

How to use the TI Embedded Processors MediaWiki

May '09

Wiki(s) Introduction

- What?
 - Based on open-standard Mediawiki (same as e.g. wikipedia)
- Why?
 - Need a way to get non-proprietary, important *developer* info out quickly
 - Enables collaboration, community contributions (Field, Factory, customers)
- When?
 - Davinci Wiki launched 1h07.
 - tiexpressdsp.com wiki launched April '08. Marketing announcement sent to registered customers
 - Merged with Davinci wiki March '09
- How?
 - Getting started guide / FAQ available on the wiki itself [[link](#)]. Webex recording [here](#)

Look & Feel

- Similar layout to ti.com [Embedded Processors webpage](#)

Welcome to the Texas Instruments Embedded Processors Wiki

Searching and RSS Feed

-  Search for an article here:

-  [Embedded Processors Technology Developers](#) 
- You can also check the [FAQ](#) section for Frequently Asked Questions.

Embedded Processors

| Applications Processors | Digital Signal Processors | Microcontrollers |
|-------------------------|---------------------------|------------------|
| OMAP35x | C647x | MSP430 |
| OMAPL1, C674x | C645x | C2000 |
| DM644x, DM646x | C641x | TMS470 |
| DM643x, DM64x | | |
| DM35x, DM36x | | |

This table is structured by device-family. Each of starting point for that particular family. This will ty articles associated with that family will automatic it may be a dedicated home-page for a set of devi

Note that in general we try to limit per-device cate topics which apply to many devices e.g. Codec E Processors hence we do not want to re-edit topic new device comes to market

Useful Starting points

- For **Multimedia Codecs and Frameworks** check out [Codecs](#), [Codec Engine](#), [XDAIS Algorithm Standard](#) ar
- For **Target Content** see [DSP/BIOS](#), [DSP/BIOS Link](#), [Network Developers Kit](#) and [Platform Support Package](#)
- For **Foundational Tools** consider looking at [Emulation](#), [Simulation](#), [Code Generation Tools](#) and [Real-Time S](#)

Categories

- Key categories are listed in the Main Page [[link](#)]
- When an author associates a new topic with a Category it automatically shows up under that Category

– syntax example: -

- `[[Category : CCS]]`

- Can associate a topic with multiple categories

– `[[Category : NDK]]`

– `[[Category : CCS]]`

Pages in category "Code Composer Studio v3"

The following 53 pages are in this category, out of 53 total.

A

- AET & 560Trace Advanced Emulation Techniques
- Advanced Event Triggering
- Aetlib

B

- Before asking for BIOS support
- Before asking for CGT support
- Building codec library CCS projects with complex cache layouts

C

C cont.

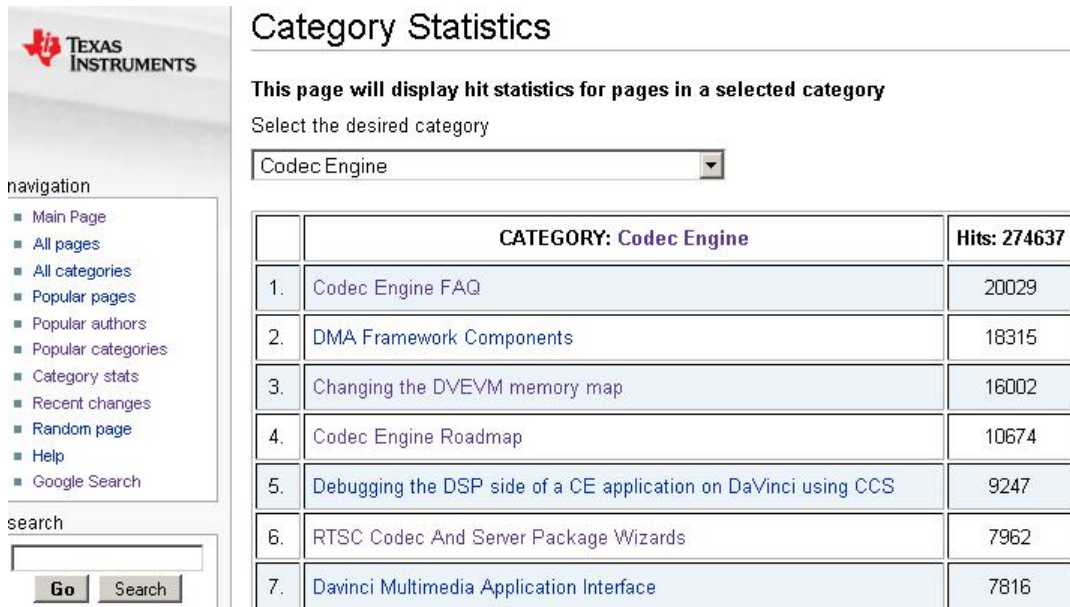
- Creating Custom Memory Mapped CCStudio
- Creating a C-callable Assembly Function for

D

- Data Breakpoint/Watchpoint
- Dbgtag
- Debug versus Optimization Tradeoff
- Debugging JTAG Connectivity Problems
- Debugging NDK in DaVinci
- Debugging Overlays With CCStudio

Statistics

- Lots of useful statistics available from Left sidebar



The screenshot displays the Texas Instruments website interface. On the left is a navigation sidebar with links such as 'Main Page', 'All pages', 'All categories', 'Popular pages', 'Popular authors', 'Popular categories', 'Category stats', 'Recent changes', 'Random page', 'Help', and 'Google Search'. Below the navigation is a search box with 'Go' and 'Search' buttons. The main content area is titled 'Category Statistics' and includes a sub-header: 'This page will display hit statistics for pages in a selected category'. Below this is a dropdown menu set to 'Codec Engine'. A table lists the top 7 pages in this category, ranked by hit count.

| | CATEGORY: Codec Engine | Hits: 274637 |
|----|---|--------------|
| 1. | Codec Engine FAQ | 20029 |
| 2. | DMA Framework Components | 18315 |
| 3. | Changing the DVEVM memory map | 16002 |
| 4. | Codec Engine Roadmap | 10674 |
| 5. | Debugging the DSP side of a CE application on DaVinci using CCS | 9247 |
| 6. | RTSC Codec And Server Package Wizards | 7962 |
| 7. | Davinci Multimedia Application Interface | 7816 |

- Popular Pages – ranked list of pages with most hits
- Popular Authors – same as above with initial & most recent authors
- Popular Categories – which categories are accessed most frequently
- Category Statistics – within a category which topics are most popular

Creating a new account


- First step is to to create a new account and login
 - Simple. Takes 1 minute. Click top-right ‘Log in’ [[link](#)]
 - Entering email address, real name is optional

Log in / create account


Create account

Already have an account? [Log in](#).

To help protect against automated account creation, please type the two words you see in the box below:



Type the two words:



Username:

Password:

Retype password:

E-mail:

E-mail address is optional, but allows a new password to be e-mailed to you if you forget your password. You can page without needing to reveal your identity.

Real name:

Real name is optional. If you choose to provide it, this will be used for giving you attribution for your work.

Remember my login on this computer

Contributing – creating a new topic

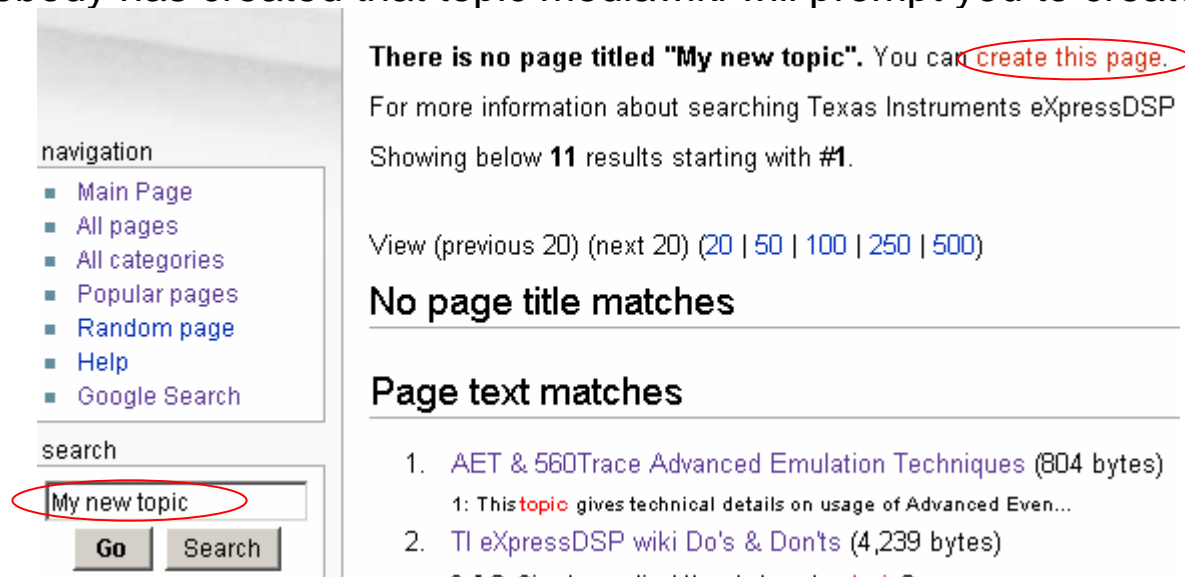
- Creating a new topic

- NOTE : before you do this: -

- Read the Wiki Do's and Don'ts [\[link\]](#)
 - Search to see if somebody already created a similar topic that you could add to
 - Ensure there's no customer names or proprietary material in it

- Easiest way is to just enter your proposed topic name in the box above 'Go' then press ENTER.

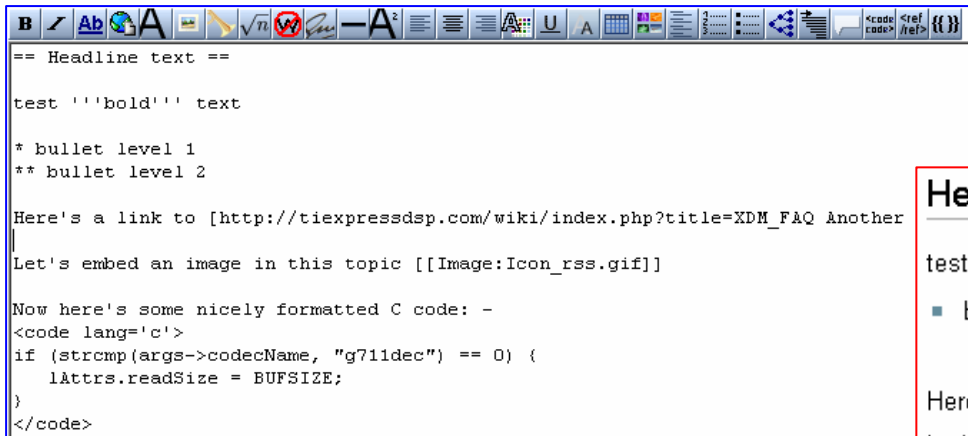
- If nobody has created that topic mediawiki will prompt you to create it



The screenshot shows a search interface on a MediaWiki site. On the left, there is a navigation menu with links for Main Page, All pages, All categories, Popular pages, Random page, Help, and Google Search. Below the navigation is a search box containing the text "My new topic", which is circled in red. To the right of the search box are "Go" and "Search" buttons. The main content area displays the search results for "My new topic". It states: "There is no page titled "My new topic". You can [create this page.](#)" The "create this page" link is circled in red. Below this message, it says "For more information about searching Texas Instruments eXpressDSP" and "Showing below 11 results starting with #1." There are pagination links: "View (previous 20) (next 20) (20 | 50 | 100 | 250 | 500)". The search results are divided into two sections: "No page title matches" and "Page text matches". Under "Page text matches", there are two results: 1. "AET & 560Trace Advanced Emulation Techniques (804 bytes)" with a sub-entry "1: This topic gives technical details on usage of Advanced Even...". 2. "TI eXpressDSP wiki Do's & Don'ts (4,239 bytes)".

Editing

- Mediawiki editor has buttons for the basic operations (bold, headings, links, images...)
- Extra plugins installed for
 - code syntax highlighting
 - Extended Editor (tables, bullets, categories etc)
- Lots of helper topics out there on how to edit in mediawiki e.g. [\[link\]](#)



The screenshot shows the Mediawiki editor's source code view. At the top is a toolbar with icons for bold, italic, underline, link, unlink, image, table, and code. Below the toolbar is the source code:

```
== Headline text ==

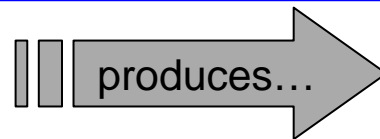
test '''bold''' text

* bullet level 1
** bullet level 2

Here's a link to [http://tiexpressdsp.com/wiki/index.php?title=XDM_FAQ Another
]

Let's embed an image in this topic [[Image:Icon_rss.gif]]

Now here's some nicely formatted C code: -
<code lang='c'>
if (strcmp(args->codecName, "g711dec") == 0) {
    lAttrs.readSize = BUFSIZE;
}
</code>
```



The screenshot shows the Mediawiki editor's preview view. The rendered content is:

Headline text

test **bold** text

- bullet level 1
 - bullet level 2

Here's a link to [Another Topic](#)

Let's embed an image in this topic 

Now here's some nicely formatted C code: -

```
if (strcmp(args->codecName, "g711dec") == 0) {
    lAttrs.readSize = BUFSIZE;
}
```

- Use 'Show Preview' before 'Save Page'

Allowed filetypes & conversion utilities

- Most of the basic read-only filetypes are allowed e.g. 'png', 'gif', 'jpg', 'jpeg', 'pdf', 'gz'
 - .gz enables .tar.gz i.e. compressed tar files
- Filesize attachment limit = 5Mb
- For security reasons we do not allow MS Word or Powerpoint docs
- Converters
 - Lots of converters listed here [\[link\]](#)
 - Word -> mediawiki...
 - Word2MediaWikiPlus works well
 - Powerpoint -> mediawiki...
 - Adobe Professional
 - PdfSuite995
 - doPDF
 - PDF Creator...
 - Twiki -> mediawiki...
 - We have a Twiki -> Mediawiki plugin installed *internally* within TI [\[link\]](#)

Future plans

| <u>Item</u> | <u>Status</u> |
|---|--|
| Improve Search – make Google Custom Search front & centre! | Complete : Sep '08 |
| Improve MediaWiki Ease of Use. | Complete : Mar '09 Installed GCS, extra edit toolbar. Installed WYSIWYG FCKEditor, Recent History, Leave A Comment |
| Category cleanup. Too many device categories == N pages to re-edit when new device comes out. | Complete : Oct '08 |
| 1 wiki. Merge tiexpressdsp.com & wiki.davincidsp.com wikis | Complete : Mar '09 |
| Broaden the scope to TI Embedded Processors wiki | Ongoing : MSP430, C2000 adding content, other groups doing likewise. |
| Training Material | Ongoing : TTO Pushing 1 day workshops to wiki under new Training category |
| Upgrade to dedicated fast server | Complete : May '09 |

Summary

- Excellent source for *developer* content
- Get involved! Post Content!
 - Applications, Engineering, FAEs, 3rd parties, customers...