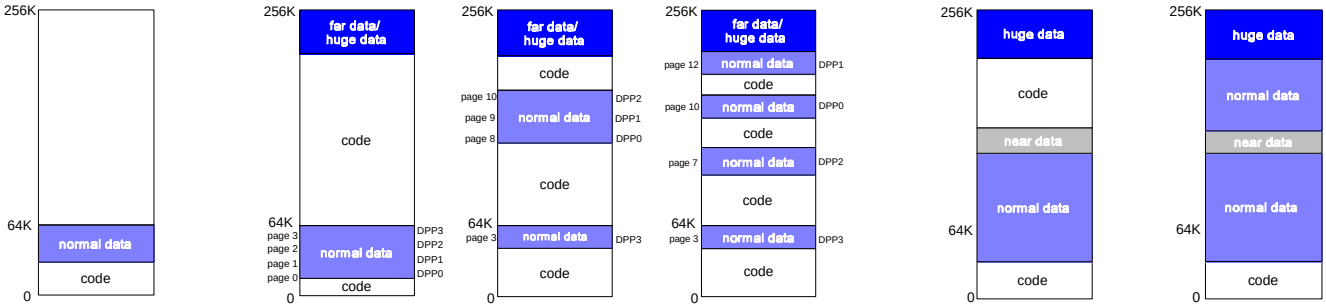
Memory Models



tiny small - three configurations medium large

Tiny Model

Item	Usage	Comments
CPU	non-segmented	Only model which runs non-segmented. Code + normal data < 64K.
code	< 64K	Limited to first segment of 64K.
normal data	< 64K	Limited to first segment of 64K (near).
far data	not allowed	-
huge data	not allowed	-

Small Model - three configurations

The selection of one of the three memory configurations of small is done by means of different location of the normal data. The three configurations are *default*, *linear* and *paged*.

Item	Usage	Comments
CPU	segmented	-
code	> 64K	Unrestricted code size.Code allowed anywhere in 256K/16M memory range.
normal data	< 64K	Up to 64 Kb of fast accessible user data using default DPP addressing. The maximum size of a single object depends on the used configuration: • *default*, 64K in four pages in the first 64K segment • *linear,* 48K in three consequetive pages anywhere in the 256K/16M memory range • *paged,* 16K in three pages anywhere in the 256K/16M memory range and page 3
far data	allowed	Supports far data (paged) access anywhere in 256K/16M memory range. The size of a single object is limited to 16K. Far data access is not as fast as normal data access.
huge data	allowed	Huge data access is supported anywhere in the 256K/16M memory range with the *huge* keyword. The size of a single object is only limited to by the available target memory. Huge data access is not as fast as far data access.

Medium Model

Item	Usage	Comments
CPU	segmented	-
code	< 64K	Limited to first segment of 64K.
normal data	> 64K	Paged (far) data access anywhere in the 256K/16M memory range. The size of a single data object is limited to 16K. Paged (far) data access is faster than far data access in the small model.
near data	< 16K	The Task Concept has 16K fast accessible near data available per task anywhere in the 256K/16M memory range. The Flat Interrupt Concept only has 16K availble for the whole application. Near data is automatically utilized by the compiler
huge data	allowed	Huge data access is supported anywhere in the 256K/16M memory range with the *huge* keyword. The size of a single object is only limited by the available target memory. Huge data access is not as fast as far data access.

Large Model

Item	Usage	Comments
CPU	segmented	-
code	> 64K	Unrestricted. Allows code anywhere in 256K/16M memory range.
normal data	> 64K	Paged (far) data access anywhere in the 256K/16M memory range. The size of a single data object is limited to 16K. Paged (far) data access is faster than far data access in the small model.
near data	< 16K	The Task Concept has 16K fast accessible near data available per task anywhere in the 256K/16M memory range. The Flat Interrupt Concept only has 16K availble for the whole application. Near data is automatically utilized by the compiler
huge data	allowed	Huge data access is supported anywhere in the 256K/16M memory range with the *huge* keyword. The size of a single object is only limited by the available target memory. Huge data access is not as fast as far data access.