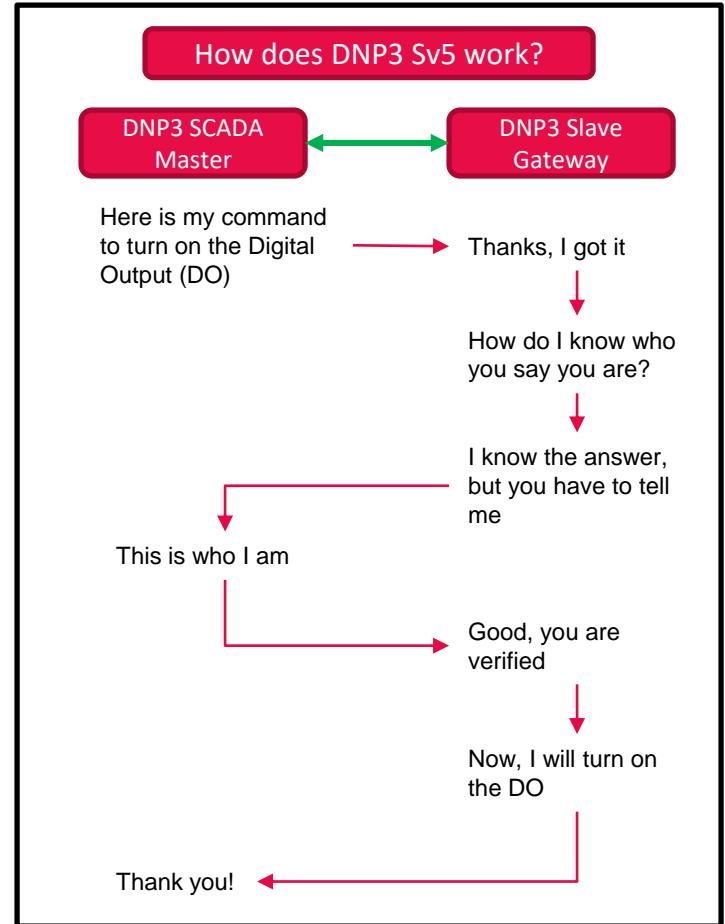
Modbus TCP/IP,  
Modbus RTU,  
EtherNet/IP

2-port Unmanaged  
Switch

# DNP3 Secure Authentication v5

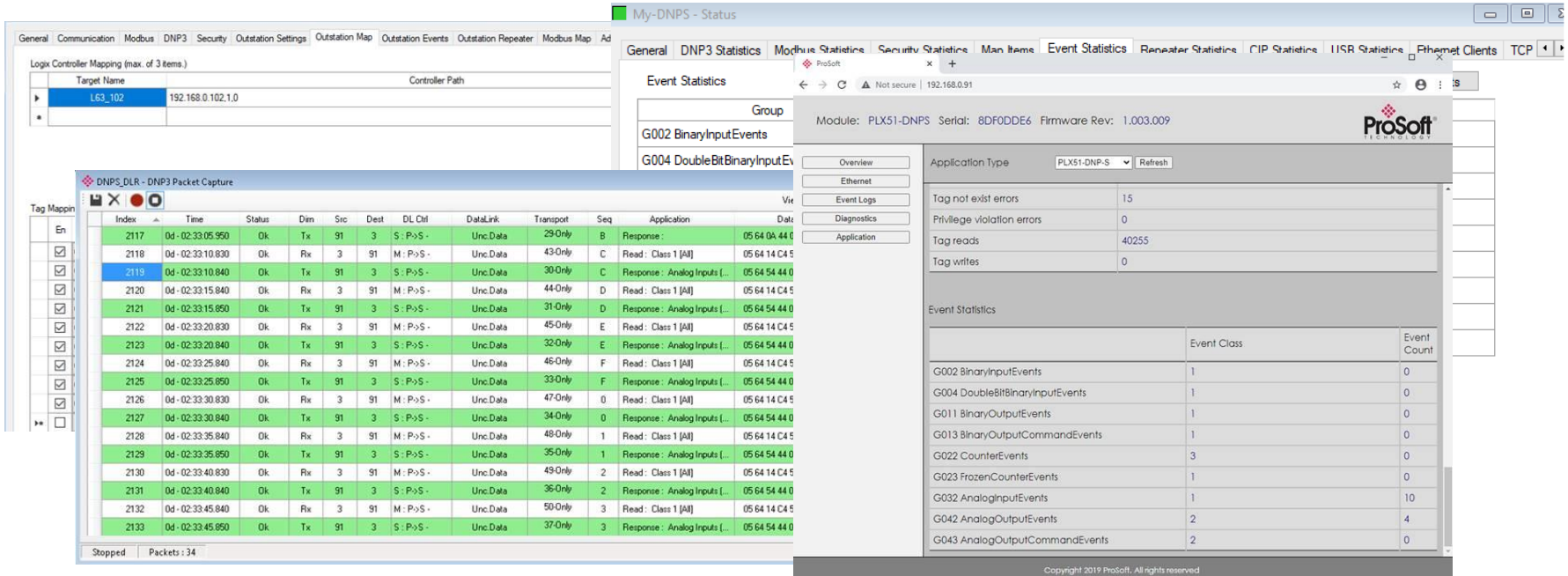
- Encryption vs Authentication
  - Encryption – meaningful data is garbled and cannot be understood, has to be decrypted
  - Authentication - convince the other party of who you say you are
- Why?
  - Works on any network – increase security without upgrading comms network
  - End-to-end authentication, in addition to network security like TLS
  - Reduced risk of unintended actions like turning on a DO by mistake
- Some Acronyms
  - Sv5 = Secure Authentication, version 5
  - NIST = National Institute of Standards and Technology
    - One of the oldest lab / standards authority
  - NERC CIP = North American Electric Reliability Corporation Critical Infrastructure Protection
    - Set of requirements designed to secure NA power system
- **DNP3 Sv5 will help with NERC CIP compliance**

**Key Takeaway: Between the NERC and the NIST, the CIP and the Authentication – we've got you covered!**



# Is it easy to use?

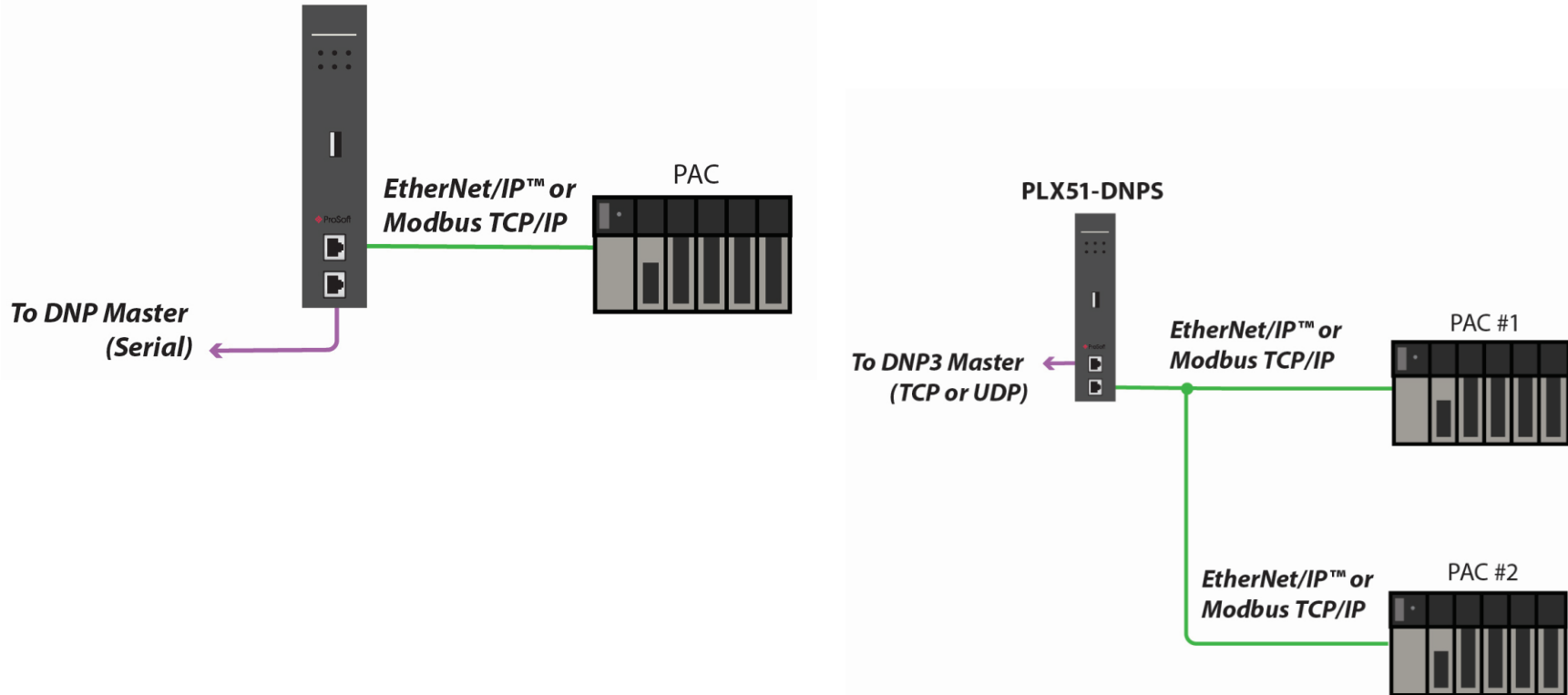
- Configure using PLX50 configuration utility, which can be downloaded from [www.prosoft-technology.com](http://www.prosoft-technology.com) for free!



The screenshot displays the ProSoft My-DNPS Status utility interface. A packet capture window titled 'DNPS\_DL1 - DNP3 Packet Capture' is open, showing a list of captured packets with columns for Index, Time, Status, Dirn, Src, Dest, DL Cnt, Data Link, Transport, Seq, Application, and Data. Packet 2119 is highlighted. The main interface shows 'Event Statistics' for 'G002 BinaryInputEvents' and 'G004 DoubleBitBinaryInputEv'. A table on the right provides a summary of event counts for various classes.

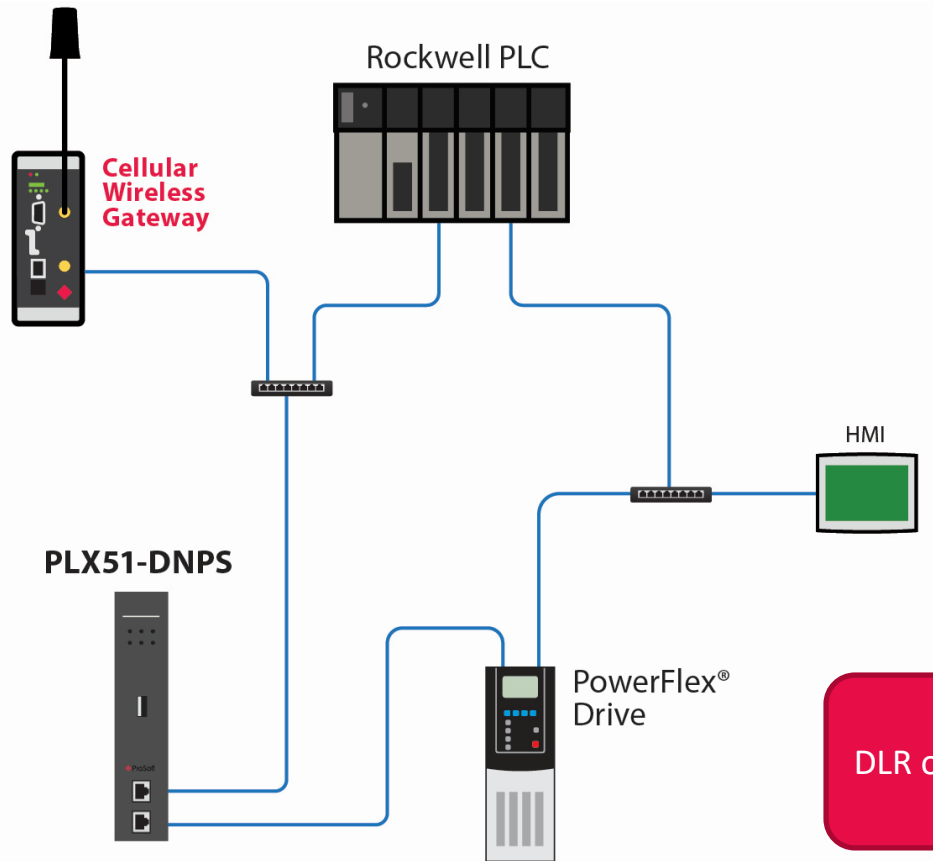
Event Class	Event Count
G002 BinaryInputEvents	0
G004 DoubleBitBinaryInputEvents	0
G011 BinaryOutputEvents	0
G013 BinaryOutputCommandEvents	0
G022 CounterEvents	3
G023 FrozenCounterEvents	0
G032 AnalogInputEvents	10
G042 AnalogOutputEvents	4
G043 AnalogOutputCommandEvents	0

# Serial or Ethernet, Single or Multiple



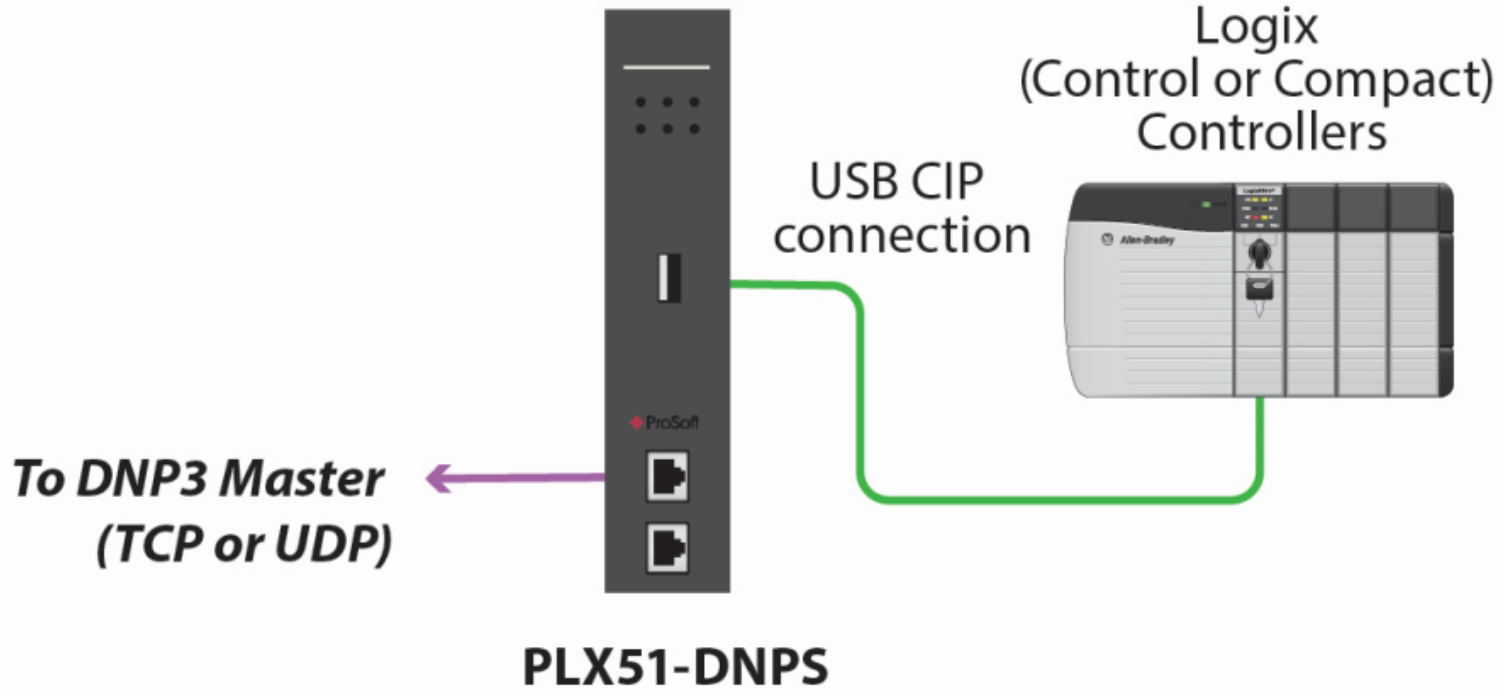


# The gateway supports Device Level Ring (or DLR)



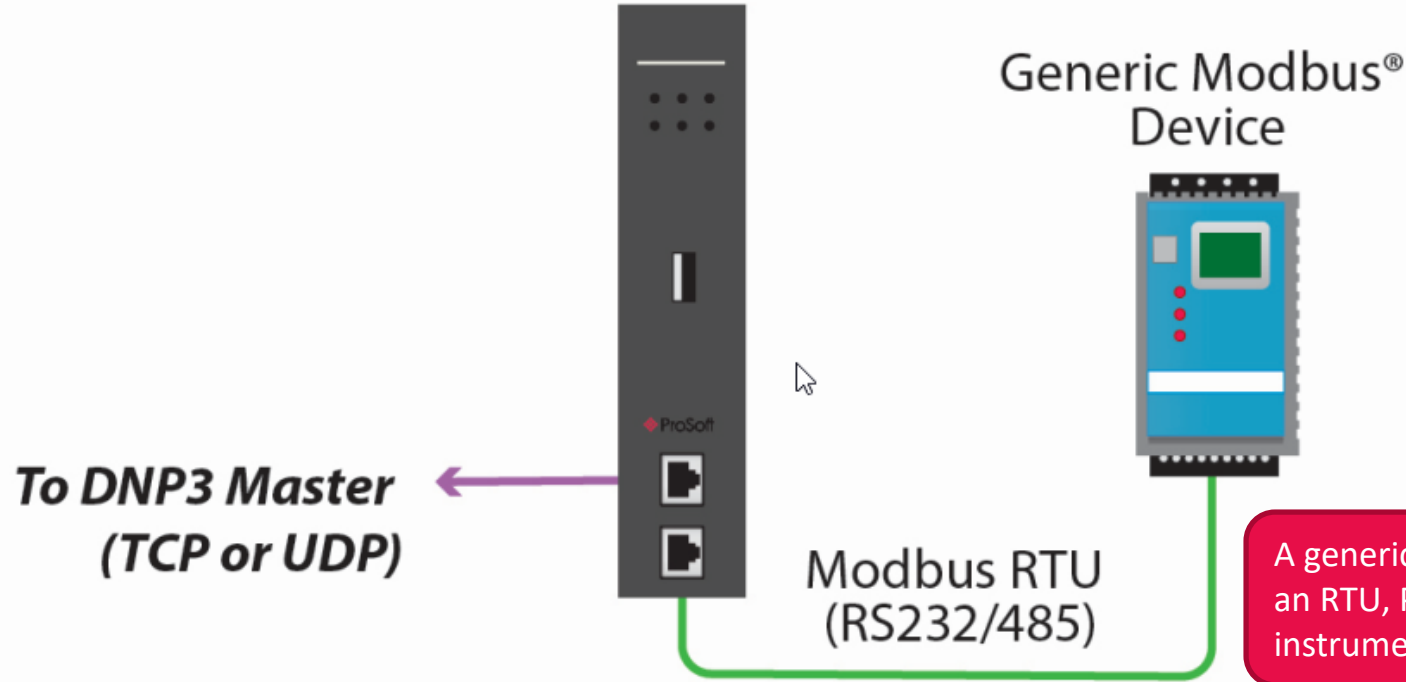
DLR or 2-port unmanaged switch

# USB Connection to Rockwell Logix Controllers...



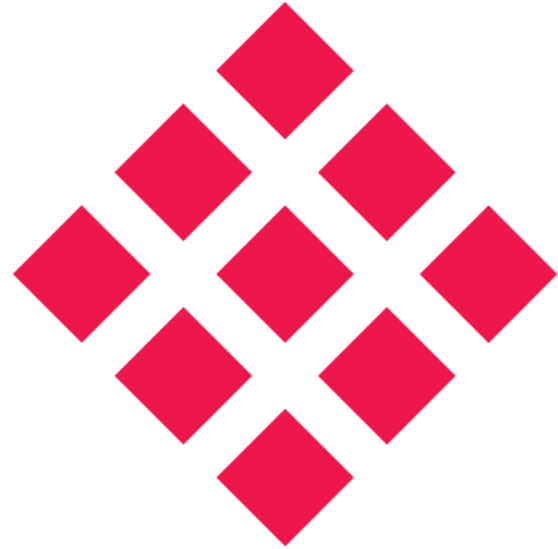
# Connects to Modbus Controllers

PLX51-DNPS



A generic Modbus device may be an RTU, PLC, I/O or a smart field instrument.

# Summary



# PLX51-DNPS

- The PLX51-DNPS gateway enables intelligent routing between DNP3 and EtherNet/IP or Modbus protocols.
- The PLX51-DNPS gateway:
  - Is flexible and easy to configure
  - Supports secure authentication
  - Includes webserver, SD Card, and advanced diagnostics
  - Is optimized for Rockwell architectures
  - Supports Serial, USB, and Ethernet communications
  - Supports Modbus RTU/TCP/IP and EtherNet/IP
- Integrating the PLX51-DNPS into your SCADA and Telemetry system will help:
  - Capture data with no holes
  - Time- and date-stamp data at source
  - Get alarm conditions to SCADA faster





# Questions?

## Thank you!



# What's coming?

- PLX51-DNPM

