

## DEFINITIONS

In order to make use of these application notes and even the C16x itself, some terms need to be understood. Those terms used in later application notes will be better defined there, but for now, these simplified definitions will help the user to understand roughly what is going on.

### *Compiler-Related Terms*

<b>IDATA</b>	= On-chip RAM at 0xFA00 (C166) or 0xF600 (C167/5)
<b>NEAR</b>	= Area of off-chip RAM whose variables can be accessed in one instruction (medium speed access)
<b>FAR</b>	= Area of off-chip RAM whose variables require several instructions to access (slow access)
<b>Registers</b>	= Bank of 16 General purpose word registers used to local (automatic) variables, function parameters; intermediate calculation results (fastest access)
<b>R1, R2 etc.</b>	= Register within the current register bank
<b>User Stack</b>	= Artificial stack created by C166 to hold some local variables. Formed from MOV R <sub>w</sub> , [R0+] type instructions. (slow access)
<b>System Stack</b>	= The C16x's own proper hardware stack in on-chip RAM with which PUSH and POP instructions can be used and onto which return addresses are placed during subroutine calls
<b>DPP0, 1, 2 &amp; 3</b>	= Registers which hold the base addresses of regions in multiples of 0x4000 (16k), each of which is 0x4000 bytes long. For example, DPP3 always equals 3, indicating a 16kb region from 3 * 0x4000, i.e. 0xC000 to 0xFFFF
<b>Memory Model</b>	= How the compiler decides to place its variables, i.e. on-chip or off-chip, fast or slow access
<b>PEC</b>	= (Peripheral Event Controller) An on-board data transfer controller that moves data between peripherals and on-chip RAM. The destination and source addresses are limited to being in the first 64k.

### *Linker-Related Terms*

<b>CLASSES</b>	= Locates the named large data or code items at the stated address
<b>SECTIONS</b>	= Locates the code or data from a single source file (module) at the stated address
<b>VECTAB</b>	= Sets the base address of the interrupt vector table area
<b>REGBANK</b>	= Locates the named registerbank at the stated address
<b>RESERVE</b>	= Prevents any code or data object from being placed in the stated address range

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