

# TMS320C5535 eZdsp™ USB Development Kit



## Key features and benefits

- Small form factor DSP development kit for the C5535 processor
- TMS320C5535 fixed-point ultra-low-power DSP
- Embedded XDS100 emulator
- 8-MB serial Flash memory
- TLV320AIC3204 programmable low-power stereo audio codec
- USB 2.0 high speed
- Micro SD card slot with 2-GB micro SD card
- Line in/Mic in, headphone out audio jacks
- Earphone with mic
- 60-pin expansion connector
- 96 × 16-pixel OLED display
- Two push buttons
- Includes Code Composer Studio™ IDE 4.0
- Software framework for USB audio class and HID applications
- Out-of-the-box demo software
- Full documentation with source code on CD-ROM

The TMDX5535eZdsp is a small form factor, very-low-cost USB-powered DSP development kit which includes hardware and software needed to evaluate the C553x generation, which is the industry's lowest-cost and lowest-power 16-bit DSP. This ultra-low-cost kit allows quick and easy evaluation of the advanced capabilities of the C5532, C5533, C5534 and C5535 processors. The kit has an on-board XDS100 emulator for full source-level debug capability and supports Code Composer Studio™ (CCStudio) Integrated

Development Environment (IDE) version 4.0 and eXpressDSP™ software which includes the DSP/BIOS™ kernel. The full contents of the Development Kit include C5535 eZdsp board, CCStudio IDE Rev. 4.0, a headphone with mic, a 2-GB micro SD card, a free software framework for USB audio class and human interface device (HID) applications and an out-of-the-box comprehensive demo for USB audio class applications.

## Technical details

The C5535 eZdsp USB kit simplifies development by providing integrated features including:

- Complete Code Composer Studio v4 IDE for fast code development
- On-board XDS100 v2 emulator provides complete debugging capabilities and visibility inside the processor for algorithm optimization and benchmarking
- On-board audio codec and connectors allow developers to evaluate the C5535 processor and quickly optimize complex DSP algorithms in terms of performance and power consumption across a variety of design scenarios
- Energy-efficient C5535 DSP allows the entire development tool to be powered by the USB port – no other components or cables are needed
- Rich set of features including LCD 96 × 16 monochrome OLED display screen, MicroSD card slot, USB 2.0 port for applications, *Bluetooth*®/Chipcon expansion connector

## Software

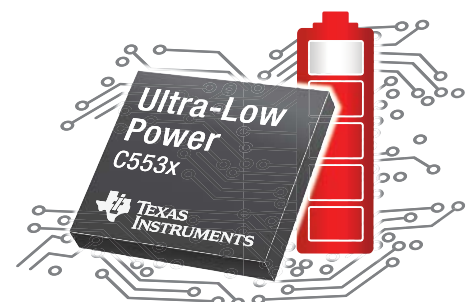
Designers can readily target the TMS320C5532/33/34/35 DSP through TI's robust and comprehensive Code Composer Studio IDE, including:



- A complete Integrated Development Environment, an efficient optimizing C/C++ compiler assembler, linker, debugger, integrated CodeWright editor with CodeSense technology for faster code creation, data visualization, a profiler and a flexible project manager
- DSP/BIOS™ real-time kernel
- Chip Support Library
- Free, integrated software framework for USB audio class and HID applications, including an out-of-the-box demo

## Community support

The eZdsp USB kit is supported by TI's online community [e2e.ti.com](http://e2e.ti.com). Complete collateral, CCStudio IDE drivers, Chip Support Library (CSL) and all the required production-quality



documentation for the DSP is available today. Complete schematics and layout files are available for the tool at <http://support.spectrumdigital.com/boards/ezdsp5535/revb/>, so customers can use this as a reference for their own system development.

Various examples in audio/musical special effects, digital filter design, USB audio class with HID and many others will also be available in the community. Special pricing incentives are available for educators, university students

and developers that actively participate in the community. [e2e.ti.com/code.google.com/p/c5535-ezdsp/](http://e2e.ti.com/code.google.com/p/c5535-ezdsp/)

### Get started today

The feature-rich C5535 eZdsp™ USB Development Kit (part number: TMDX5535eZdsp) is available now for the low cost of U.S. \$99. Pricing includes the full XDS100 v2 emulator and the industry-leading CCStudio v.4 IDE as well as pre-loaded

demo software. To celebrate this momentous achievement, a one-time promotional price of just U.S. \$55 is offered for 55 days starting August 30, 2011. To order, please visit [www.ti.com/c5535ezdsp](http://www.ti.com/c5535ezdsp).

The TMS320C553x DSP generation is supported by TI's extensive Developer Network, as well as a complete Chip Support Library, comprehensive application notes, reference designs, application guides, videos and online communities.

## TI Worldwide Technical Support

### Internet

**TI Semiconductor Product Information Center Home Page**  
support.ti.com

**TI E2E™ Community Home Page**  
e2e.ti.com

### Product Information Centers

<b>Americas</b>	Phone	+1(972) 644-5580
<b>Brazil</b>	Phone	0800-891-2616
<b>Mexico</b>	Phone	0800-670-7544
	Fax	+1(972) 927-6377
	Internet/Email	support.ti.com/sc/pic/americas.htm

### Europe, Middle East, and Africa

Phone	
European Free Call	00800-ASK-TEXAS (00800 275 83927)
International	+49 (0) 8161 80 2121
Russian Support	+7 (4) 95 98 10 701

**Note:** The European Free Call (Toll Free) number is not active in all countries. If you have technical difficulty calling the free call number, please use the international number above.

Fax	+ (49) (0) 8161 80 2045
Internet	support.ti.com/sc/pic/euro.htm
Direct Email	asktexas@ti.com

### Japan

Phone	Domestic	0120-92-3326
Fax	International	+81-3-3344-5317
	Domestic	0120-81-0036
Internet/Email	International	support.ti.com/sc/pic/japan.htm
	Domestic	www.tij.co.jp/pic

### Asia

Phone	
International	+91-80-41381665
Domestic	<a href="#">Toll-Free Number</a>
<b>Note:</b> Toll-free numbers do not support mobile and IP phones.	
Australia	1-800-999-084
China	800-820-8682
Hong Kong	800-96-5941
India	1-800-425-7888
Indonesia	001-803-8861-1006
Korea	080-551-2804
Malaysia	1-800-80-3973
New Zealand	0800-446-934
Philippines	1-800-765-7404
Singapore	800-886-1028
Taiwan	0800-006800
Thailand	001-800-886-0010
Fax	+8621-23073686
Email	tiasia@ti.com or ti-china@ti.com
Internet	support.ti.com/sc/pic/asia.htm

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DSP	<a href="http://dsp.ti.com">dsp.ti.com</a>
Clocks and Timers	<a href="http://www.ti.com/clocks">www.ti.com/clocks</a>
Interface	<a href="http://interface.ti.com">interface.ti.com</a>
Logic	<a href="http://logic.ti.com">logic.ti.com</a>
Power Mgmt	<a href="http://power.ti.com">power.ti.com</a>
Microcontrollers	<a href="http://microcontroller.ti.com">microcontroller.ti.com</a>
RFID	<a href="http://www.ti-rfid.com">www.ti-rfid.com</a>
OMAP Mobile Processors	<a href="http://www.ti.com/omap">www.ti.com/omap</a>
Wireless Connectivity	<a href="http://www.ti.com/wirelessconnectivity">www.ti.com/wirelessconnectivity</a>

### Applications

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Consumer Electronics	<a href="http://www.ti.com/consumer-apps">www.ti.com/consumer-apps</a>
Energy and Lighting	<a href="http://www.ti.com/energy">www.ti.com/energy</a>
Industrial	<a href="http://www.ti.com/industrial">www.ti.com/industrial</a>
Medical	<a href="http://www.ti.com/medical">www.ti.com/medical</a>
Security	<a href="http://www.ti.com/security">www.ti.com/security</a>
Space, Avionics and Defense	<a href="http://www.ti.com/space-avionics-defense">www.ti.com/space-avionics-defense</a>
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TI E2E Community Home Page

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