# **CC32xx Interrupt Demo Application**

## **Application details**

The objective of this application is to showcase interrupt preemption and tail-chaining capabilities. Nested interrupts are synthesized when the interrupts have the same priority, increasing priorities, and decreasing priorities. With increasing priorities, preemption will occur; in the other two cases tail-chaining will occur.

## Source Files briefly explained

- pinmux Pinmux configurations as required by the application.
- main Main file that showcases Interrupt Preemption capabilities
- uart\_if To display status information over the UART
- systick\_if Setup the systick values and registers SysTick handler

## **Usage**

• Setup a serial communication application (HyperTerminal/TeraTerm). For detail info visit Terminal setup

On the host PC. The settings are:

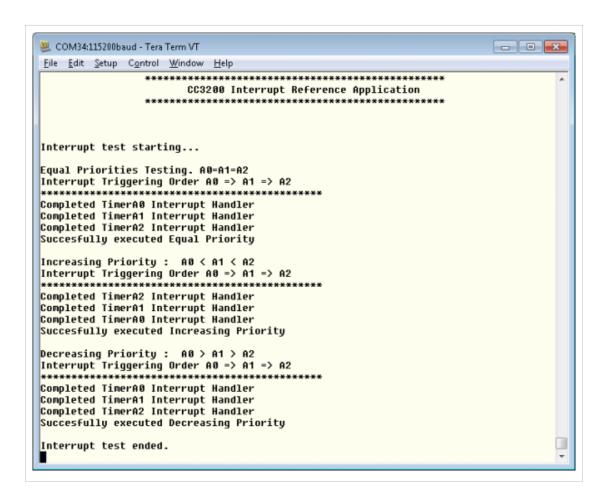
- Port: Enumerated COM port

- Baud rate: 115200

- Data: 8 bit- Parity: None- Stop: 1 bit

- Flow control: None

- Run the reference application (Flashing the bin/IAR/CCS).
- Observe the status messages on the host over serial port to understand the sequence of operations performed by the application.



## **Limitations/Known Issues**

None.

# **Article Sources and Contributors**

CC32xx Interrupt Demo Application Source: http://processors.wiki.ti.com/index.php?oldid=178060 Contributors: Codycooke, Jitgupta, Malokyle

# **Image Sources, Licenses and Contributors**

Image:CC3200 interrupt terminal runScreen.png Source: http://processors.wiki.ti.com/index.php?title=File:CC3200\_interrupt\_terminal\_runScreen.png License: unknown Contributors: Codycooke

# License

THE WORK (AS DEFINED BELOW) IS PROVIDED UNDER THE TERMS OF THIS CREATIVE COMMONS PUBLIC LICENSE ("CCPL" OR "LICENSE"). THE WORK IS PROTECTED BY COPYRIGHT AND/OR OTHER APPLICABLE LAW. ANY USE OF THE WORK OTHER THAN AS AUTHORIZED UNDER THIS LICENSE OR COPYRIGHT LAW IS PROHIBITED.

BY EXERCISING ANY RIGHTS TO THE WORK PROVIDED HERE, VOU ACCEPT AND AGREE TO BE BOUND BY THE TERMS OF THIS LICENSE. TO THE EXTENT THIS LICENSE MAY BE CONSIDERED TO BE A CONTRACT, THE LICENSOR GRANTS YOU THE RIGHTS CONTAINED HERE IN CONSIDERATION OF YOUR ACCEPTANCE OF SUCH TERMS AND CONDITIONS.

### License

- Adaptation means a work based upon the Work, or upon the Work and other pre-existing works, such as a translation, adaptation, derivative work, arrangement of music or other alterations of a literary or artistic work, or phonogram or performance and includes cinematographic adaptations or any other form in which the Work may be recast, transformed, or adapted including in any form recognizably derived from the original, except that a work interestications with a moving image ("synching") will be considered an Adaptation for the purpose of this License.

  "Collection" means a collection of literary or artistic works, such as encyclopedias and anthologies, or performances, phonograms or broadcasts, or other works or subject matter other than works listed in Section 1(f) below, which, by reason of the selection and arrangement of their contents, constitute intellectual creations, in which the work is included in its entirety in unmodified form along with one or more other contributions, each constituting separate and independent works in themselves, which together are assembled into a collective whole. A work that constitutes a Collection will not be considered an Adaptation (as defined below) for the purpose of this License.

  "Creative Commons Compatible Licenses" means a license that is listed at http://creative/commons.org/coverommons.or

## 2. Fair Dealing Rights

nded to reduce, limit, or restrict any uses free from copyright or rights arising from limitations or exceptions that are provided for in connection with the copyright protection under copyright law or other

3. License Grant
Subject to the terms and conditions of this License, Licensor hereby grants You a worldwide, royalty-free, non-exclusive, perpetual (for the duration of the applicable copyright) license to exercise the rights in the Work as stated

- to Reproduce the Work, to incorporate the Work into one or more Collections, and to Reproduce the Work as incorporated in the Collections; to create and Reproduce Adaptations provided that any such Adaptation, including any translation in any medium, takes reasonable steps to clearly label, demarcate or otherwise identify that changes were made to the original Work. For example, a translation could be marked "The original work was translated from English to Spanish," or a modification could indicate "The original work has been modified."; to Distribute and Publicly Perform the Work including as incorporated in Collections; and, to Distribute and Publicly Perform Adaptations.

i. Non-waivable Compulsory License Schemes. In those jurisdictions in which the right to collect royalties through any statutory or compulsory licensing scheme cannot be waived, the Licensor reserves the exclusive right to collect such royalties for any exercise by You of the rights granted under this License;
ii. Waivable Compulsory License Schemes. In those jurisdictions in which the right to collect royalties through any statutory or compulsory licensing scheme can be waived, the Licensor waives the exclusive right to collect such royalties for any exercise by You of the rights granted under this License; and,
iii. Voluntary License Schemes. The Licensor waives the right to collect royalties, whether individually or, in the event that the Licensor is a member of a collecting society that administers voluntary licensing schemes, via that society, from any exercise by You of the rights granted under this License.

The above rights may be exercised in all media and formats whether now known or hereafter devised. The above rights include the right to make such modifications as are technically necessary to exercise the rights in other media and formats. Subject to Section 8(f), all rights not expressly granted by Licensor are hereby reserved.

in Section 3 above is expressly made subject to and limited by the following restrictions:

- license granted in Section 3 above is expressly made subject to and limited by the following restrictions:

  You may Distribute or Publicly Perform the Work only under the terms of this License. You must include a copy of, or the Uniform Resource Identifier (URI) for, this License with every copy of the Work You Distribute or Publicly Perform. When You Distribute or Publicly Performs on the Work that restrict the terms of this License or the ability of the recipient of the Work You Distribute or Publicly Perform. When You Distribute or Publicly Perform and you impose any effective technological measures on the Work that restrict the ability of a recipient of the Work You Distribute or Publicly Perform. When You Distribute or Publicly Perform and you impose any effective technological measures on the Work that restrict the ability of a recipient of the Work from You to exercise the rights granted to that recipient under the terms of the License. This Section 4(a) applies to the Work as incorporated in a Collection, but this does not require the Collection apart from the Work itself to be made subject to the terms of this License. If You create a Collection, upon notice from any Licensor You must, to the extent practicable, remove from the Collection and preferror You must, to the extent practicable, remove from the Collection apart from the Work itself to be made subject to the terms of this License. If You may Distribute or Publicly Perform an Adaptation only under the terms of: (i) this License with the same License Elements as this License (either this or a later license version) that contains the same License Elements as this License (eight ritios or a later license version) that contains the same License Elements as this License (eight ritios or a later license version) that contains the same License Elements as this License (eight ritios or a later license version) that contains the same License Elements as this License (eight ritios or a later license version) that contains the same License Elements as thi
- You Distribute of Publicly Perform the Adaptation, You may not impose any effective technological measures on the Adaptation than the Adaptation from You to exercise the rights granted to that recipient under the terms of the Applicable License. This Section 4(b) applies to the Adaptation in sincorporated in a Collection, but this does not require the Collection apart from the Adaptation in set in the Adaptation is subject to the terms of the Applicable License. This Section 4(b) applies to the Adaptation is does not require the Collection apart from the Adaptation (see subject to the terms of the Applicable License. This Section 4(b) applies to the Adaptation (see July 1975) and the Adaptation (see July 1975) and the Adaptation (see July 1975) and the More Adaptation (see July 1975) and the Adaptation (see July 1975) and the Adaptation (see July 1975) and the Adaptation (see July 1975), in the case of an Adaptation, a credit identifying the use of the Work in the Adaptation (see July 1975), in the case of an Adaptation, a credit identifying the use of the Work in the Adaptation or Collection of Collection appears, then a spart of these credits and in a manner at least as prominent as the credits for the Original Author of Collection and July 2075 and Adaptation (see July 2075) and the Adaptation of Collection of the Work by Original Author). The credit required by this Section 4(c) may be implemented in any reasonable manner; provided, however, that in the case of a Adaptation or Collection appears, then a spart of these credits and in a manner at least as prominent as the credits for the Original Author in Adaptation or Collection and papears, then a spart of these credits and in a manner at least as prominent as the credits for the original value of the Collection of the Original Author in the Adaptation (see July 2075) and the Adaptation of Collection of the Original Author in the Adaptation of Collection of the Original Author in the Adaptation of Collection of the Original Author in the Adaptation of Coll

Elegise (1)git to hirds caughations) due that caughations of the value transfer of the value of val

### 6. Limitation on Liability

EXCEPT TO THE EXTENT REQUIRED BY APPLICABLE LAW, IN NO EVENT WILL LICENSOR BE LIABLE TO YOU ON ANY LEGAL THEORY FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES ARISING OUT OF THIS LICENSE OR THE USE OF THE WORK, EVEN IF LICENSOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

### 7. Termination

- This License and the rights granted hereunder will terminate automatically upon any breach by You of the terms of this License. Individuals or entities who have received Adaptations or Collections from You under this License, however, will not have their licenses terminated provided such individuals or entities remain in full compliance with those licenses. Sections 1, 2, 5, 6, 7, and 8 will survive any termination of this License. Subject to the above terms and conditions, the license granted here is perpetual (for the duration of the applicable copyright in the Work). Notwithstanding the above, Licensor reserves the right to release the Work under different license terms or to stop distributing the Work at any time; provided, however that any such election will not serve to withdraw this License (or any other license that has been, or is required to be, granted under the terms of this

License

License), and this License will continue in full force and effect unless terminated as stated above.

### 8. Miscellaneous

VISCEIBINEOUS

Each time You Distribute or Publicly Perform the Work or a Collection, the Licensor offers to the recipient a license to the Work on the same terms and conditions as the license granted to You under this License.

Each time You Distribute or Publicly Perform an Adaptation, Licensor offers to the recipient a license to the original Work on the same terms and conditions as the license granted to You under this License.

If any provision of this License is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this License, and without further action by the parties to this agreement, such provision shall be reformed to the minimum extent necessary to make such provision shall enforceable.

No term or provision of this License shall be deemed waived and no breach consented to unless such waiver or consents that he entire agreement between the parties with respect to the Work licensed here. This License constitutes the entire agreement between the parties with respect to the Work licensed here. Licensor shall be in writing and signed by the party to be charged with such waiver or consent.

This License constitutes the entire agreement between the parties with respect to the Work not specified here. Licensor shall not be bound by any additional provisions that may appear in any communication from You. This License may not be modified without the mutual written agreement of the Licensor and You.

The rights granted under, and the subject matter referenced, in this License were drafted utilizing the terminology of the Berne Convention of Literary and Artistic Works (as amended on September 28, 1979), the Rome Convention of 1961, the WIPO Copyright Treaty of 1996, the WIPO Performances and Phonograms Treaty of 1996 and the Universal Copyright Convention (as revised on July 24, 1971). These rights and subject the standard suite of rights granted under applicable copyright law includes additional rights not granted under this Licens