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Sommario/riassunto	<p>A digital interface for connecting multiple physically separated transducers to a single processor over a single pair of wires. The interface can support both asynchronous and isochronous data transfers. Several Transducer Electronic Data Sheets (TEDS) and their data formats are described. An electrical interface, channel identification protocols, time synchronization protocols, read and write logic functions to access the TEDS, and transducers with a wide variety of attributes are defined. This standard does not specify signal conditioning, signal conversion, or how an application uses the TEDS data. Scope: This project will develop a standard thqt defines a digital interface for connecting multiple physically separated transducers. It will leverage off the IEEE P1451.1 and IEEE P1451.2 standards. The standard will define the TEDS format, the electrical interface, channel identification protocols, hot swap protocols, time synchronization protocols, and the read and write logic functions used to access the TEDS and transducer data. The standard will nto specify signal conditioning, signal conversion, or how an application uses the TEDS data. Purpose: There is currently no defined independent standard for interfacing multiple physically separated transducers that allos time</p>

synchronization of data. Without such a standard, custom transducer interface solutions are required which are time-consuming and costly. The standard will provide a minimum implementation that allows multidrop, hot swapping, self-identification and configuration of transducers that may not be located in the same enclosure, but are confined to a relatively small space.
