IFIP WORKING GROUP 10.5

REPORT OF ACTIVITIES SEPTEMBER 2003 - AUGUST 2004

1. Sponsored events

CHARME'2003 – 12th Advanced Research Working Conference on Correct Hardware Design and Verification Methods, which is organized by SIG-CHARME, was held in L'Aquila, Italy, from October 21st to 24th 2003.

VLSI-SoC'03 – 12th International Conference on Very Large Scale Integration, which is the flagship event of WG 10.5, was held in Darmsdadt, Germany, from December 1st to 3rd 2003.

DIPES'2004 – Workshop on Distributed and Parallel Embedded Systems, sponsored by the WG and organized by SIG-ES, was held in Toulouse, France, from August 22nd to 27th 2004, together with the IFIP World Computer Congress.

EduTech – Workshop on Education in Computer-Aided Design of Electronic Systems, was held in Toulouse, France, from August 22nd to 27th 2004, together with the IFIP World Computer Congress, with support from IFIP WG 3.6 on Distance Learning

Next sponsored event will be:

 VLSI-SoC'05 – 13th International Conference on Very Large Scale Integration will be held in Perth, Australia, in October 2005.

2. Co-sponsored events

SBCCI'2003 – 16th Symposium on Integrated Circuits and Systems Design, was held in São Paulo, Brazil, from September 8th to 11th 2003. It has been sponsored by SBC – Brazilian Computer Society and SBMICRO – Brazilian Microelectronics Society and co-sponsored by WG 10.5, IEEE Circuits and Systems Society, and ACM SIGDA. Proceedings have been published by IEEE Computer Society Press.

FDL'2003 - Forum on Design Languages, was held in Frankfurt, Germany, from September $23^{\rm rd}$ to $26^{\rm th}$ 2003. It has been organized by ECSI and co-sponsored by WG 10.5. Papers have been published on a CD-ROM.

CODES+ISSS'2003 – 1st IEEE/ACM/IFIP International Conference on Hardware/Software Codesign and System Synthesis (the new conference merging CODES and ISSS), was held in Newport Beach, USA, from October 1st to 3rd 2003. It has been co-sponsored by the IEEE Circuits and Systems Society (CAS), the IEEE Computer Society (CS), the ACM Special Interest Groups on Design Automation (SIGDA), Software Engineering (SIGSOFT) and Embedded Systems (SIGBED), and IFIP WG 10.5. Proceedings have been published by IEEE Computer Society Press.

IP-BASED DESIGN, the International Workshop on IP-based SoC Design, was held in Grenoble, France, from November 13th to 14th 2003. It has been organized by INPG and Design & Reuse and co-sponsored by WG 10.5. Proceedings have been published by the local organizers and distributed to the participants.

DATE'2004 - Design, Automation and Test in Europe, was held in Paris, France, from February 16th to 20th 2004. It has been co-sponsored by the European Design and Automation Association, the EDA Consortium, the IEEE Computer Society - TTTC, ECSI, RAS, and ACM SIGDA. Proceedings have been published by the IEEE Computer Society Press.

All these events have been co-sponsored by Working Group 10.5 without financial involvement (except for CODES-ISSS, which has financial involvement).

3. Meetings

Following meetings have been held in the past 12 months:

- Darmstadt, on November 30th 2003, during the WG-owned VLSI-SoC conference;
- Toulouse, on August 26th 2004, during the IFIP World Computer Congress, together with two events sponsored by WG 10.5 – DIPES and EduTech.

The next meeting is not yet confirmed. It shall be probably held in Munich, during DATE'2005.

4. Special Interest Groups

The Working Group has two Special Interest Groups attached to it: the Special Interest Group on "Embedded Systems" (SIG-ES), which is also attached to WG 10.3 and WG 10.4, and the Special Interest Group on "Formal Design and Verification Methods for Correct Hardware-like Systems" (SIG-CHARME). Chairs of these SIG's are Bernd Kleinjohann (C-Lab, Germany) and Steve Johnson (Indiana University, USA).

Reports on the activities of these SIG's are attached to this WG report.

5. Changes of membership

There are no changes to report.

The WG has now 65 members, with the following distribution:

North America - 21 Europe - 33 Asia / Pacific - 9 South America - 2

6. New activities

A Working Group PhD forum was held for the first time at the VLSI-SoC conference in Darmstadt, Germany, in December 2003. Funds have been obtained from TC 10 to support participation of PhD students from all continents.

WG members expressed interest in educational activities. Presentations from interested members in this topic have been offered during the regular meeting in Munich, in March 2003. A new Workshop in Education (EduTech), in the context of electronic systems, chaired by Carlos Delgado-Kloos, was held together with the IFIP World Congress in Toulouse. Support and co-sponsorship from WG 3.6 on Distance Learning have been obtained.

The WG launched a sequence of workshops entitled Frontiers. These will be very informal workshops on topics of future relevance, with invited speakers from academia and industry, to be held together with the WG regular meetings. Goal of these workshops will be to investigate future challenges in the field. The first workshop has been held in Darmstadt, on November 30th 2003, with the subject "Automotive Electronics".

7. Officers

Officers have not changed in this period. Chair is Flávio R. Wagner (UFRGS, Brazil). Three vice-chairs represent the three continents – Nikil Dutt (Irvine, USA), Masaharu Imai (Osaka University, Japan), and Eugenio Villar (Univ. of Cantabria, Spain).

8. Home-page

The WG 10.5 home-page is located at http://www.inf.ufrgs.br/ifip10-5