

Classification of the 802.3 Connection

January 24 - 28th, 2005

Multi-bit Identification Scheme

using

Existing Ethernet Data Lines

By CMS Technologies

Classification of the 802.3 Connection

Characteristics of Method

Low Energy and Low Frequency

Either Pair and Either Location

Common and Differential Modes

Physical ID mirrors (and extends) logical MAC

No Logical dependencies - 100% Physical

No gaps in physical control

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System Description

Current Loop (Part of 802.3af)

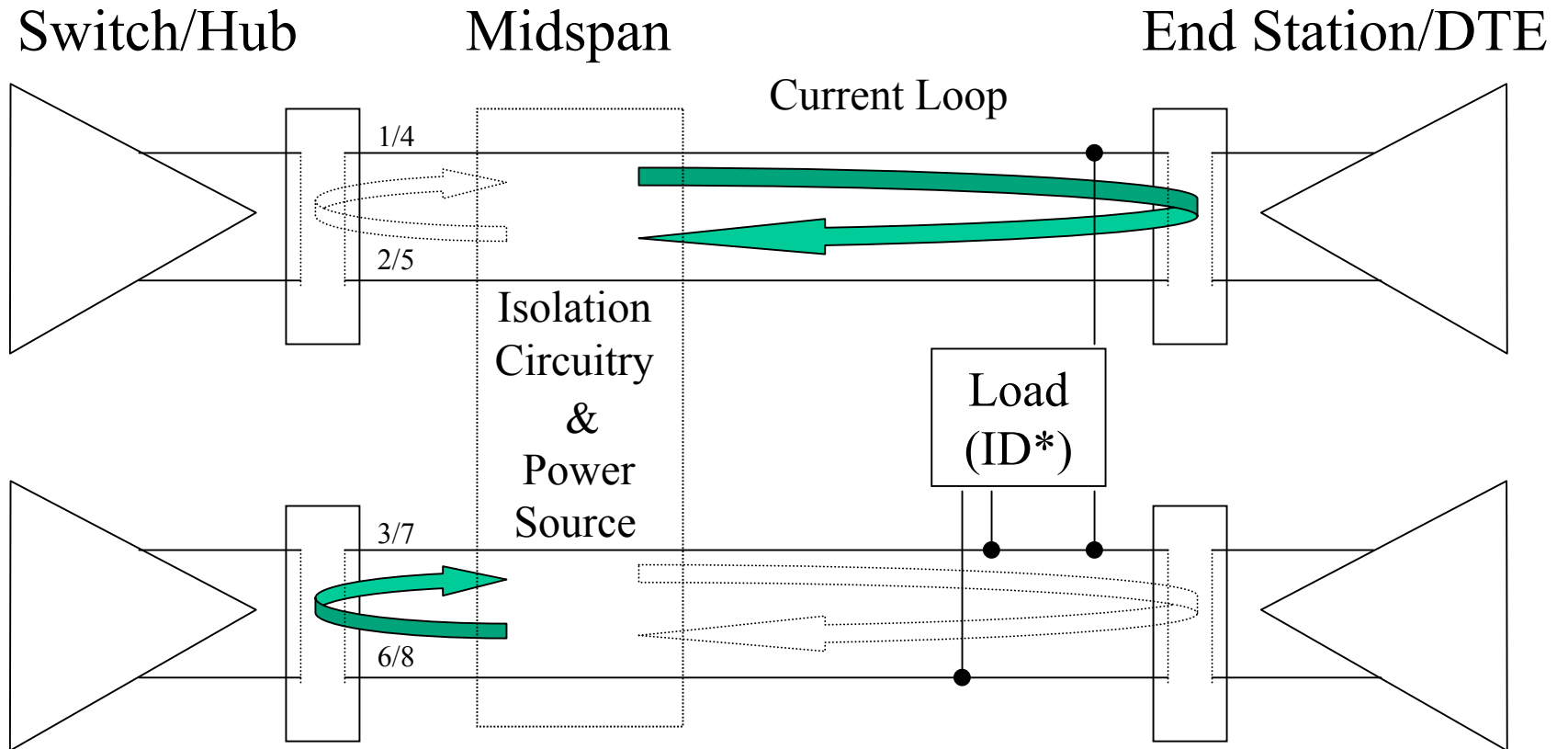
Power Source (Part of 802.3af)

Add Multi-bit Transmitter and Receiver Circuits

Multi-bit implemented with shift registers or firmware

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System Description Example



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Common Applications of System

Device Classification

Device and Network Security

Device and Network Management

Expanded connection control for any device

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Benefits

280+ Trillion Classifications

Rapid Response Time

40dB/1.8kHz Noise Margin

Low Cost and Mature Technology

Stand-alone multi-bit communication platform for PoE technology

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802.3 Committee

Thank you!