Introducing CANbus

Definitions & Applications

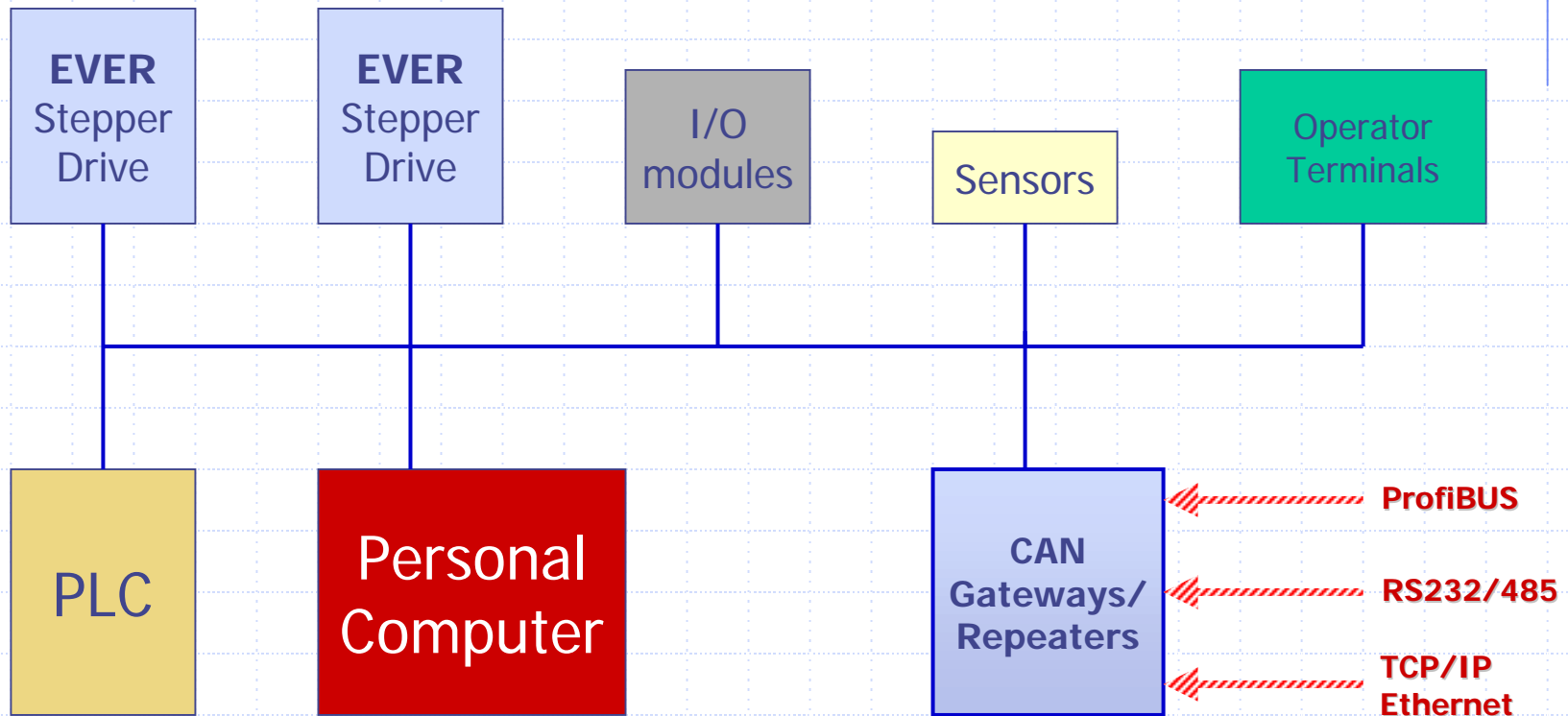# CAN Background

- Developed in 1983 by Bosch & Intel
- ISO 11898 standard
- Multi-Master structured bus
- Speed up to 1 Mbit/s
- Simple cabling (twisted pair)
- Hardware error handling
- Non destructive bitwise arbitration

CANbus benefits

- Low cost interfacing
- Connection of up to 127 devices
- Semplified cabling
- Robustness in harsch environment
- World wide diffusion
- Standards: CANopen, DeviceNET, etc.

CAN Network Example

| EVER Stepper Drive | EVER Stepper Drive | I/O modules | Sensors | Operator Terminals |

| PLC | Personal Computer | | CAN Gateways/ Repeaters |

- ProfiBUS
- RS232/485
- TCP/IP Ethernet

EVER CANbus Stepper Drives

- ◆ CAN 2.0A & B compliant
- ◆ CANopen protocol compliant
- ◆ Configurable Baud Rate & Node Id
- ◆ Supported CANopen device profiles:
  - DS 301, DS 401, DSP 402, DS 406
- ◆ Master (SDH only) & Slave versions

EVER drives use CAN

- ◆ To syncronize motors movement
- ◆ To get feedback from CAN sensors
- ◆ To get commands from PLCs, PCs, etc.
- ◆ To share informations
- ◆ To check drives working status
- ◆ To enhance communication robustness
- ◆ To reduce costs!

EVER CAN Drives Applications

- ◆ Flexo printing machines
- ◆ Textile machines
- ◆ Labelling machines
- ◆ ...

CAN Organizations

◆ CAN in Automation:
  - www.can-cia.de