



Educator Track Agenda

Wednesday, August 4

9:00am-9:10am

* *Introduction*

9:10am-11:30 am

* *TI's Role in DSP Education & Research*

- **eXpressDSP Software Technology**
- *New Tools for DSP Education!*

11:30am-1:15 pm

* *Lunch Keynote Speaker: Dr. Oppenheim, MIT*

1:30pm-5:30 pm

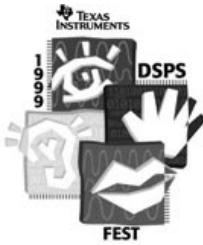
* *Education-in-Action Session*

- Implementation of DSP in Education

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Educator Track (a.m.)

TI's Role in DSP Education & Research

9:10-9:45 am TI DSP University Program

- *Education & Labs Update/Highlights*
- *Research Program*

Maria Ho

WW Regional Managers
Torrence Robinson

9:45-10:05 am eXpressDSP

Bob Frankel

10:05-10:30 am 'C6000 DSK & 'C3x Update

Richard Faust

10:30-10:50 am DSP Teaching Kit - 'C54x DSK & DTK

Christina Peterson

10:50-11:00 am Digital Motor Control DSK

Justin Rosenbaum

11:00-11:30 am 'New' DSP Educational Tool : VAB

Visual Application Builder

Dr. Mark Yoder - Rose Hulman Institute of Technology

Jim Zachman - Hyperception

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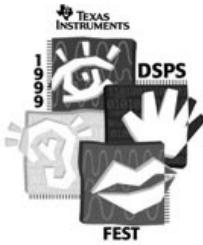
DSP University Program



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DSP University Program

Scope

- Equipping the next generation of engineers with the skills to tackle tomorrow's problems by **TEACHING DSP!**
- Widening the potential applications of DSPS technology by stimulating innovation through **RESEARCH!**
- Enable the widest possible use of real-time DSP with the industry's leading **TI DSPs!**

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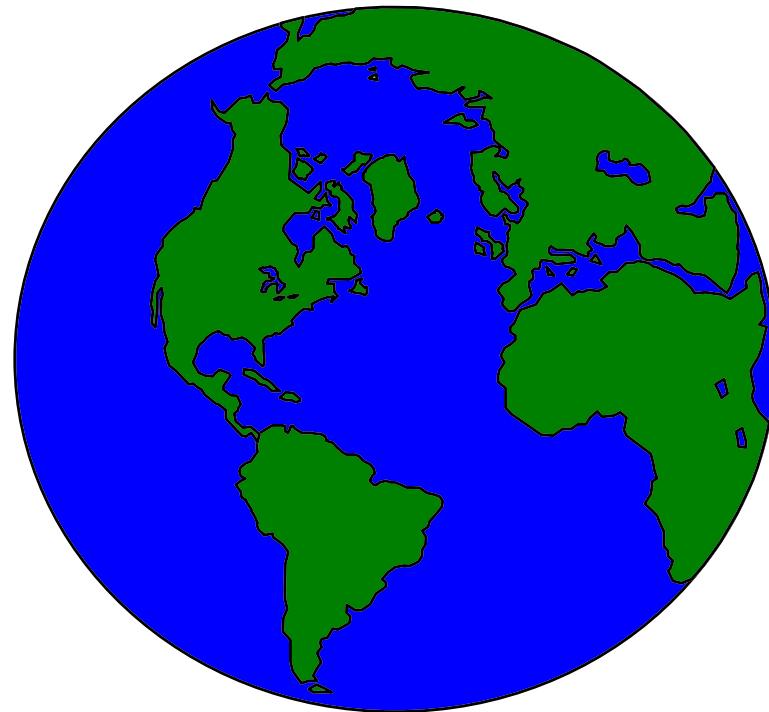


DSP University Program

Growing DSP literacy worldwide!

Global Penetration

- North America
- South America
- Japan
- Asia
- China
- India
- Europe/Mid East



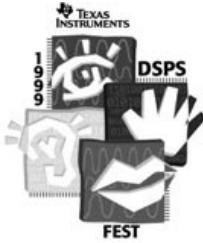
WW Growth of Program

- 1982 : 1 P/T resource
- 1999 : 5 F/T, 7 P/T

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Paradigm Shift

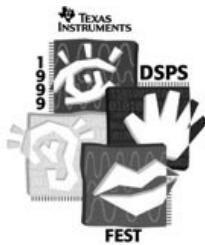
◆ What's happening?

- DSP Market
- Demand for Engineers is exploding
- Teaching DSP earlier in the curriculum...
 - ◆ DSP is not just for seniors and grad students anymore!
- DSP is not just for EE's anymore!

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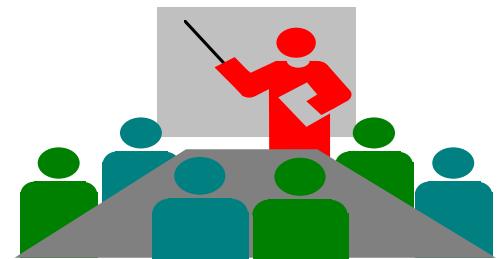
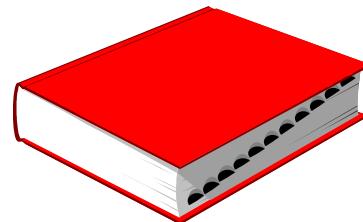
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TI is committed to universities...

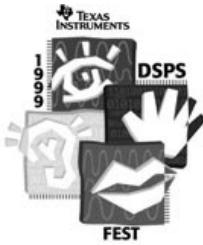
- ◆ **Education & Labs Support**
 - Access to DSP Development Tools
 - Textbook Development Support
 - Literature & Information
- ◆ **Resources**
 - Access to Technical Support
 - TMS320 Technical Training
- ◆ **University Research Program**
- ◆ **Academic Conferences**
 - DSPS FEST
 - ICASSP, ASEE, IEEE, etc...



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Education & Labs Support

Textbook Development Support

- ◆ Supports educational materials development (textbooks, curricula, teaching materials, demos programs, etc on TI DSP)
- ◆ Types of Support
 - Development Tools
 - Workshop documentation/license to use TI materials/documentation in textbook, etc.
 - Marketing on TI's website
- ◆ Support is tailored on a case-by-case basis
- ◆ Materials must support TI DSP
- ◆ Submit your proposal to univ@ti.com

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Education & Labs Support

Access to Development Tools

◆ Tools Discount Program

- Special discount pricing to universities
- 20%-75% off list price for software & hardware-based tools
- Excludes DSKs (DSP Starter Kit) and DTKs (DSP Teaching Kit)
- For academic purposes only
- Sold through TI's authorized distributor network
- <http://www.ti.com/sc/docs/dspss/univprog/toolweb.htm>

◆ Matching/Donation Program

- Development tool matching/ donations for existing and new TI-based labs
- For academic purposes only: preference given to proposals that impact education and research
- Support is tailored on a case-by-case basis
- <http://www.ti.com/sc/docs/dspss/univprog/donate.htm>

◆ Matching Software Tool Program

- ◆ Free TI C Comp/ A/L with purchase of participating TMS320-based 3rd party product

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Education & Labs Support

Technical Support

- ◆ **EDUCATORS** have unrestricted access to **TI technical support** expertise through the PIC

- Email
- Phone
- Fax

sc-infomaster@ti.com
(972) 644-5580
(972) 480-7800

- ◆ **DSP Hotline**

- Web
- Email
- Phone

www.ti.com/sc/docs/dspshotline/support.htm
dsph@ti.com
(281) 274-2320

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TI Resources & Literature

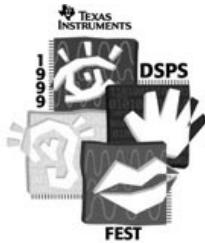
www.ti.com/sc/dsps

- Development Tools: www.ti.com/sc/docs/dsps/tools.htm
- User Manuals: www.ti.com/sc/docs/psheets/man_dsp.htm
- Application Notes: www.ti.com/sc/docs/psheets/man_dsp.htm
- Designer Note Pages: www.ti.com/sc/docs/dsps/dnp/pdftoc.htm
- DSP Programs & Freeware
 - ftp://ftp.ti.com/mirrors/tms320bbs/
 - BBS (281) 274-2323
 - Application Source Codes & updated DSK files
- Data Books (972) 293-5055
- DSP S/W Tool Registration & Upgrades (972) 293-5050
- U.S. Factory Repair Center (281) 274-2285
- Product Information Center (972) 644-5580

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New Textbooks

- ◆ “Real Time DSP with the TMS320C6000”
 - By: Nasser Kehtarnavaz
 - Prentice Hall Publishing
- ◆ “DSP Implementation Using The TMS320C62x Processors”
 - By: Naim Dahnoun
 - Addison Wesley Publishing
- ◆ “DSP: Laboratory Experiments Using C and the TMS320C31 DSK”
 - By: Rulph Chassaing
 - John Wiley & Sons Publishing
- ◆ “DSP First - A Multimedia Approach”
 - By: Ron Schafer, James McClellan, Mark Yoder
 - Prentice Hall Publishing



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Contact Information

DSP University Program

<http://www.ti.com/sc/university>

DSP University Research Program

<http://www.ti.com/sc/univfund>

DSP Education & Labs Program

Mexico

Brazil

India

Japan

Asia

China

Europe/Middle East

DSP University Research Program

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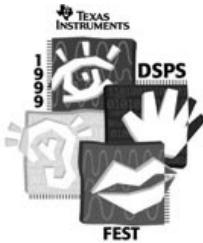
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Torrence Robinson

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Conclusions

- **DSP market is growing faster than the amount of engineers graduating.**
- **DSP is being taught at the freshman and sophomore level and is increasingly being used in student projects.**
- **DSP is not just for EEs anymore! DSP is a fundamental component of engineering curriculum.**
- **DSP Univ Program welcomes proposals to support TI DSP-based projects such as textbooks, teaching materials, demo programs, application reports, conference papers, etc.**
- **TI is committed to education and has programs to help you!**
- **TI is the market leader!**

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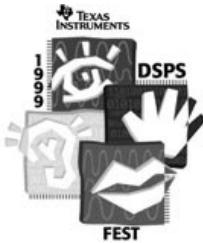
Universities **can** help!

- Maximizing use of TI DSP in Teaching, Student Projects, and Research!
- Motivating students by getting DSP into the engineering curriculum earlier with the help of new low cost products: VAB and DSKs.
- Submitting DSP textbooks, teaching materials, demo programs, application reports, conference papers, and press articles to TI DSP Univ Program for widespread publication.
- Promoting the importance of DSP as a core skill for the next millennium.

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Here's what **you** can do...

- Teach DSP **earlier**: freshman/sophomore course
- Add **real time DSP labs** to DSP courses
- Submit proposals to the **DSP University Research Program**
- Submit DSP teaching related materials to **univ@ti.com**
- Submit papers for **DSPS FEST 2000!**

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Don't Forget!

Tonight: eXpress Yourself DSP Party

Thursday Night: Product & Technology Expo

Friday Evening: Closing Reception

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