P21451-2

Submitter Email: kang.lee@ieee.org
Type of Project: Revision to IEEE Standard 21451-2-2010
PAR Request Date: 06-Jun-2014
PAR Approval Date: 21-Aug-2014
PAR Expiration Date: 31-Dec-2018
Status: PAR for a Revision to an existing IEEE Standard
Root Project: 21451-2-2010

1.1 Project Number: P21451-2
1.2 Type of Document: Standard
1.3 Life Cycle: Full Use

2.1 Title: ISO/IEC/IEEE Standard for Information Technology -- Smart Transducer Interface for Sensors and Actuators -- Part 2: Serial Point-to-Point Interface

Changes in title: ISO/IEC/IEEE Standard for Information ~~technology~~Technology -- Smart ~~transducer~~Transducer ~~interface~~Interface for ~~sensors~~Sensors and ~~actuators~~Actuators -- Part 2: ~~Transducer~~Serial Point-to-Point ~~microprocessor~~Interface~~communication protocols and Transducer Electronic Data Sheet (TEDS) formats~~

3.1 Working Group: Transducer to Microprocessor Communication Working Group (IM/ST/1451.2WG)
Contact Information for Working Group Chair
Name: Darold Wobschall
Email Address: darold@wobschall.com
Phone: 716-634-9317
Contact Information for Working Group Vice-Chair
None

3.2 Sponsoring Society and Committee: IEEE Instrumentation and Measurement Society/TC9 - Sensor Technology (IM/ST)
Contact Information for Sponsor Chair
Name: Kang Lee
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4.1 Type of Ballot: Individual
4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 11/2016
4.3 Projected Completion Date for Submittal to RevCom: 08/2017

5.1 Approximate number of people expected to be actively involved in the development of this project: 10
5.2 Scope: This standard defines serial interfaces between a transducer interface module (TIM) and a network module called network capable application processor (NCAP). It also defines a physical transducer electronic data sheet (PHY TEDS) which enables this standard to be in compliance with the IEEE 21450 standard. This standard does not specify signal conditioning or conversion.

Changes in scope:

5.3 Is the completion of this standard dependent upon the completion of another standard: No
5.4 Purpose: The purpose of this standard is to provide methods for serial interfaces between the IEEE 21451-X TIM and NCAP. This standard provides means for transducer devices and equipment interoperability.

Changes in purpose:

5.5 Need for the Project: There is currently a great need for open standards to provide economically viable digital communication interfaces between transducers and microprocessors. Without a cost effective, easy-to-implement, independent, openly defined transducer interface standard, the development of remote sensing applications for safety, security, industrial automation, and other remote monitoring/remote control applications will continue to be hindered.

5.6 Stakeholders for the Standard: Sensor and actuator users, producers, and system integrators.

Intellectual Property
6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?: No
6.1.b. Is the Sponsor aware of possible registration activity related to this project?: No

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7.1 Are there other standards or projects with a similar scope?: No
7.2 Joint Development
Is it the intent to develop this document jointly with another organization?: Yes
Organization: ISO/IEC JTC1
Technical Committee Name: Automatic identification and data capture techniques
Technical Committee Number: SC31
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8.1 Additional Explanatory Notes (Item Number and Explanation): 5.2, 5.4 and 7.2: The PAR is modified to include ISO/IEC/JTC1/SC31 as a joint partner for the development of this draft standard as stated in Clause 7.2 via the ISO/IEEE Partner Standards Development Organization (PSDO) Cooperation Agreement. The PSDO cooperation agreement provides new opportunities to adopt and jointly develop international standards to serve the global marketplace. The project number is changed to 21451-2 for the joint effort.