

CANopen in the Shell

Managing and Developing CANopen Applications on Linux

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September 23, 2017

Me (Tom Flynn):

- BEng. Mechatronics
- Linux User
- Industrial Electronics
- Engineer

Introduction- Outline

① Controller Area Networks - What, Why, How?

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- 4 The CAN FOSS Tool Kit

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- ① Controller Area Networks - What, Why, How?
- ② Unleash the Protocols
- ③ CAN and the Kernel
- ④ The CAN FOSS Tool Kit
- ⑤ Smooth and Unproblematic Demonstration

Introduction- GNU Image Manipulation



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- **2011** CiA 301 V 4.2 made public - *Open*

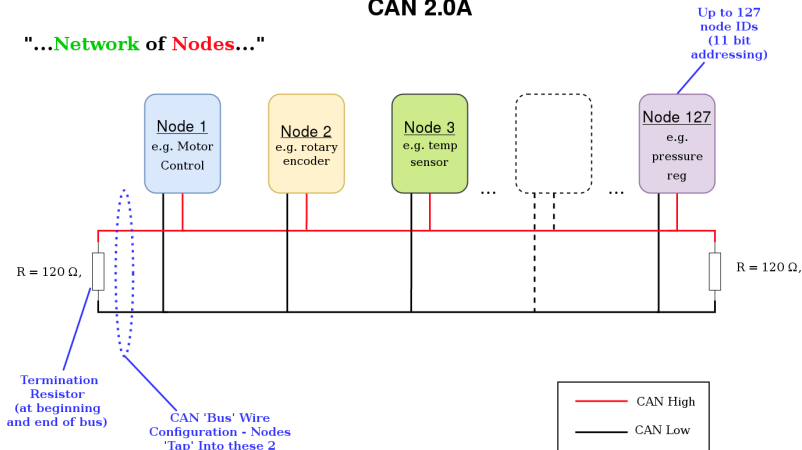
What is a Controller Area Network?

A network of nodes exchanging messages.

Controller Area Networks - What, Why, How?- Network

Generic Network Topology CAN 2.0A

"...Network of Nodes..."

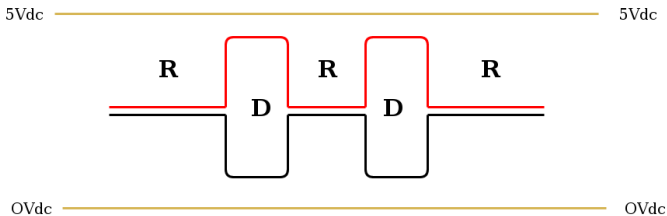


Controller Area Networks - What, Why, How?- Exchange

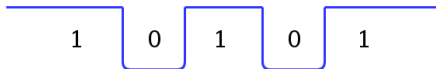
CAN Signaling

D - Dominant - Both lines in 'on' state - Logical 0

R - Recessive - Both lines in 'off' state - Logical 1



Resulting Data:



Controller Area Networks - What, Why, How?- Messages

