
myProject™ - P1528 PAR Detail

Submitter Email: mark.douglas@motorola.com

Type of Project: Revision to IEEE Standard

PAR Request Date: 10-Apr-2008

PAR Approval Date: 12-Jun-2008

PAR Expiration Date: 31-Dec-2012

Status: Revision to an Existing IEEE Standard, Std 1528-2003

Project:

Root Project: 1528-2003

1.1 Project Number: P1528

1.2 Type of Document: Recommended Practice

1.3 Life Cycle: Full Use

1.4 Is this project in ballot now? No

2.1 Title: Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques

Old Title: IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques

3.1 Working Group: Measurement Techniques Working Group (SASB/SCC39/MESRMENT)

Contact Information for Working Group Chair

Name: Mark Gordon Douglas

Email: mark.douglas@motorola.com

Phone: 954-723-4902

Contact Information for Working Group Vice-Chair

None

3.2 Sponsoring Society and Committee: IEEE-SASB Coordinating Committees/SCC39 - International Committee on Electromagnetic Safety (SASB/SCC39)

Contact Information for Sponsor Chair

Name: Ralf Bodemann

Email: ralf.bodemann@siemens.com

Phone: +498963640706

Contact Information for Standards Representative

None

4.1 Type of Ballot: Individual

4.2 Expected Date of Submission for Initial Sponsor Ballot: 07/2009

4.3 Projected Completion Date for Submittal to RevCom: 02/2010

5.1 Approximate number of people expected to work on this project: 70

5.2 Scope: To specify protocols for the measurement of the peak spatial-average SAR in a simplified model of the head of users of handheld radio transceivers used for personal wireless

Old Scope: To specify protocols for the measurement of the peak spatial-average specific absorption rate (SAR) in a simplified model of the head of users of hand-held radio transceivers used for

communications services and intended to be operated while held next to the ear. It applies to contemporary and future devices with the same operational characteristics as contemporary devices that operate in the 300 MHz to 6 GHz frequency range and provides a conservative estimate of the peak spatial-average SAR representative of that which would be expected to occur in the heads of a significant majority of persons during normal use of these devices, but which may not be the absolute maximum value that could possibly occur under every conceivable combination of head size, head shape, handset orientation, and spacing relative to the head.

personal wireless communications services and intended to be operated while held next to the ear. It applies to contemporary and future devices with the same or similar operational characteristics as contemporary devices that operate in the 300 MHz to 3 GHz frequency range and provides a conservative estimate of the spatial peak SAR representative of that which would be expected to occur in the heads of a significant majority of persons during normal use of these devices, but which may not be the absolute maximum value that could possibly occur under every conceivable combination of head size, head shape, handset orientation and spacing relative to the head.

5.3 Is the completion of this standard dependent upon the completion of another standard: No

5.4 Purpose: The purpose of this recommended practice is to provide a protocol for the measurement of the peak spatial-average SAR in an anatomical model of the human head of users of wireless handsets intended to be operated while held next to the ear. It provides the users with standardized and accepted protocols, measurement and validation techniques, and means for estimating the overall uncertainty in order to produce valid and repeatable data. Specific SAR limit values are not included since these are found in other documents, e.g., IEEE Std C95.1 and the International Commission on Non-Ionizing Radiation Protection (ICNIRP) guidelines.

Old Purpose The purpose of this recommended practice is to provide a protocol for the measurement of the peak spatial-average SAR in an anatomical model of the human head of users of wireless handsets intended to be operated while held next to the ear. It provides the users with standardized and accepted protocols, measurement and validation techniques, and means for estimating the overall uncertainty in order to produce valid and repeatable data. Specific SAR limit values are not included since these are found in other documents, e.g., IEEE Std C95.

5.5 Need for the Project: The revision extends the frequency range of the 2003 version from 300 to 3000 MHz to 300 to 6000 MHz. Recently, there has been a rapid increase in the development of personal communication devices that transmit in the 3-6 GHz frequency range. These devices are operated close to the user's body and therefore recommended practices are needed to evaluate compliance with exposure limits, as defined in international standards. IEEE Std C95.1-2005 states that for frequencies in the range 100 kHz to 6 GHz the evaluation of SAR may be used to demonstrate compliance with its specifications. SAR is the basic restriction for frequencies up to 3 GHz, and a transition frequency range of 3 GHz to 6 GHz allows compliance with the standard by valuation of either incident power density or local SAR. Therefore, 6 GHz is the upper end of the frequency spectrum for which SAR evaluation is needed.

5.6 Stakeholders for the Standard: Manufacturers of handheld wireless equipment, manufacturers of test equipment, testing laboratories, and government regulatory agencies.

Intellectual Property

6.1.a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR prior to the PAR submittal to the IEEE-SA Standards Board? Yes

If yes, state date: 03/20/2008

6.1.b. Is the Sponsor aware of any copyright permissions needed for this project? No

6.1.c. Is the Sponsor aware of possible registration activity related to this project? No

7.1 Are there other standards or projects with a similar scope? Yes

If yes, please explain: An existing IEC standard (IEC 62209-1, published in 2005) has a scope that covers SAR measurements of devices held to the side of the head in the 300-3000 MHz frequency range. IEC PT 62209 is currently busy working on IEC 62209-2 for portable devices near the body (not at the side of the head) in the 30 - 6000 MHz range. The scope of IEEE 1528 is therefore a complement to IEC standards with a unique scope.

and answer the following:

Sponsor Organization: IEC

Project/Standard Number: P62209

Project/Standard Date: 02/01/2005

Project/Standard Title: Human Exposure to Radio Frequency Fields from Handheld and Body-Mounted Wireless Communication Devices - Human models, Instrumentation, and Procedures - Part 2: Procedure to determine the specific absorption rate (SAR) for mobile wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)

7.2 International Activities

a. Adoption

Is there potential for this standard (in part or in whole) to be adopted by another national, regional or international organization? No

Organization:

Technical Committee Name:

Technical Committee Number:

Contact Person Name:

Contact Person Phone:

Contact Person Email:

b. Joint Development

Is it the intent to develop this document jointly with another organization? No

Organization:

Technical Committee Name:

Technical Committee Number:

Contact Person Name:

Contact Person Phone:

Contact Person Email:

c. Harmonization

Are you aware of another organization that may be interested in portions of this document in their standardization development efforts? No

Organization:

Technical Committee Name:

Technical Committee Number:

Contact Person Name:

Contact Person Phone:

Contact Person Email:

8.1 Additional Explanatory Notes (Item Number and Explanation):